





CLASS 379.73

BOOK 109

VOL. 1906



*Iowa State Library.*  
DES MOINES,  
IOWA.

leg.

# HAND-BOOK

FOR

# IOWA SCHOOLS

---

1906

---

A Course of Study for Iowa Rural and Village  
Schools. School Laws Directly  
Affecting Teachers

---

IOWA STATE LIBRARY  
Legislative Reference Dept.

ISSUED BY THE DEPARTMENT OF PUBLIC INSTRUCTION

---

JOHN F. RIGGS  
Superintendent of Public Instruction

---

This Book is the Property of the School District

---

DES MOINES  
BERNARD MURPHY, STATE PRINTER  
1906



## PREFACE.

The Hand-Book first issued in 1895 and revised in 1900 has proved most useful to rural teachers and its value to the rural schools has been widely recognized. In the third edition here presented a careful revision has been made bringing the work up to date and, as we think, greatly improving the text of former editions. The principal changes made are as follows:

1. The change from *three* main divisions of the course and the school to *four* divisions. Many schools have found it difficult to organize on the three grade plan.

2. The text covering the work in *Writing* is entirely new.

3. The work in *Arithmetic* is shortened and simplified in the lower grades.

4. The number of studies has been reduced in several of the years where the schedule seemed to be full.

5. The work in *Language* and *Nature Study* for the primary divisions has been taken out of the body of the course and put in the form of Outlines by themselves. As printed before, it seemed to cumber the course, and the work for the different months did not always correspond to the work in the other branches as printed for the same grade.

6. The outlines and suggestions for teaching *Vocal Music* are entirely new.

7. Two sample programs are given, one for a school of *four* divisions and the other for a school of *five* divisions.

8. The entire course for advanced and village schools is rearranged and made out for *nine* months instead of eight.

9. Appropriate and helpful exercises in the Primary Division are suggested under the term "Hand-Work." This is in line with the trend of courses toward elementary manual training.

10. The effects of Stimulants and Narcotics will be found fully treated for lower grades under the general topic "Nature Study," see sub-topic "Hygiene and Behavior."

The work under "Nature Study" also contains very much material for "Elementary Agriculture."

11. Several paragraphs that seemed superfluous have been omitted such as, "Blanks for Successor," "Keeping Register," etc. These matters are fully explained in the school registers.

Extracts from the school law are omitted, but a more helpful outline is given. Every school director has a copy of the school law which is usually accessible to the teacher. We hope to get authority from the Thirty-second General Assembly to have a cloth bound copy of the school law, edition of 1907, placed in every school library of the state.

The department is under obligations to Prof. C. P. Colgrove for the general revision of the course of study.

JOHN F. RIGGS,

Superintendent of Public Instruction.

April 2, 1906.



## INTRODUCTION.

---

AIMS. The aims of this course of study are:

1. To provide a plain, simple and progressive outline for the guidance of teachers, so that pupils may do systematic work and thus derive from public schools the best possible practical preparation for after life.
2. To reduce to a minimum the waste of time, money and effort caused by frequent change of teachers, poor classification and blind, aimless or unplanned work.
3. To arrange the work of the common schools by months so that teachers and pupils may have a definite standard of progress—may know when they have completed the course or any portion of it.
4. To afford young teachers all the help and encouragement possible by means of suggestions and directions which summarize the best current educational theory and practice.
5. To unify the work of the common schools of the state and to secure more effective supervision by furnishing a common basis as to the branches taught, and tests for promotion and graduation.
6. To enlist the interest and sympathy of parents and school officers and to secure their hearty co-operation, by making them better acquainted with what pupils and teachers are striving to accomplish in the schools.

HIGHER COURSE. To aid pupils who desire to pursue their studies beyond the common branches, and to furnish a suitable course for advanced rural schools and the smaller graded schools, an additional course of two years has been prepared.

RECORDS. Teachers should keep a record of the advancement of their classes in the work of the course. In this way officers and patrons of the school can easily determine the progress of pupils, and reports may be made to parents or guardians. A



statement should be prepared, showing what years have been finished and how much work, by months or terms, has been done in years not completed. This statement, together with a program of daily recitations, should be left for the benefit of the next teacher.

All rural schools are now supplied with classification registers.

If properly kept, these registers are a valuable aid to a systematic and progressive use of the course of study. At the close of the term of school, the classification register and course of study should be returned to the director or secretary of the board. At the beginning of the term, the teacher should secure possession of these records *before* organizing the school.

**SCHOOL LIBRARIES.** A good library ought to be considered a necessary part of the equipment of every school, rural or graded. Teachers should be alive to this great need of our common schools. In order to secure the best result, books for supplementary reading, for reference and for home use are essential. The pupil must acquire the power to get thought from the printed page easily in order to make satisfactory progress in his study of the text-books. His reading should be systematic; he should read only the best books, and the teacher should assist and direct him in this work. The list of books for the different years given in this course will, it is hoped, be very helpful and suggestive to teachers and school officers.

**SUPERVISION.** However excellent a course of study, it cannot execute its own provisions. Neither can it be used with a fair degree of success unless the teacher is familiar with its details. In its use the best results can be secured only by close and watchful supervision on the part of the county superintendent. The normal institute affords an excellent opportunity to give teachers instruction in the course of study and its use, and this study should have an important place on every institute program. Some county superintendents secure excellent results by requiring teachers to take an examination on the course of study.

Most of the difficulties encountered in following this course of study are caused by the irregular attendance of pupils, by the inexperience of teachers, and by the frequent change of



teachers. These facts render it all the more necessary that county superintendents should instruct young teachers how to use the Hand-Book most effectively. It is an axiom of common sense that well-planned, systematic school work is far superior to aimless, haphazard work.



## Outline of the Course of Study.

FIRST YEAR		
Primary Division .....	FIRST PRIMARY.. (First Reader)	Reading and Language Spelling Writing Handwork and Drawing Music Numbers
	SECOND PRIMARY (Second Reader)	Reading and Language Spelling Writing Handwork and Drawing Music Numbers
SECOND YEAR		
First Intermediate Division .....	THIRD YEAR .....	Reading Spelling Writing and Drawing Language and Literature Nature Study and General Lessons Music Arithmetic
	FOURTH YEAR...	Reading Spelling Writing and Drawing Language and Literature Geography and Nature Study Music Arithmetic
Second Intermediate Division .....	FIFTH YEAR.....	Reading Spelling Writing and Drawing Language and Literature Geography and Nature Study Music Arithmetic
	SIXTH YEAR.....	Reading Spelling Writing and Drawing Language and Literature Geography Music Arithmetic
Advanced Division .....	SEVENTH YEAR..	Reading and Literature Orthography Grammar Geography Physiology Arithmetic History
	EIGHTH YEAR....	Reading and Literature Grammar Geography Physiology Arithmetic History (five months) Civil Government (three months)



*Suggestions to Teachers.*

I. CLASSIFICATION OF PUPILS. In the rural schools where all the eight years' work must be done by one teacher, and where pupils are of all ages from five to twenty-one, the organization and arrangement of classes must be given very careful thought, or the number of classes will be so great that good, thorough work is impossible. The pupils should be arranged in four divisions—primary, first intermediate, second intermediate and advanced. Reading serves as the most convenient basis for classification.

1. The Primary Division includes the first two years of the course. All pupils in the first and the second readers are placed in this division.

2. The First Intermediate Division is composed of the third and fourth years, and includes all pupils in the third reader. The Second Intermediate Division is composed of the fifth and sixth years, and includes all pupils in the fourth reader.

3. The Advanced Division should include two years' work—seventh and eighth. Most of the fifth reader pupils will be classified in this division.

II. SUB-DIVISIONS AND CLASSES. Of course it is not possible for the teacher to organize classes in each study and each year of the entire course. In fact, very few rural schools will have pupils representing all of the eight years. The outline of the course of study provides for five sub-divisions, as follows: (1) First-Primary; (2) Second-Primary; (3) First-Intermediate; (4) Second-Intermediate; (5) Advanced. In the winter term, the First-Primary will usually contain only a few pupils, and may not be represented at all, while the Advanced Division will be large. In the summer months, this condition will be reversed.

Classes should not be formed for one or two pupils unless it would be absolute injustice to put them into classes already organized. Too much dependence must not be placed upon the



classification of the preceding teacher, for the gradation of pupils will need constant change and readjustment. On the first day of the term a temporary classification should be made. Within a few days, after carefully considering the case of each pupil, his age, natural ability, and attainments, a term classification should be made, placing each pupil where he can accomplish the best results. Worthy pupils should be promoted when they are able to do the work of the next higher class. Make such promotions an incentive to do good work. While it is desirable that a pupil shall recite in the same division in all his studies, yet this is not essential.

Some pupils in every rural school are very uneven in their studies, and must be allowed to recite in the class or division where they can derive the greatest good.

Such pupils may be permitted to recite in one branch in the second-intermediate division and in some other branches they may recite in the advanced division. But teachers should try to keep the classification of the school as uniform as possible.

In the smaller schools the number of classes should not exceed twenty including general exercises. In the larger schools, where all the five subdivisions are represented, the classes and recitations necessary will be about as follows:

READING—5 or 6 classes; nine recitations daily.

SPELLING—3 classes; three recitations daily.

WRITING AND DRAWING—General class.

MUSIC—2 divisions; one exercise daily.

NUMBERS—2 classes; two recitations daily.

LANGUAGE AND LITERATURE—I or 2 classes; one recitation daily.

NATURE STUDY—2 classes; two recitations daily.

GEOGRAPHY—2 or 3 classes; two recitations daily.

GRAMMAR—2 classes; two recitations daily.

PHYSIOLOGY—I class; one recitation daily.

HISTORY—I class; one recitation daily.

ARITHMETIC—3 or 4 classes; three recitations daily.

GENERAL LESSONS—I exercise.



III. DAILY PROGRAM. Attention is called to the two sample programs given at the close of this section. The one for four divisions is an exact copy of the winter term program of Miss Jennie Gonzales for a rural school in Cerro Gordo county. The sample program for first division illustrates one of the greatest difficulties that confronts the teacher of a large rural school. The numbers of recitations is so great that the time for each class is too short to permit good work. The teacher's problem is to reduce the number of classes. This may be done by combining classes, by having certain classes recite only on alternate days, or by selecting some advanced pupil to assist the teacher in the oversight of the primary classes. These two programs do not profess to be perfect. They are simply suggestive. It is conceded that a program must be flexible and adapted to the school in which it is used. Such adaptation must be left very largely to the judgment of the teacher.

The daily program should be in a conspicuous place in the school room, and as much attention given to its provisions for seat work as for recitations. It should be closely followed, and changed only on proof that revision is desirable. Pupils should be familiar not only with the program, but also with the course of study. In the use of the course, teachers will find it very helpful, both to pupils and to themselves, to interest pupils in the provisions of the course, and to help them to understand it and be guided by it.

The amount of time given to any one class must be determined by the importance of the subject, the number in the class, and the time at the teacher's disposal. Classes should be so arranged that the same pupils do not come in consecutive recitations.

The teachers should study how to provide and conduct daily opening exercises that are interesting and instructive. To maintain interest in these exercises they should be varied. A good school journal will be of much assistance in suggesting variety.

At the close of the term a copy of the program should be left in the classification register for the benefit of the next teacher.



IV. EXAMINATIONS AND GRADUATION. When pupils have completed the work of any year, they should be given a written review or examination on their work. The "Tests for Promotion" are intended to be a guide as to what the pupil should know when he has completed the work of a division. When pupils complete the course, they should have a thorough examination on the branches studied. This examination should be under the direction of the county superintendent, and all who pass this test should receive a *common school diploma*. A good time for these examinations is at the close of the winter term. Teachers, parents and school officers should encourage, in every way, pupils to complete this common school course, for fully one half of the children of our state receive no higher or better education than that furnished by our rural schools.

V. OUTLINES OF SPECIAL SUBJECTS. Immediately after the work of the eighth year the teacher will find "Outlines in Special Subjects." These outlines include Drawing, Music, Language, Nature Study, and Handwork. Teachers should consult these outlines daily and adapt them to the needs of the school. They will be found especially helpful in planning seat work for the primary classes. Much of the language work can be used in the second year and the exercises under "Handwork" are the best kind of elementary manual training. The kind of language work suggested in the outlines is a necessary preparation for the study of grammar. The outlines in Nature Study include oral lessons in Physiology and Hygiene, and if these lessons are properly taught, they will fully meet the requirements of the law in regard to instruction in the effects of stimulants and narcotics.

VI. HOW TO USE THIS COURSE OF STUDY. It is not intended that this course of study shall in any way fetter the teacher's freedom or individuality. This course does not attempt to convert the rural schools into city schools. It does not propose a rigid graded system, nor does it imply that it is to be strictly and literally followed in any school. Surely some judgment, tact and common sense should be expected of teachers and such teachers will willingly give this course of study a fair trial and will carefully study its provisions and suggestions. It should be



studied carefully as a whole, then each year's work should be studied by itself. Next the work for the term or month should be carefully planned. Only in this way can any teacher correlate the work in the different branches or assign lessons intelligently. The entire course for each year, each month and each branch of the course has its general aims, but the teacher in assigning lessons must have specific and definite aims or pupils are all "at sea" in their study and preparation. Every lesson if taught effectively must be taught with reference to the lessons that both precede and follow it. This, the course of study will enable the teachers to do. Thus our school work will be more definite, more symmetrical, and the progress of our pupils more satisfactory. Let teachers consult the course in making their daily preparation. Only by earnest systematic work can we make the schools of our state equal to the demands of the Twentieth Century.



## Program for School of Four Divisions.

Recitations.	Time.	Second Grade.	Third Grade.	Fourth Grade.	Fifth Grade.
Opening Exercises .....	9:00-15	.....	.....	.....	.....
Reading, 5th grade.....	9:15-15	Reading...	Reading...	Reading ...	.....
Reading, 2d grade.....	9:30-15	.....	Reading...	Reading ...	Arithmetic
Reading, 3d grade.....	9:45-15	Written Work	.....	Reading ...	Arithmetic
Reading, 4th grade.....	10:00-15	Written Work	Written Work	.....	Arithmetic
B Arithmetic, 5th grade†	10:15-15	Hand work	.....	Written Work .	.....
Recess					
A Arithmetic, 5th grade†	10:50-15	Arithmetic	Arithmetic	Arithmetic .	.....
Arithmetic, 2d grade ..	11:05-10	.....	Arithmetic	Arithmetic .	Geography
Arithmetic, 3d grade ..	11:15-15	Arithmetic	.....	Arithmetic .	Geography
Arithmetic, 4th grade..	11:30-15	Reading...	Arithmetic	.....	Grammar
Geography, 5th grade ..	11:45-15	Hand work	.....	Arithmetic .	.....
Noon					
Music * .....	1:00-15	.....	.....	.....	.....
Reading, 2d grade .....	1:15-10	.....	Language .	Language..	Grammar
Grammar, 5th grade...	1:25-15	Language..	Language .	Language..	.....
Language, 3d & 4th grades	1:40-15	Language .	.....	.....	Spelling ..
Spelling, 5th grade ....	2:05-10	Language .	Reading...	Geography .	.....
Writing† .....	2:15-15	.....	.....	.....	.....
Recess					
General Lessons 2d grade	2:50-10	.....	Reading...	Geography.	History
Reading, 3d grade‡....	3:00-10	Spelling...	.....	Geography.	History
Geography, 4th grade..	3:10-15	Spelling...	Spelling...	.....	History
History, 5th grade.....	3:25-15	Spelling...	Spelling...	Spelling ...	.....
Spelling, 2d & 3d grades	3:40-10	.....	.....	Spelling ...	Reading
Spelling, 4th grade ....	3:50-10	Hand work	Written Work	.....	Reading

† The Fifth Grade was divided into two divisions in arithmetic.

\* Music comprised two classes—one division had written work one day while the other division had practice in reading music, etc.

‡ Writing three days and drawing two days of each week.

§ The third grade took primary physiology part of the time in place of reading.



## Program for School of Five Divisions.

Time.	First Prim-ary.	Second Prim-ary.	First Inter-mediate.	Second inter-mediate.	Advanced.
9:00—10 Opening Exercises.					
9:10—10	Reading	Reading. ....	Reading....	Arithmetic..	Arithmetic
9:20—10	Copying	Reading.....	Reading....	Arithmetic..	Arithmetic
9:30—15	Copying	Written work.	Reading....	Arithmetic.	Arithmetic
9:45—15	Blackboard work .....	Written work.	Arithmetic..	Arithmetic.	Arithmetic
10:00—15	Reading.....	Drawing.....	Arithmetic..	Drawing....	Arithmetic
10:15—15	Reading ....	Number work	Arithmetic.	Reading ....	Writtenwork
10:30—15 Recess.					
10:45—10	Reading,...	Numberwork..	Arithmetic..	Reading ....	History
10:55—10	Writtenwork	Numbers.....	Reading ....	Reading ....	Reading
11:05—10	Writtenwork	Reading .....	Reading ....	Reading....	Reading
11:15—10	Handwork..	Reading .....	Nature study	Physiology..	Reading
11:25—10	Handwork..	Reading.....	Nature study	Geography..	Geography
11:35—10	Number work.....	Language work.....	Nature study.....	Geography..	Geography
11:45—15 Writing and Drawing					
Noon.					
1:00—10	Numbers...	Handwork....	Language...	Geography..	Geography
1:10—10	Number work.....	Handwork....	Language...	Geography..	Geography
1:20—10	Drawing ...	Reading .....	Language...	Geography..	Grammar
1:30—10	Reading ....	Reading.....	Language...	Grammar..	Grammar
1:40—10	Reading ....	Reading.....	Composition work.....	Grammar...	Grammar
1:50—10	Reading....	Nature work...	Spelling ....	Grammar...	Grammar
2:00—10	Nature Study	Nature study	.....	Grammar...	Grammar
2:10—10	Nature Study	Drawing .....	Spelling ....	Grammar...	.....
2:20—10 Music.					
2:30—15 Recess.					
2:45—10	Nature study .....	Nature study	Spelling ....	Physiology..	History
2:55—10	Copying ....	Blackboard work.....	Spelling....	Physiology..	History
3:05—10	Blackboard work.....	Copying.....	.....	Physiology..	History
3:15—15	Language ..	Drawing.....	Library work	Spelling ....	History
3:30—10	.....	General lessons .....	.....	Spelling ....	Spelling
3:40—10	Reading ....	Reading....	Arithmetic..	Spelling....	Spelling
3:50—10	Reading ....	Reading....	Arithmetic..	Arithmetic..	Spelling



COURSE OF STUDY  
OF  
IOWA RURAL SCHOOLS.

---

PRIMARY DIVISION.

---

FIRST YEAR.

---

1. *Books and Materials Needed.*

First readers, slate and pencil or tablet and lead-pencil, sponge, ruler. Pencils of all kinds should be large and long and should be kept well sharpened. Encourage each pupil to make a collection of good pictures and to start a little cabinet of pretty shells, pebbles, etc. Plenty of drawing material. A pair of small scissors. Cardboard and pretty colored paper.

2. *Studies.*

READING AND LANGUAGE. Chart and first reader, supplemented by easy myths, legends and stories. Three recitations daily.

SPELLING. Words in reading lessons.

WRITING. Letter forms and easy sentences.

NATURE STUDY. Animals and plants.

HANDWORK AND DRAWING. Objects, colors, simple forms, and figures.

MUSIC. Simple songs only.



NUMBERS. Combinations to 6 using objects, with constant drill in estimating, comparing and measuring lines, surfaces, volumes, forces, values, weights and time. Problems involving addition, subtraction, multiplication and division.

### 3. *Suggestions on Teaching Primary Reading.*

STARTING POINT. Try to settle definitely in your own mind what the child already knows that will help him in learning to read. You will find that the average child already knows several hundred words, can pronounce them, recognize them when spoken, and is able to use them in easy sentences. You must build on this foundation. Remember that children have little power of continued attention where they have little interest. Your first aim must be to create interest and pleasure in the reading lesson. Make the change from hearing and speaking words to reading and writing them just as easy and unconscious for the pupil as possible. Keep difficulties out of sight, and do not worry or weary the child.

AIMS. 1. To recognize the printed and written forms of the words which the child has already learned through hearing and speaking.

2. To combine elementary sounds into words and to separate words into their proper sounds.

3. To write and print words and combine them into simple sentences.

4. To read, pronounce and talk in natural, pleasant, animated tones.

METHOD. Do not attempt to follow any *one* method. Combine the sentence, word and phonic methods. A live teacher is greater than any method. You cannot teach the method of anyone else; you must teach by your own method, faithfully striving to get all the help and suggestions you can from every source.

PRACTICE IN READING. If you teach properly and are interested yourself, the pupils will find the greatest pleasure in learning to read. Encourage rather than criticise. Praise judiciously. Plan for variety. Above all, let the children *read*. Much easy



reading will give them ease, confidence, accuracy. Attempting to read what is too difficult causes halting, stumbling, discouragement, sullenness. Supplementary reading in all grades is a prime necessity. Every pupil should read through two first readers or their equivalent before going on to the second reader. Have much sight reading, that is, the reading of lessons and stories without preparation. Such reading must be very simple, so as not to discourage pupils. It has the charm of novelty and creates interest in reading. Do not have much concert reading.

**SEAT WORK.** Always assign lessons carefully and definitely. Aim to assign some expressive work—copying, illustrating by drawing or painting, card work, paper folding, making objects described in reading lesson etc.—in connection with every lesson. Children are fearless with pencil and drawing paper. They will attempt to illustrate any object, no matter how difficult. They will paint or draw a ship, a locomotive, a battle,—anything with life and movement and color in it. Encourage even these crudest efforts. Cut out words in large type and let the children build these separate words into sentences. Do not permit pupils just to “mark on their slates.” Let all their seat work have a definite purpose. Do not encourage or permit dawdling, putting and killing time. If children become tired, change their work, give them a short exercise in gymnastics, or let them go out doors and play a few minutes, if the weather is favorable.

**SUPPLEMENTARY READING.** From the very first lessons the teacher of reading should keep in mind two things: 1. Reading is the most important branch in the lower grades, for it is the door through which the child must pass to obtain a knowledge of language, literature, history, and almost the whole realm of human learning and achievement. 2. A love for good literature both poetry and prose, must be fostered and cherished. That pupil who leaves the public school without a love for good reading has been poorly taught and has failed to get the very best thing which the schools ought to give him. These results cannot be attained if children are confined to one series of readers for seven or eight years of school life. The amount of actual reading matter in one series of ordinary school readers does not exceed that in one of Dickens' novels. A few books and stories suitable



for the first year are suggested below. Every teacher can easily obtain some of these or encourage the children to secure them. They give practice in reading, furnish the basis for work in language and literature, give variety, banish dullness and arouse interest. In selecting and using this material for supplementary reading, let the teacher remember the five requisites of a really helpful story for children: 1. "It must be *truly child-like*—that is, both simple and full of fancy. 2. It must *form morals*, in the sense that it introduces persons and matters, which, while simple and lively, call out a moral judgment of approval or disapproval. 3. It must be *instructive* and lead to thoughtful discussions of society and nature. 4. It must be of *permanent value*, one which children will read again and again. 5. It must be a *connected whole*, so as to give the impression of design and completeness and become the source of a many-sided interest."

Cyr's First Reader, Ginn & Co.

Stickney's First Reader, Ginn & Co.

Baldwin's First Reader, American Book Co.

Our Little Book for Little Folks, American Book Co.

Fairy Tales and Fables, The Morse Co.

Fables and Rhymes for Beginners, Ginn & Co.

Nature Study, Five-Cent series, Educational Pub. Co.

Hodskin's Little People's Reader, Ginn & Co.

Wheeler's First Reader, Wheeler Pub. Co.

The Art and Life Primer, A. Flanagan Co.

The Wide Awake Primer, Lathrop Pub. Co.

Child Life Primer, The Mac Millan Co.

Cyr's First Dramatic Reader, Ginn & Co.

Child Life First Reader, The Mac Millan Co.

Fairy Stories for First Grade, by Lida B. McMurray, Public School Publishing Co., Bloomington, Ill.

In addition to these, *Hiawatha* includes a study of a typical Indian boy, contains nature myths illustrating important truths, abounds in beautiful suggestions and descriptions of animals, plants, simple forms of community life and industries. The whole poem is full of excellent material for reading, writing, modeling, cutting, language work, paper-folding, drawing, painting and making.



## OUTLINES OF COURSE FOR EACH MONTH.

## FIRST MONTH.

READING AND LANGUAGE. Object. To recognize at sight the printed word and to pronounce it readily as a whole; to acquaint the child with the printed and written forms of words that it has known before only by sound.

FIRST STEPS. Make the child feel at home. Do not hurry him into a reader. Get him to talk freely about some familiar object, picture or experiment. When he is intensely interested in the object, write the name of it on the board or a sentence containing it. Ask the pupil to look at it carefully. Erase it and ask him to write it. The blackboard well used is better than a chart. Encourage the pupil's crudest attempts. Write the word several times, if necessary. The greater the pupil's interest, the fewer the repetitions that will be necessary to fix the form of the word. When the child has learned four or five words, the articles *a* and *the* should be prefixed, as *a dog, a cat, a boy; the dog, the cat, the boy*. The child should be taught to pronounce each group as one word, pronouncing *a dog* as if it were a word of two syllables. Place all new words upon the board, adding to the list from day to day. In every recitation give a drill on these words, pointing rapidly first to one, then to another, while the children pronounce them quickly and accurately. Be careful about articulation at the start. Revise the list of words on the board from time to time, omitting words that are fully mastered. Teach new words as wholes, but soon begin to teach their letters and sounds. Careful drill in sounding the letters and combinations will very soon enable children to pronounce new words independently.

Language work for the first year should be given in connection with the reading and other lessons. Induce pupils to talk freely and to use full sentences. Correct common errors in speech. Tell the children a good story and ask them to reproduce it orally. Aim to cultivate the ear as well as the eye.

SPELLING. Spelling for the first year at least should be connected with the reading lesson. All words in the reading lesson should be spelled orally, and copied as seat work. The pupil



should soon begin to spell by sound, and to recognize that words usually consist of two or more sounds. This can be shown by speaking the words slowly and more slowly, prolonging the sound and gradually separating the word into its elements. Train the pupil to do this. Pronounce slowly the names of objects near at hand and have pupils touch or point to the objects.

WRITING. It is not necessary to spend much time in teaching children to print. As much as possible, let pupils use the blackboard in learning to write. There should be daily free arm exercises on the blackboard and on unruled paper. Guard pupils against the cramped finger movement and bad position. Large sheets of paper and soft pencils are far preferable to slates. Primary writing cards may be used with excellent results.

HANDWORK AND DRAWING. All the work in drawing should be freehand. Select simple objects for models. Illustrate parts of stories. Encourage easy constructive work such as cutting, pasting, card work, tracing and modeling in sand or clay. Keep a box of paints on hand and permit pupils whose patterns are nicely drawn to paint them. See outlines for Handwork and Drawing. ..

MUSIC. The beginning of this branch should not be put off till the child reaches the higher grades. Any teacher can make a start in this line. Begin by testing the ear of the child in pitch, intensity and quality of tones. Many children will be found whose hearing is defective. These will require special care in seating and in recitation work. Be very careful to select songs of easy grade and within the compass of children's voices. Insist on soft, clear melodious tones. Never permit harsh, shrill tones. See outlines for Music.

NUMBERS. If pupils cannot count, teach them to do so as far as ten, using objects such as pebbles, marbles, sticks, books. Teach pupils to estimate distances in inches, feet, yards, thus training the eye to accurate measurements. Write the Roman numbers to V, and drill in making the Arabic Symbols. Count by 2's to 10.



## SECOND MONTH.

READING. The pupil should now have a primer and should be able to read several pages at sight if properly taught up to this time. Make constant reference to the pictures in the book, as they suggest the story that the pupil is to read. Parts of the picture even suggest words in the story. Make constant use of the blackboard. If children drawl the words or read in unnatural tones, you are at fault in your teaching. The cure for these faults is genuine interest in their work. Vary the sentences on the board constantly, so that pupils may not repeat the sentences from memory. Change the subject, the predicate, the article, the adjective, the number, the gender, the form of the sentence, one at a time, reviewing in this way the words that have already been learned. Be sure that pupils grasp the thought of the sentence before they try to read the sentence aloud. As pupils begin to write words from memory, be very careful that they write them rapidly and correctly. Train the pupil to see the entire short sentence and then to speak it. Do not teach the pupils to read as they talk unless they talk right. Teach them to talk as well as to read. Remember that merely pronouncing words is not reading. Let the children illustrate by drawing as many words as possible as they learn them, and in the board work let them substitute these pictures for the corresponding words in the sentence. Drill every day on spelling words by sound.

For language work memorize little poems and songs as wholes. Let children describe very familiar objects. Do not be *over* critical, as you will make your pupils afraid to talk freely. To secure freedom of expression is your chief aim in these first lessons. Teach politeness by requiring clear and distinct speaking, attentive listening, freedom from interruption, and courteous treatment of each pupil.

SPELLING. List of words on blackboard used in reading lessons. Review difficult words until they are thoroughly mastered. If you can prevent it, never let the child see the incorrect form of any word. Erase all such incorrect forms as soon as made by children in their board work and write the correct form. Practice phonic spelling, pronouncing the words slowly and distinctly.



WRITING. It will require considerable time to teach children how to handle their writing material properly, how to hold the pencil, how to keep the correct position, how to write with the free arm movement. Discourage erasing, biting pencils, unnecessary movements. Copies on the board should be large and accurate. Have pupils practice for a little time each day on movement exercises. Remember that the large muscles are to be exercised and brought under control before the small muscles. Do not permit small, cramped letters, made with the finger movement. Children take more interest in writing words as whole than they do in practicing on separate letters. Show them good specimens of writing and write copies in large hand on the board. In all copying from the board see to it that the light is not reflected in the eyes of the children, and that they are seated near enough to the board to see without effort.

HANDWORK AND DRAWING. Much of this work should grow out of the daily lessons of the pupil. It is one of the fundamental laws of teaching that ideas must find expression, must be worked out in action, before they can be vividly pictured and clearly understood. Encourage the child to invent new modes of expressing himself. Stimulate his creative power. The materials for handwork in the lower grades is very simple and costs only a trifle,—paper, pencils, a pair of scissors, a knife, card board, cord, clay for modeling, raffia. See suggestions for first month, and outlines.

MUSIC. Each school should be provided with a good music chart. If you have no chart, make one yourself. The work should consist of chart work, rote songs, action songs, games, and marching. Consult the outlines in music.

NUMBERS. Counting. Teach combinations to 4, using objects. Remember that you are to teach *numbers*, not mere *figures*. Do not attempt to teach the signs,—use words instead. In teaching 4, require all these combinations to be mastered before going on to 5:

3 and 1 are 4; 2 and 2 are 4; 1 and 3 are 4; 1, 1, 1, 1, are 4; 4 less 1 are 3; 4 less 3 are 1; 4 less 2 are 2; 4 less 0 are 4; four 1's are 4; two 2's are 4; four times 1 are 4; two times 2 are 4;



there are four 1's in 4; there are two 2's in 4; there is one 4 in 4; one-half of 4 is 2; one-fourth of 4 is 1.

Each pupil should have a one-foot ruler, and should learn its use. Let pupils draw lines on the board of any required length, say one foot, and then tell what they have done, as, "I have drawn a line one foot long." Have them draw a line two feet long; two such lines; erase one; tell what they do at each step. Have them draw a line four feet long; erase one-fourth of it, one-half of it or two-fourths thus teaching that one-half and two-fourths are equivalents. Vary the exercises. Give much practice. Review work. Do not neglect the dull ones. Require definite statements of what is done. Train the eye and the sense of touch. Measure, compare, verify. Do not permit addition or subtraction by counting units. Practice until pupils recognize results instantly.

#### THIRD MONTH.

READING AND LANGUAGE. During the first two years, pupils should read three times each day. If the school is large, the recitations must be short, but the classes are usually small. A short, wide-awake, interesting exercise is far better than a dull prosy, long one. Besides the primer in daily use, there should be two or three other primers for supplementary reading. No child can fail to be greatly interested in such primers as Sunbonnet Babies, Holton's Primer, The Art and Life Primer, and Wheeler's Primer. Encourage pupils to talk freely of what they read, to dramatize little stories, to illustrate parts of the lessons, to cut, model or make things described in their reading lessons. Give special drills in phonics.

The language work should not consist of mere copy work from the reading lessons, as it does in many schools. Do not lose sight of the fact that "the tongue must prepare the way for the free use of the pen." A few lines of poetry should be memorized each week. Excellent selections can be made from Little Pussy, by Taylor; The Dewdrop, by Sherman; Who Has Seen the Wind, by Rosetti. Most of the famous classics for children are found in the first book of the Heart of Oak series of readers. These classics should be familiar to every child. Much of the language work for this month may be connected with Thanksgiving.



**SPELLING.** List of words on blackboard used in reading lesson. Give a few short words similar in sound as an exercise in phonic spelling. Example: man, can, tan, ran. Continue this kind of work until pupils can pronounce new words without the aid of the teacher.

**WRITING.** Continue practice on arm movements. This must be done with pencil and paper as seat work, since such work on slates is too noisy. Pupils should have daily practice in board writing, large hand, free movement. Keep good copies before the children. Avoid vertical writing and back hand, and try to keep the pupils from forming bad habits of position.

**HANDWORK AND DRAWING.** This work should include clay modeling, weaving, sewing cards, braiding, paper folding and cutting, cutting from patterns, board sketching, sand table work, and designing. All this work should be correlated with Reading, Language, Nature Study and Numbers, and should be closely connected with the child's interests, his home life, his games, excursions and farm work. See outlines for suggestions.

**MUSIC.** Simple exercises in rhythm should be given daily. Breathing exercises. Aim to produce a clear and beautiful quality of tone. In teaching songs, teach the words very carefully. Remember that children must learn the words through the ear. Many times they do not understand the words of the song, and sing all sorts of nonsense.

**NUMBERS.** The teacher should have a copy of Speer's Primary Arithmetic for Teachers. This book is full of excellent material and suggestions for sense training. The exercises in the discrimination of form and weight through the sense of touch are especially helpful. Every school should be furnished with a set of blocks for teaching numbers. Try to show your pupils how to apply their knowledge of numbers as fast as they acquire it. Count the pupils in the class or school, the desks, the windows, the window panes, the number of inches in a foot ruler, the days in the week or month. Teach them to compare their age, weight, height, etc. Teach value of coins, stamps, articles in the school room, such as books, pencils. Build the tables, but do not hurry this work. Substitute the signs plus and minus for the words "and" and "less". Continue the work with ruler and introduce the yard stick.



## FOURTH MONTH.

READING AND LANGUAGE. Do not hurry pupils into the first reader. They should complete several primers first. Remember that the purpose of teaching reading is two-fold,—to teach the child to get the thought and to *express* the thought to others. The first is *silent* reading; the second is *oral* reading. The silent reading must precede the oral. Before permitting the pupil to read a sentence aloud, help him to read it silently. Never permit the reading lesson to become a mere mechanical grind, but emphasize the story or content side of the lesson. Read *to* the children from the choicest juvenile literature. Make use of supplementary reading according to previous suggestions. Cultivate the power of observation and attention. Let pupils tell, write and read about things that they observe and actually experience. Make constant use of illustrations by means of modeling, drawing, making and painting. Have pupils *act* words. Let all the work be done under the spur of interest and with heartiness and good will.

For language work have pupils copy all the new words in reading lessons. Have pupils reproduce stories orally. Correct their errors by repeating distinctly the correct form. Never ask them to describe an object which they have not really observed. Teach the uses of capitals at the beginning of sentences, in proper names, and the word I. Let much of the language work grow out of the preparation for Christmas.

The language work should include conversations on the nature study work, on simple pictures, on the pupil's playthings, pets and games, on food, manners, good habits. The teacher's part of the exercise should be suggestive. The pupils should be encouraged to ask questions and take freely, not simply answer questions by "yes" and "no."

SPELLING. Continue drills on the blackboard. Have pupils mark easy words and indicate silent letters by drawing slanting lines through them. Continue the drills in slow pronouncing.

Put a good deal of emphasis on spelling by sound. Do not spend too much time on teaching the diacritical marks. Make the spelling lesson a help to the success of the next reading lesson.



**WRITING.** Pupils should now be able to write easy original sentences on the blackboard. Pupils may begin the use of ruled paper. Teach pupils to write rapidly. Write words and sentences used in all lessons upon the blackboard; erase, and have pupils write the same from memory. For seat work, use primary writing cards. Require very little copying from the board.

**HANDWORK AND DRAWING:** Children should make such simple articles as book mark, little trays, envelope, weather vane, mats, name cards. They should model in clay, fruits, seeds, leaves, flowers, birds, eggs, nests, cubes, spheres, prisms. They should paint and draw similar articles. Much of the work in drawing for this month (December) should illustrate Christmas stories and scenes.

**MUSIC.** The chief purpose of the teacher should be to help create in the child a desire to learn to sing. No child will acquire this desire by being made to learn the notes at the start. No such work should be attempted during the first year. Let the child sing and hear others sing, easy little songs, till he knows his own voice and gets the ease and freedom of the bird in expressing himself through music.

**NUMBERS.** Teach the combinations very thoroughly. Count by twos and threes. Teach the signs for the fundamental operations. Never give board work in such a way that pupils can copy from each other. See that pupils make large figures and stand properly while at the blackboard, never resting the head or body against the board.

Have gallon, quart and pint measures. Let children use them freely, describing accurately what they do. Teach the forms of the fractions  $\frac{1}{2}$ ,  $\frac{1}{4}$ ,  $\frac{2}{4}$ . Show that one pint is  $\frac{1}{2}$  of one quart; one quart is  $\frac{1}{4}$  of one gallon. Compare, in like manner, lines, areas, volumes, value of coins, stamps, and so on. The teacher should have a set of blocks such as are used in connection with the Speer number work. Any carpenter or some of the larger boys can make them. Remember that you are teaching the relations of *quantities* to each other, that these relations are expressed by numbers and that figures are merely symbols which have been invented to represent numbers. Make every exercise



in numbers a thought exercise. Do not permit slovenly work or inaccurate statements to go uncorrected. Adapt these outlines to the special needs and conditions of your pupils.

#### FIFTH MONTH.

READING AND LANGUAGE. Master all new words before attempting to read aloud. It is better to give the drill on new words when assigning the lesson; then test pupil's ability to name the words the first thing when the class is called to recite. Do not call it reading when the pupil halts and hesitates before speaking the words. Do not allow pupils to assume lazy, careless positions when reciting. Give pupils plenty of interesting and profitable reading matter. It is well to read one first reader about half way through, and then take another reader and go as far rapidly, afterward completing the first book.

In regard to language work the teacher should remember that "good habits of speech are caught rather than taught." Hence the teacher should always use model language. Do not presume that a teacher can inspire the child with the proper use of language, and at the same time make use of decidedly faulty English himself, as a means of such instruction. Give especial attention to articulation and enunciation. Introduce short stories of Eskimo life. Have poems of winter memorized. Let all language work grow out of the child's present surroundings and associations. Make good use of pictures. Continue the work in capitals suggested in fourth month's work.

SPELLING. Words in reader and other lessons give constant drill in phonics. See that pupils make the sounds accurately and give them distinctly. Pupils should begin to spell by letter, orally dividing the words into their syllables.

WRITING. Call special attention to the loop letters, and show how to make them correctly.

Require neat work in all lessons. Practice on free-arm movements. Look carefully to the manner of holding the pencil, and insist on correct position at the desk. If slates are used, require all erasing to be done with a sponge.



**HANDWORK AND DRAWING.** Every teacher should have such a book as Jane Hoxie's *Handwork for Kindergartens and Primary Schools*, published by Milton Bradley Co., Springfield, Mass. This book contains a series of illustrated exercises in domestic activities, woodwork, raffia, drawing and blue print. Handwork and drawing ought to banish drudgery and laziness from the school. Dull or backward pupils need such work especially as a means of getting clear ideas. Right at the door of the rural school is the whole field of nature—plants, flowers, insects, animals, stones, fruits, vegetables. The children delight to bring these things into the school room. Their forms can be drawn or modeled. Their colors can be painted. Their names can be written and spelled. Their uses can be learned. Farmers' children should know their environment, see its wonders and beauties and learn to love them.

**MUSIC.** Continue the work along the lines suggested for the fourth month, and consult the outlines.

**NUMBERS.** Wm. T. Harris says that a knowledge of arithmetic is man's first great step in the conquest of nature. Arithmetic is the first tool of thought that man invents in the work of freeing himself from the thralldom of external forces. Number makes possible all the other sciences of nature that depend on exact measurement. The teacher should understand that there are constant opportunities to teach and apply numbers outside of the one short recitation in this particular topic. The lessons and pages in the reader are numbered, as are the days of the week and the month, the letters and sounds in every word, the value of every article in the school room, the length of rivers and the height of mountains, the distances from place to place. The opportunities for teaching the quantity side of arithmetic are equally apparent. As compared to each other all objects are greater, less or equal. Katherine Beebe says, "In the teaching of number to little children, the element of opportunity is perhaps the greatest one. The child helps us out by his natural love of counting, measuring, and estimating. In nearly everything you do with and for him the element of number is largely present, if you could only see it. A new work on primary arithmetic might



be summed up in the sentence: Watch for number opportunities and take advantage of them. Another volume might read: Make number opportunities from subject-matter which has an educational value." Be sure that figures mean something definite and real to your pupils.  $2 + 2 = 4$  ought to stand for a concrete visible fact in the child's experience.

Measure lines, areas, and solids. Have pupils make original problems for each other. Test the imaging activity constantly. Make practical examples, showing how to apply what is learned.

#### SIXTH MONTH.

READING AND LANGUAGE. Be sure that pupils get the thought before they try to express it. In calling words see that they give full, pure vowel sounds, and that they do not clip consonant sounds. Let them tell the story of the lesson in their own language. Review hard words. Drill on all new words.

The prominent place given to reading and language work in the first three years of this course of study is justified by the fact that language is the means by which each person gives his own thoughts to others and is also enabled to understand and profit by the thoughts of all. "The written and printed forms of speech preserve human knowledge and make progress in civilization possible. Reading and writing are not so much ends in themselves as the means for the acquirement of all other human learning." Mastery of the English language is the most important as it is the most difficult work of the elementary school. While the wise teacher will strive to prepare the mind and heart of the child to understand and to love the best things in our literature, she will not neglect the mechanical part of the work in mastering any language, such as correct spelling, capitalization and punctuation.

Teach the use of period and question mark at the end of sentence. Stories and pictures dealing with the early life of Washington and Lincoln. Myths and fairy stories. Give especial attention to securing correct statements in number work, nature study and reading.



**SPELLING:** Words in reader. Have pupils pronounce all the words at the head of the lesson two or three times before spelling. In copying words on slate or blackboard, have pupils use all the script letters that they have learned.

**WRITING:** Do not permit pupils to acquire a slow laborious method of writing. Insist on rapidity as well as legibility. Do not use copy books nor tracing books. Children dislike the cramped movement which the copy book writing requires. They enjoy freedom of movement in writing just as they do in other things. Continue the work suggested for the fifth month. The pupils should write a large free hand. They may begin to write words and easy sentences from dictation.

**HANDWORK AND DRAWING:** Let much of this work for the month grow out of the birthday celebrations of Washington, Lincoln and Longfellow. Correlate the work with your other lessons. All such work shall have a distinct and immediate purpose and should appeal to the child as worth doing *now*, not for some distant time or purpose.

**MUSIC:** Be careful in your choice of songs. Nothing but the best is good enough for children, both as to words and music. Consult outline for music.

**NUMBERS:** Give much drill in measuring and estimating lines, areas, solids. Let each child keep a calendar and learn how time is measured. Give many practical and original examples. Give especial attention to rapid sight work in addition.

#### SEVENTH MONTH.

**READING AND LANGUAGE:** Continue work of former months. Vary the general plan of recitation by occasionally letting pupils read several preceding lessons at one recitation, each pupil reading a whole page or lesson. In this exercise do not dampen pupil's ardor by stopping him to correct minor mistakes. Let the work be animated and pleasant. Children should read only the best juvenile literature. Much of the so-called children's literature is worthless. Reading should all along be taught as a thought study, a form of thinking, with or without oral expression. Give great attention to silent reading. The pupil's interest in reading



as a branch should grow constantly stronger. Do not magnify difficulties. If possible, do not let the child know that there are any difficulties.

The language work should not be neglected. Teach a few of the most common abbreviations. Teach the marks of punctuation found in the pupil's reader. Practice on dates, and on names and addresses of people that the pupils know personally. Do not require very much work in filling blanks, and all such work should be looked over faithfully, having the pupil correct errors and re-write careless work. Illustrate scenes from stories like *Hiawatha*.

**SPELLING:** Same as in former months. Written work should be looked over carefully and errors corrected at once. Spell by sound. Mark letters as in the reader. Give easy sentences from dictation. Learn to spell the names of the months, days, state, county, town.

**WRITING:** Practice on small letters. Aim at accurate and rapid writing. Have writing contests. Commend best work. Practice arm movement.

**HANDWORK AND DRAWING:** For suggestions as to such work and how to connect it with other lessons, every teacher should read *Jean Mitchell's School*. Some of the things suggested in this wonderfully interesting little book are paper cuttings illustrating familiar poems; clay-modelings of tiny baskets and vegetables; pictures mounted on card board; drawings with colored pencils; the calendar for the month on the blackboard; the farm-house on the sand-table, surrounded by a neat fence made of colored sticks, enclosing the fields, orchards and gardens, while twigs did duty for trees; the "Smith family" preparing for Thanksgiving; the little church at the top of the sand-hill; the corner of the sand-table with strips of tin laid down for canals and windmills made of card board to represent Holland; the presents for Christmas, the flags for Memorial Day, the cocoons and butterflies,—all this wealth of material and suggestion lies ready at hand for every wide-awake teacher.

**MUSIC:** Song should come from the child's heart as freely and spontaneously as from the bird. Do not bother the little ones with notes and flats and sharps and a lot of hard names.



Let them *sing*. Teach them to make music a means of expression. Make the exercise bright, short and always full of joy and freedom.

NUMBERS. Teach measures of length, area, solids, weight and value concretely. Children should handle and experiment with pounds, pints, ounces, rulers, yard-sticks. They should compare, measure, weigh. Only in this way will the terms in arithmetic become full of meaning and more than mere abstractions. Give great attention to rapid addition, counting in groups of twos, threes and fours, and the comparing and estimating of relative quantities.

#### EIGHTH MONTH.

READING AND LANGUAGE. Use supplementary reading largely. Review first reader, making sure that pupils have mastered all the words. Give attention to tones, position, articulation. Let children read such little poems as Little Boy Blue, Little Bo-peep, Mary's Lamb, and any of the standard nursery rhymes contained in the first reader of the Heart of Oak series. Encourage them to read freely, with interest and animation, for the pure pleasure of reading. During the later months of the year they can read such pieces as Twinkle, Twinkle, Little Star, Lady Moon, Snowflakes, Some of AEsop's Fables, Who killed Cock Robin? The anxious Leaf, The Ugly Duckling, and Cinderella. Vary the work with every lesson. Give specific seat work and see that the children prepare it. Encourage the illustration of parts of the lesson by means of drawing, painting, cutting, dramatic action, etc. Master all the new words at the head of the lesson by having pupils pronounce them by columns, forward, backward, across, spell by sound, use in sentences, illustrate, give synonym, and so on. Let such work be lively and hold the close attention of all the class. Above all, never let the reading lesson degenerate into a lifeless, mechanical grind. No competent teacher who has a spark of interest in her work need fail to make these first lessons in reading a pleasant memory forever to every child.

Teach abbreviations found in reader. Copy easy poems from memory. Write brief description of objects which they have already drawn or made. Tell or have told Decoration Day stories,



myths, and fairy tales. Get pupils to use their eyes, ears, hands, and constantly exercise their observing and imaging powers. Have all written work neatly done. Careless work must be re-written. Be patient and persistent in correcting errors in speech. Owing to causes for which the child is not at all to blame he may, at five years of age, have many wrong habits of speech very firmly fixed.

**SPELLING.** Teach pupils to recognize syllables. Review all the hard words in the first reader. Do not neglect oral spelling. Never ask pupils to give a set definition for a word. Teach them to point to the object represented by the word, bring it to you, tell you about it, make a picture of it, but never define it in the dictionary fashion. Give dictation work.

**WRITING.** Review all the small letters. Practice on easy capitals. Have much writing on board using the large muscles of the arm also rapid writing of such words as man, nice, one, mamma, mine.

**HANDWORK AND DRAWING.** Bring nature into the school-room. Have the children bring fruits, seeds, leaves, flowers, cocoons, shells, pretty pebbles, and let them paint, draw, cut, model and color these objects. Plant seeds and let the children care for them, watch their growth, draw and model them.

**MUSIC.** Continue suggestions for previous months. See outlines. Review the songs learned during the year. See that pupils get the meaning and sense of the words and understand and appreciate the sentiments expressed.

**NUMBERS.** Review work of the year. Add and subtract twos, threes and fours. Remember that in addition to its great practical value, the study of arithmetic should give the mind vigor, freedom, alertness; should promote quickness of mental movement until it becomes a habit.; should strengthen the power of attention and give the pupil power to close his mind against distracting influences; should enable the child to grasp ideas clearly, arrange them in orderly fashion and state them exactly; should encourage the habit of looking into things, foster self-reliance by gaining conquests over material things; train memory and imaging power, and develop the power of comparison, judging and reasoning.



## SONGS, GAMES AND LITERATURE FOR FIRST YEAR.

*Fall.*

1. "Windy Nights," Robert Louis Stevenson.
2. "Lady Moon," Lord Houghton.
3. "The Sunbeams."
4. "The First Christmas," Poulsson.
5. "Come Little Leaves," Child's Song Book.
6. "Jack Frost," Merry Songs and Games.
7. "I'm a Little Sunbeam," Infant Praises.
8. "Merry Christmas Bells," Dainty Songs.
9. "Father, We Thank Thee for the Night," Songs and Games, Walker and Jenks.
10. "Father, Help Each Little Child," Mrs. Hailman's Songs, Games and Rhymes.
11. "Good Night," The Child's Song Book.

*Winter.* (Review those learned during the Fall.)

1. "The Snow," Peasley's Graded Selections.
2. "The Little Chickadees."
3. "Pine Needles," Wm. Hayne.
4. "This is the Way the Snow Comes Down," Dainty Songs.
5. "Merry Little Sunbeams," The Child's Song Book.
6. "Wynken, Blynken and Nod," Riverside Song Book.
7. "The Pigeon Song," Songs for Little Folks. Crafts & Merrill.
8. "The Dollies' Dance," Golden Boat.

*Spring.* (Review those for Fall and Winter.)

1. "A Little Brown Seed."
2. "The Nestlings," Laura F. Pollard.
3. "The Dandelion," Peasley's Graded Selections.
4. "The Chicken's Mistake," Phoebe Cary.
5. "Rain Drops."
6. "How Queer," Robert Louis Stevenson.
7. "Robin's Lullaby," Stories in Song.



8. "The Violet," Songs and Games for Little Ones.
9. "When the Rain Comes Down," The Child's Song Book.
10. "The Tree Song," The Golden Boat.
11. "A Song for Summer," Stories in Song.

*General.*

1. Grimm's Fairy Tales.
2. DeGarmo's Fairy Tales.
3. Hawthorne's Wonderbook.
4. Aesop's Fables.
5. Hans Christian Anderson's Tales.
6. Bulfinch's Age of Fable.
7. Hiawatha.
8. Elliot's Poetry for Children.
9. Whittier's Child Life in Poetry.
10. Adventures of a Brownie.
11. Aunt Louisa's Wee Wee.
12. Mew-Mew and Bow-Bow.
13. Nine Little Goslings.
14. Pied Piper.
15. Poems of Eugene Field.

---

*HELPFUL BOOKS FOR TEACHERS.*

1. How to Teach Reading, by Hall. Houghton, Mifflin & Co., 15 cents.
2. Literature in Schools, by Scudder. H., M. & Co.
3. Kindergarten Magazine.
4. Miss Cooley's Series of Language Lessons.
5. Nature's By-Ways, by Ford. The Morse Co., 35 cents.
6. Stories for Children, by Lane. American Book Co., 25 cents.
7. First Four Years in Numbers, by Boson. Ginn & Co., 40 cents.



8. Graded Instruction in English, by Bright. American Book Co., 36 cents.
9. Child and Nature, by Frye. Ginn & Co., 80 cents.
10. Special Method in Geography, by McMurray. Public School Publishing Co., 40 cents.
11. Nature Study and Related Literature by Anna E. McGovern, Cedar Falls, Iowa.
12. The First School Year by Katherine Beebe, the Werner Co., Chicago.
13. Handwork for Kindergartens and Primary Schools by Jane L. Hoxie. Milton Bradley Co., Springfield, Mass.
14. Jean Mitchell's School by A. W. Wray. Public-School Publishing Co., Bloomington, Ill.
15. Phelps and His Teachers by Dan V. Stephens, Fremont, Nebr.
16. Occupation for Little Fingers by Elizabeth Sage and Anna M. Cooley.

### PRIMARY DIVISION.

---

#### SECOND YEAR.

---

##### 1. *Books and Materials Needed.*

Second reader, tablets and pencils, ruler, drawing material, scissors, cardboard, practice paper for writing, colored pencils box of paints, materials for handwork.

##### 2. *Studies.*

READING AND LANGUAGE. Second readers and supplementary work. Phonics. Three recitations daily.



**SPELLING.** New words in reader and other lessons. Punctuation. Abbreviation. Dictation exercises.

**WRITING.** Review small letters. Capitals. Copying. Practice movements.

**NATURE STUDY.** Plants, animals, forces. Oral lessons in Geography, Hygiene, and Behavior. See outlines.

**HANDWORK AND DRAWING.** Follow outlines, adapting them to the needs of your school.

**MUSIC.** Singing by note. Intervals on the staff. Rhythm and the cultivation of soft and pleasant tones.

**NUMBERS.** Read and write numbers to 100. Addition table completed. Subtraction within the tables orally.

Multiplication table to 5 times 9. Division within the tables. Easy comparisons and measurements. Fractions, taught in connection with the common weights and measures. Easy problems. Written work.

---

## *OUTLINE OF COURSE FOR EACH MONTH.*

### **FIRST MONTH.**

**READING AND LANGUAGE.** Review first reader work or use supplementary reading of easy first reader grade most of this first month, bringing your class gradually to the second reader. Teach all new words in the lesson before you permit the pupil to read from the book, and then insist on his reading promptly, without drawling or hesitating. Do not try to advance too rapidly, but do not keep the class on a lesson after it has lost its interest for them. Turn back, after a few days, and review such lessons. You can never secure good oral reading by imitation or mechanical drill. The pupil must be interested in the lesson, master its thought, and be filled with its sentiment before he can express them easily, freely, spontaneously. Every school should have a series of readers for use in supplementary reading. Frequent changes from the regular reader to the supplementary one is bet-



ter than to read two second readers consecutively. The following books are recommenced for supplementary work for the second year:

Cyr's Second Reader, Ginn & Co.

Wheeler's Second Reader, Wheeler's Pub. Co., Chicago.

Easy Steps for Little Feet, American Book Co.

Classic Stories for Little Ones, Public-School Publishing Co.

Cooke's Nature Myths, A. Flanagan.

Nature Stories for Young Readers, D. C. Heath & Co.

Stickney's Pets and Companions, Ginn & Co.

First Year Nature Reader, Werner School Book Co.

Verse and Prose for Beginners, Houghton, Mifflin & Co.

A complete outline for language work will be found immediately after the course of study for the eighth year. This work is intended for the first two grades and is based upon the story of Hiawatha. The teacher should adapt the work to the needs and attainments of the pupils. The work is very suggestive along the line of handwork, drawing and nature study.

**SPELLING.** The new words in each reading lesson. Teach pupils to pronounce these rapidly and accurately at sight from the blackboard before reading. Give careful drills on syllables, accent and spelling by sound. Do not require formal definitions, but call for illustrations, use of the word in a sentence, word of like meaning. Have frequent reviews of all words missed. Practice oral spelling and spelling by sound.

**WRITING.** Review small letters. Keep a full list of all the letters, both small letters and capitals, on the board where pupils can see them. Strive to secure freedom of movement. Do not permit small, fine, cramped writing. Copy sentences, stanzas and short poems. Write lists of proper names.

**HANDWORK AND DRAWING.** Much of this work will grow naturally out of the language work and other lessons. Children are fearless in drawing. Give them every facility for freely expressing their ideas. Do not criticise closely, but encourage the crudest attempts. See outlines for Language, Drawing and



### Nature study.

**MUSIC.** In learning new songs, select those easily within the range of the children's voices. Have three or four good opening and closing songs so that pupils may not become weary of such songs. Write the words of each new song on the board, for children often make most ludicrous mistakes if they depend wholly upon the ear in learning the words. A little boy complained of the "foolish school songs," and cited as an example "Mary sings the lark." Another child inquired of his father on coming home from church what kind of a bear a "consecrated cross-eyed bear" was. See outlines.

**NUMBERS.** Counting to 50. Addition table to 7. Count by twos, threes, fours and fives. Measurements and comparisons, such as minute, hour, day, week, month, square inch, square foot, ounce, pound, pint, quart, telling the time by the clock and writing the current date. Easy problems. Review the work of the first year. Do not hurry on to the new work for the vacation has been long, and some children will seem to have forgotten all they ever learned in numbers. Be patient and careful with such ones. A little harshness has often made arithmetic a sealed book to the child for two or three years of his school life.

### SECOND MONTH.

**READING AND LANGUAGE.** Ten or fifteen pages of the regular second reader, besides some supplementary work. Give much attention to the pupil's silent reading by having him read a stanza or paragraph to himself and then tell it in his own words or answer questions. New words that appear in sight reading from supplementary work should be written on the board. Drill in slow pronunciation. See outlines for second month in Language.

**SPELLING.** From reader and other lessons. Spell by sound. Have spelling matches. Keep a list of each pupil's misspelled words and review them till they are mastered. Many words do not occur often enough in the lessons to fix their form firmly in the pupil's mind.



WRITING. See that all written work is neatly done. Have considerable work on the board by the pupils. Practice free movement. Begin the systematic teaching of the capital letters, four to five each month.

HANDWORK AND DRAWING. In connection with reading, language, and nature study.

MUSIC. According to an enactment of the Twenty-eighth General Assembly, all teachers are required to pass an examination in the Elements of Vocal Music. This means that vocal music is considered an essential part of a common school education, and should be taught in every school. Begin now. A short general lesson can be given to the whole school once a day. And a short lesson, full of life, interest and cheer is far better than a long lesson which is lacking in these essential elements. See outlines.

NUMBERS. Counting to 70. Addition table to 8. Teach 1-2 of 8 and all the fourths of 8, by using the pint, quart and gallon measures. See that the child images his operations in number. To add 1-4 of a gal. and 1-8 of a gal. should instantly appeal to him as a concrete act, i. e., to add two pints and one pint. Give much drill in measuring and estimating lines, areas, solids. Let each child keep a calendar and learn how time is measured. Give many practical and original examples. Give especial attention to rapid sight work in addition.

### THIRD MONTH.

READING AND LANGUAGE. About fifteen pages of the second reader besides supplementary work. Commit choice selections to recite before the class. No piece is to be committed to memory by the pupil unless he first grasps the thought of the piece. By this it is not meant that a *child's* grasp of the thought must be or *can* be as full as that of the adult. Assign the new lesson with great care, so that each pupil knows just what he must do in preparing it. Be careful not to give too much written work. Substitute illustrative work for written work. If written work is assigned, it should be done and the teacher must hold each pupil responsible for it, and should look it over for mistakes. Test the



pupil's knowledge of the meaning of words by requiring him to illustrate them by drawing, by synonyms, or by use in sentences *after* the meaning has been fully explained. Do not fall into the habit of pronouncing words for the pupil while he is reading since that shows that the lesson has not been prepared for intelligent reading. Such blundering over a lesson does little good and much harm. Teach punctuation marks in the reader not already learned.

Much of the language work will grow naturally out of the lessons in reading, nature study, handwork and drawing. An abundance of additional work will be found in the outlines for language based on portions of Longfellow's *Hiawatha*. Some portion of the work there suggested should be regularly followed throughout the year.

**SPELLING.** From reader and blackboard. Have frequent reviews of the hard words in back lessons. Keep list of words frequently misspelled and drill daily upon them. Words of more than one syllable should be properly divided and spelled orally by syllable.

**WRITING.** Free-arm movements and special attention to capitals. Pupils should write a smaller hand than in the first year's work.

**HANDWORK AND DRAWING.** The teacher should encourage all forms of motor expression, following the suggestions for the first year's work. There is scarcely a lesson that does not furnish opportunity for pupils to express their ideas by means of handwork. This incidental instruction is as important as the regular work. Do not teach drawing for the sake of drawing, but teach the children to use drawing as a means of expressing thought. See outlines.

**MUSIC.** Continue the exercises in breathing. Explain how we represent musical sounds on the staff. Call attention to the major scale. Begin work on the scales. Let most of the time be spent on simple rote songs, and do not be in a hurry to rush pupils into the theory of music.



NUMBERS. Counting to 100, Addition table to the 9's. Count by three's to 30; by four's to 40, and by five's to 50. Review all units of preceding months. Teach the fractional parts of dollar using half-dollars, quarters, dimes, and five-cent pieces. Illustrate halves, thirds, quarters and sixths by folding papers, drawing rectangles, and by constant use of the blocks.

#### FOURTH MONTH.

READING AND LANGUAGE. About twelve to fifteen pages and some supplementary work. Phonic exercises. Occasional lessons in sight reading. The teacher should read to the pupils choosing easy stories that contain life and action or describe animal life. Choice legends, folk lore, and fairy tales are always interesting. If pupils show lack of interest, change the poem or story. Continue the language work in Hiawatha as outlined.

Give close attention to language work in the reading class, but try to vary the work as much as possible. Some teachers have one invariable formula for teaching language in a reading lesson, *i. e.*, "Tell what you have read." There is no surer way to kill all interest in the lesson than the *over use* of this formula.

SPELLING. From reader and blackboard. Give lists of words from back lessons and have pupils copy, using proper diacritical marks so far as learned, and marking silent letters, without reference to reader. Teach them to pronounce these words *as they have marked them*, making corrections afterwards.

WRITING. Capitals P, B, R, A. Do not try to hear another class recite while the class in writing is at work. All pupils of the first six years should have one lesson in writing or drawing every day. See that the writing and drawing materials are kept in good condition.

HANDWORK AND DRAWING. Consult outlines.

MUSIC. Give exercises in the major scale, teaching the intervals. Give special attention to pitch and accent. Continue the exercises in staff notation, explaining such terms as measure, half-note, quarter-note, and rests as they are introduced. Do not continue these drills so long that pupils tire of them.



NUMBERS: Addition and subtraction to 12. Make the foot the unite for teaching 12. Teach halves, thirds, fourths and sixths of 12, reducing these fractional parts to inches and the reverse, adding and subtracting fractions in this way. Require pupils to make the actual measurements of lines, surfaces, solids, and to estimate bulk, weight, value, time.

#### FIFTH MONTH.

READING. Fifteen to twenty pages in the reader, with additional supplementary work. This supplementary work should be of easier grade than the pupil's ordinary lessons, and should be read at sight. Let each pupil select some piece that he would like to read and permit him to read it entire. Take great pains to have children read all their written work in sweet and pleasant tones and without stumbling. Give frequent drills upon the elementary sounds and combinations. Give continued attention to pronunciation, articulation, accent, emphasis, inflection. Do not keep the class too long on one lesson. It is better to review it after a time than to read that in which the class has lost interest.

SPELLING. From reader and blackboard. Give attention to the division of words into syllables and to marking accented syllables. The syllable is the unit of pronunciation, and good pronunciation cannot be secured without careful drill upon syllables. This is of special importance if you are using the word method, since the syllable really has no place in that method.

WRITING. Special attention should be given to proper position, pen-holding, ease and legibility of writing. Give much drill in free-arm movements. Practice on groups of letters that are similar in formation.

HANDWORK AND DRAWING. Follow suggestions already given and plan your work for the month after carefully reading the outlines for language, drawing and nature study.

MUSIC. See outlines.

NUMBERS. Addition and subtraction to 20. Roman notation to XX. More written work can be required. Multiplication and division to 4 times 10.



Much drill work in rapid addition. Teach pupils to picture results and relations vividly. Encourage actual measuring, weighing and computing. Ask for the number of beans or peas in a pod, rows of corn on a cob, kernels in a row, apples in a peck. etc. Call for the length, breadth, bulk and value of common articles. Avoid being bookish, and show pupils the practical value of arithmetic.

#### SIXTH MONTH.

READING. Fifteen to twenty pages. Teach the principal diacritical marks as used in the reader. Rapidly review lessons passed over, letting each pupil read a whole page or whole short lesson. Let pupils read interesting stories in other easy second readers or first readers.

Memorize four to six lines each week. Teach our national songs. Teach the meaning of the new words, but do not require pupils to learn set definitions. Read to the pupils. Silent reading should precede oral reading. Teach pupils that oral reading is a means of giving our thought to others. Follow the outlines for language work.

SPELLING. From reading and other lessons. Study carefully the form of each new word in the reader. Pupils should use the words they learn to spell in written sentences. Words should be spelled first orally, and then written from dictation. Group together words having a common phonic element.

WRITING. Aim to secure free movement and reasonably rapid work in writing. All the written work should be neatly done. Practice on the capitals. Avoid flourishing. Teach a plain, simple hand.

HANDWORK AND DRAWING. According to outlines. Correlate with all studies, and emphasize both as a means of securing clear and vivid images.

MUSIC. See outlines.

NUMBERS. Addition within the limit of 30, but do not require pupils to add more than four or five numbers in one problem. Roman numerals to XL. Multiplication and division tables to 5 times 7.



Make addition and subtraction tables for all work up to this point, and drill on them from the board frequently. Continue work in actual measurements. Encourage pupils to make up original problems for each other. Do not confine yourself to one book. Learn to make your own problems.

Teach the table for *avoirdupois* weight. For the work in fractions use the pound as made up of 16 ounces. Review all the fractions taught so far; one-half of 1, 2, 4, 6, 8, 10, 12, 14, 16; one-third, of 1, 3, 6, 9, 12, 15; one-fourth of 1, 4, 8, 12, 16; one-fifth of 1, 5, 10, 15; one-sixth of 1, 6, 12; one-seventh of 1, 7, 14; one-eighth of 1, 8, 16; one-ninth of 1 and 9, and so on. Insist on rapid work in reviews and drills.

#### SEVENTH MONTH.

READING AND LANGUAGE. About twenty pages. Supplementary work for sight reading. Plan your seat work so that children must make careful preparation and study of the lesson. Vary your methods constantly. Memorize choice selections. Insist on correct position and secure vigorous work. Put life and cheerfulness into your own work.

In language work follow the suggestions already given.

SPELLING. Keep a sharp lookout for all misspelled words in all lessons. If a pupil misses a word, he should put it down right away on his doubtful list. He should review it carefully for the next three or four lessons, and then may consider the word mastered and may check it off his list. Encourage pupils to keep their "black list" as small as possible.

WRITING. See that pupils do not shade downward strokes, do not grasp the pencil too tightly, nor get the eyes too close to the work. Require neat written work in all lessons. Teach pupils to read script readily from the reader and from the written work of other pupils.

HANDWORK AND DRAWING. See outlines.

MUSIC. Continue work on the staff. Exercises in tone relationships. Singing of simple melodies. Writing of symbols used in notation. Simple rote songs as before.



NUMBERS. Make a list of all the combinations that make up each number to 10 and practice every day. Make constant use of the tables as far as learned. Require original problems. Continue work in fractions. Do not speak of difficulties, but measure, verify, review and drill, training the sense of touch, the eye, the hand.

Give especial attention to work in rapid combinations. Remember that much of the pupil's future progress in mathematics depends upon the skill and readiness with which he performs the simple fundamental operations of addition, subtraction, multiplication and division. Remember that figures have no magic power in themselves. They are only symbols of number. The child must think quantities accurately and picture relations vividly if he ever really masters arithmetic.

#### EIGHTH MONTH.

READING. Complete Second Reader. Review of difficult lessons. Sight reading from supplementary work. Place upon the board questions on the lesson to which the children shall write complete answers. Do not ask pupils to imitate you in reading. Make clippings of appropriate articles, paste them on cards, and use as sight reading. Gather a good supply of interesting reading material for this grade to be used by individual pupils as required. Seldom pronounce a word for a child while he is reading. He will think you will do so the next time. Do not permit blundering over words or stopping to spell out words, but teach new words better. Cultivate the power to take in a group of words at a glance. Do not teach that the voice must fall at a period and be kept up at a comma. Teach pupils to adapt their manner and voice to the style of the piece. Encourage them to look for beautiful thoughts and to read them in a beautiful way, so that they may learn to love reading for its own sake.

SPELLING. From reader and blackboard. Drill on homonyms. On use in sentences. Give dictation work. Select a list of words occasionally from words that the children use in conversation or on the playground. Teach names of the



months, holidays, local places, countries and places that children read about. Continue phonic spelling. Do not permit children to see incorrect forms, if you can prevent it. Never let children commit dialect pieces, or read them, if you can help it. Give special attention to the division of words into syllables. Do not spend too much time on the diacritical marks. Have considerable oral spelling.

WRITING. Review small letters. Write short letters to teachers and parents. Do not teach writing as a fine art, but as a means of expression. All copies for beginners should be large,—full, round letters of the simplest possible form. Aim in every lesson to secure good position, correct form of letters, easy, natural movement, and reasonable speed. Insist that pupils shall do all their written work neatly, but never assign written work just to “keep children busy” or “out of mischief.”

HANDWORK AND DRAWING. In some schools there can be very little regular class work in drawing but this does not hinder the teacher from teaching this important branch. As a means of acquiring clear and vivid mind pictures, Drawing is invaluable. Great pains has been taken to provide abundant and suggestive material for this work in the outlines on Reading, Language and Nature Study. For additional work see the outlines.

MUSIC. According to outlines. Review work gone over and songs already learned. Cultivate pleasing tones and expression.

NUMBERS. Roman notation to L. Adding short columns of figures rapidly. Easy practical examples, using feet, inches, yards, pints, quarts, gallons, ounces, pounds, cents, dimes, quarters, dollars. Simple fractions. Require constant exercises that call for comparison and judgment. Review all the work gone over.

---

### *RESULTS OF FIRST TWO YEARS' WORK.*

READING. The pupil should be able:

1. To read aloud naturally, accurately and readily any lesson in the First and Second Readers, and to gather the thought easily from the printed page.



2. To tell in good language the substance of what he reads.
3. To pronounce independently new words of easy second reader work.
4. To spell by sound most of the words learned, mark silent letters and use intelligently the diacritical marks found in his reader.
5. To accent any syllable of a word, give proper inflection to any word and emphasize any word when told to do so.
6. To give from memory a few short selections entire.

#### SPELLING. Ability.

1. To pronounce and spell, orally or in writing nearly all the words in the First and Second Readers, giving the proper division into syllables.
2. To give in a general way, by drawing, illustration, synonym, description, or use in a sentence, the meaning of the words in the readers.
3. To write easy sentences from dictation.
4. To use correctly, capital letters, abbreviations and punctuation marks most frequently found in his reading lessons.

#### WRITING. Ability:

1. To write with reasonable speed in a legible hand.
2. To put all of his written work into neat and correct form.

#### LANGUAGE. Power:

1. To describe accurately what he sees and hears.
2. To converse readily on his actual experiences.
3. To explain clearly what he makes or does.

NATURE STUDY. Some accurate knowledge of plants, animals, elementary geography, hygiene and love of nature.

#### HANDWORK AND DRAWING. Ability:

1. To sketch rapidly any object.
2. To use his hands skillfully in modeling, cutting, painting, folding, weaving, braiding, etc.
3. To make simple original designs in constructive work.



**MUSIC.** Power to distinguish pitch, tone and intensity; sing the easier scales correctly; represent notes on the staff; sing simple songs with expression.

**NUMBERS.** The pupil should be able:

1. To count, read and write numbers in Arabic Notation to 100, in Roman Notation to L.
2. To give the addition tables to 12 and the multiplication tables to 5.
3. To make accurate estimates and measurements.
4. To solve promptly, simple problems involving Dry Measure, Liquid Measure, Long Measure, Avoirdupois Weight, and U. S. Money.

---

### *DANGER POINTS IN PRIMARY GRADES.*

---

In his recent book, "The Grading of Schools," Supt. W. J. Shearer points out what he considers the "Danger Points" in the different grades and gives helpful suggestions, as follows:

#### **FIRST YEAR.**

**ARITHMETIC.** Danger Points.

Hard combinations from one to ten. Abstract combinations. Writing and reading numbers that look or sound alike. Development of clear ideas of number. Use of the signs.

Suggestions.

Concrete and abstract problems by teacher and pupils. Pupils in this grade require repeated drill in every step from the formation of figures to the combinations of numbers.

**READING.** Danger Points.

Combinations of sounds. Recognition of words in script and print, especially those similar in appearance; as, this, that, these, there, etc. Ability to recognize new words.

Suggestions.



Phonic drill. Practice on columns of words. Special attention to articulation and expression. Give the pupil time to read the sentence to himself, in order that he may get the thought. From the beginning make an effort to secure expression in reading.

#### SECOND YEAR.

##### ARITHMETIC. Danger Points

Difficulty in applying combinations, and recognizing combinations, no matter in what form they appear. Notation and numeration. Work in parts of wholes, the relation of one to the other. In subtraction, borrowing and paying back.

##### Suggestions.

Give pupils examples and questions in every conceivable way, so that they may become familiar with the form and number and be able to recognize them under all conditions. Drill at the board by mental work, and by cards containing combinations with or without answers. Oral examples and explanatory board work is the best way to make "borrowing" and "paying back" in subtraction understood.

##### READING. Danger Points.

Ability of pupils to read understandingly and with expression. Recognition of similar words. Joining the article to the noun. Sounds of letters. Recognition of words at sight.

##### Suggestions.

Be careful about words that look much alike, as, how, who, then, them, this, etc. Drill is very important here. Write the words in columns on the board and let the child read one or more words. Give these words for spelling lessons, and dictate them to pupils for writing. Expression may be secured by questions, comparisons, suggestions, informal talks and use of objects and pictures. Enunciation is aided by drill in phonics. Have children read silently one line, or to a period, before reading audibly. Have the most difficult phrases written on the board and read by class till the difficulty is removed. The hard words should be spelled by sound before the lesson is read. Have the best reader read the difficult passage, so that expression is noticed, which latter is also aided by "talking it" and by asking questions.



*SONGS, GAMES, AND LITERATURE FOR SECOND  
YEAR.*

---

FALL.

1. "The Aster."
2. "Golden Rod."
3. "The Mountain and the Squirrel," Emerson.
4. "Thanksgiving."
5. "Christmas Eve," Mary Mapes Dodge.
6. Legends of the Christ Child.
7. "The Raindrop's Song," The Golden Boat.
8. "November," Riverside Song Book.
9. "Kris Kringle," Riverside Song Book.

WINTER. (Review those of Fall.)

1. "New Year."
2. February Twenty-Second.
3. Young March Wind, M. T. Butts.
4. The Snow Bird, School Songs A.
5. Washington's Birthday, Forest Choir.
6. Good Night, Forest Choir.
7. Now Our Morning Work is Ended, Merry Songs and Games.

SPRING. (Review those of Fall and Winter.)

1. Rain and the Flowers.
2. Dandelion.
3. April's answer to a child, M. T. Butts.
4. "The Farmer," Songs for Little Children.
5. "A Song for Summer," Songs for Little Children 11
6. "Little White Lily."
7. "Bob White," Forest Choir.
8. "There's a Little Bird's Nest," Infant Praises.



*HELPFUL BOOKS FOR TEACHERS.*

---

1. Classic Stories for Little Ones, Public School Publishing Company.

2. Animal Life, by Bass. D. C. Heath & Co.

3. Plant Life, by Bass. D. C. Heath & Co

4. Fairy Stories and Fables, by Baldwin. American Book Co.

5. The World and Its People, by Larkin Dunton.

6. How to Keep Well, by Blaisdell. Ginn & Co.

7. Home Geography, by Long. American Book Co.

8. Talks About Common Things, by MacLeod. March Brothers, Lebanon, Ohio.

9. Suggestions on Teaching Geography, by McCormick. Public-School Publishing Co.



*FIRST INTERMEDIATE DIVISION.**THIRD YEAR.*

## 1. BOOKS AND MATERIALS NEEDED.

Third reader, pen, ink, blotters and paper for practice, ruler, drawing material, tablet and elementary arithmetic and a music reader.

## 2. STUDIES.

READING. About three-fifths of the Third Reader with one-half of an additional reader or equivalent supplementary work. Choice selections committed to memory. Much sight reading. Two or three good books from the school library read under the supervision of the teacher. Two recitations daily.

SPELLING. Words in reader and other lessons. Careful attention given to homonyms and synonyms. Easy word analysis.

WRITING AND DRAWING. Write with pen and ink. Free movement. All written work neatly done. Alternate with drawing, if necessary. Drawing as outlined, and in connection with all lessons.

LANGUAGE AND LITERATURE. Picture lessons and reproduction stories in connection with reading. Punctuation and capitals. Paragraphs. Correct use of words. Course of regular lessons similar to that of second year's work.

NATURE STUDY AND GENERAL LESSONS. Systematic work in observation lessons, morals and manners, plants and animals, patriotism, hygiene and the effects of stimulants and narcotics, elementary physics and geography.

MUSIC. Music Reader. Easy songs. Work as outlined.

ARITHMETIC. Primary book in the hands of the pupil. Read and write numbers. Rapid addition and subtraction of numbers of three periods. Multiplication and division with multipliers and divisors under 12. Continue objective work with tables and the drills in fractions.



## OUTLINE OF COURSE FOR EACH MONTH.

## FIRST MONTH.

READING. The objects to be attained in Third Reader work are partly mechanical and partly mental. Among the mechanical objects are correct pronunciation, accurate and pleasing enunciation, distinct articulation, proper pitch and ready adaptation to style of piece, time, or place, accent and emphasis. Among the mental objects are grasping thought easily from the printed page, fluency in oral reading and effective expression, and the attainments of a larger vocabulary with power to use words with increasing discrimination. Read carefully the suggestions for the first month of the second year. Read about fifteen pages of the third reader, with supplementary work. Have the words at the head of the lesson pronounced, spelled and used in sentences before reading. Question pupils *before* reciting to test preparation, *during* the recitation to develop the lesson, and *after* the recitation to test their connection, retention and application of the lesson. Many of the easy grammatical constructions should be pointed out and the pupils should gradually learn the names of the parts of speech and the parts of a sentence. Give attention to the simpler figures of speech, as personification, simile, and metaphor, showing how such expressions help to picture the thought better. Assign lessons carefully and give specific directions in regard to written work. Continue work on phonics and diacritical marking. Bring in sentences that you have heard some one use, and then read these sentences as they were used, and find similar sentences in the reader. Each pupil should learn one short choice selection each month. For supplementary reading:

Cyr's Third Reader. Ginn & Co.

Wheeler's Third Reader. Wheeler Pub. Co.



Scudder's Fables and Folk Lore. Houghton, Mufflin & Co.

Heart of Oak Reader, No. II. D. C. Heath & Co.

Stories of Indian Children. Public School Publishing Co.

Book of Tales. American Book Co.

Stickney's Aesop's Fables. Ginn & Co.

**SPELLING.** If a spelling book is used, follow it, but do not neglect to have the *new* words in all lessons spelled and mastered. Observe former instructions. If a speller is used, the third and fourth year classes may recite together. Begin the analysis of English derivative words, as man-ly, father-ly, loud-ly. Have frequent reviews. Insist on neatness and care in writing. All misspelled words should be reviewed until mastered. Pronounce words only once, as a rule, but be very sure that none of your pupils have defective hearing or you may do such a one very great injustice. Do not permit guessing and hesitation in oral spelling.

**WRITING AND DRAWING.** Instruct pupils how to take care of pen, ink, and copy-book. Give instruction on each character or word in the copy; let pupils practice making the same on practice paper; when it can be made sufficiently well, write the copy in the copy-book, always taking pains to do best work in copy-book and to keep it neat and clean. Let the individual pupil understand that he must continue on practice paper until he can write the copy sufficiently well for the copy-book. Honest rivalry can thus be inspired in the pupil to be first, at least not to be last, in writing the copy in the copy-book. Do not practice on a whole line in the copy-book; one word is enough at first.

**NOTE.**—Copy-books, pens and ink should be kept by the teacher, and distributed at each recitation. If the teacher is a fair writer, let the copy-books be dispensed with.

Drawing may alternate with writing, or at least, one general lesson in drawing should be given each week. Use drawing as an aid to all lessons and as a means of securing clear ideas. Follow work as outlined.



LANGUAGE AND LITERATURE. For this grade, the teacher should select some good language book, but no such book should be used entirely. Especially guard against the language work becoming purely mechanical or a mere exercise in filling blank spaces with blank thoughts. Follow the plan outlined in the second year's work. A splendid book for such work in this grade is Jane Andrew's "Ten Boys." Study first Kabul, the Aryan Boy, under the heads: 1. The Story; 2. Comparison; 3. Information Lessons; 4. Modes of expression; 5. Language. Other excellent materials are found in Hawthorne's Wonder Book and his Tanglewood Tales also in Aesop's Fables. For this month the children could study The Aunt and the Dove, The Lion and the Mouse, The Two Travelers or the Miraculous Pitcher. It is well to *read* these stories to the children, but it is much better to *study* them as a basis for intelligent and profitable language training.

Require pupils to memorize choice poems, such as Ingelow's Seven Times One, Field's Rock-a-by-Baby. Stevenson's Land of Story Books.

---

## NATURE STUDY AND GENERAL LESSONS.

---

### OUTLINE FOR FALL TERM.

1. *Plants.* The Study of seeds and fruits. Make a collection. Compare their forms, size, structure, uses, manner of dissemination. Study of autumn flowers. Compare with spring flowers. Draw and model them. Make a careful study of plant life as the plant prepares for winter; buds, and how protected; leaves, their colors, falling, uses; the sap, where it goes.

2. *Animals.* Study the caterpillar, cocoon grasshopper, beetle. Note carefully what birds migrate, what animals hibernate, how animals prepare for winter.

3. *Hygiene and Physiology.* Lesson on manners, care of the



body, food, clothing, exercise, plays and games. The effect of narcotics and stimulants.

This work should be along the line indicated in the little book "The House We Live In."

4. *Geography.* Oral lessons on soils, objects of interest from distant places, plant and animal life in warm and cold countries contrasted. Map of school room and grounds and other places visited. River basins,—their slopes, water-parting, their formation, the parts of a river, as source, banks, bed, current, falls, rapids. Effects of river upon the surface,—floods, plains, canyons deltas, sand-bars, valleys. Uses of rivers. Stories of rivers.

5. *Music.* According to outlines and previous suggestions.

6. *Arithmetic.* Follow the work as given in the book you are using. Do not, however, follow any one book slavishly. Encourage pupils to bring to the class practical examples which they have made up from real measurements. Review all previous work and continue rapid work in all the fundamental operations. Drill in fractions. Drill in the rapid writing and reading of numbers. Do not assist the pupil so much that you destroy his own self reliance. Be careful to secure intelligent *reading* of every problem and have the pupil state clearly just what is required. As far as possible lead the child to discover new facts in numbers for himself. Give oral work on every new subject, before permitting pupils to use pencil or try to solve problems involving new principles. Require pupils to state the same problem in many different ways. Do not try to distinguish written arithmetic from *mental* arithmetic. All arithmetic work is mental, and never permit pupils to waste time with pencil or chalk trying to solve problems that they have not first *thought* out. Require all written work to be done neatly and to be put into good form.

## SECOND MONTH.

READING. About fifteen pages and the same amount of supplementary matter of easier grade. Learn all new words thoroughly. Give particular attention to pronunciation, articulation.



and such diacritical marks as are in the reading lessons. See that pupils do not clip words, and do not blend the final sound of a word with the initial sound of the following word, as *Lucy's mother*, not *Lucy smother*.

**SPELLING.** Prepare a list of words of three syllables, that pupils can pronounce, and have them copy the list, dividing the words into syllables. Let them pronounce the first syllables of all the words, then the second syllables, then the third. Pronounce the words, pausing after each syllable. Give much drill on syllabication.

**WRITING AND DRAWING.** Be careful about manner of holding pen, position of copy-book, position of pupil. Point out common errors in formation of letters, and give instruction on blackboard. Do not allow pupils to continue writing while you are giving instruction on board. Insist upon attention in all recitations and in all exercises.

**DRAWING.** As outlined.

**LANGUAGE AND LITERATURE.** Continue the study from "Ten Boys" of Kablu, the Aryan Boy, under the topics suggested. Give especial attention to the comparisons between Kablu and the children of to-day in appearance, food, clothing, schooling, plays, work and surroundings. Fables for study may be "The Shepherd Boy and the Wolf," "The Boy and the Filberts." Also "The Golden Touch" from Hawthorne's Wonder Book. Encourage all forms of expressive work.

Pupils should memorize one or two choice poems and some maxims and proverbs. Require oral reproductions. Give special care to the correct use of capitals, punctuation, and spelling in all written work.

**NATURE STUDY AND GENERAL LESSONS.** The outline for the Fall term given in the first month's course covers three months' work.

**MUSIC.** As outlined.

**ARITHMETIC.** Multiplication and division tables to the 6's. Teach terms minuend, subtrahend, difference, multiplicand, multiplier, product, and show how to verify or "prove" results.



Illustrate work in fractions by means of measurements, lines, squares, circles, rectangles and solids. Add mixed numbers. As soon as pupils can picture numbers clearly, dispense with objects in teaching. Teach them to think and picture numbers and relations clearly before writing.

### THIRD MONTH.

READING. About fifteen pages with an equal amount of supplementary work. Question carefully on the lesson to induce thought on the part of the pupil. Continue review of back lessons as sight reading; also supplementary reading in some second reader that is new to the pupil.

SPELLING. Learn to spell and pronounce all new words used in all lessons. A little tablet should be used for the hard words and these should be reviewed frequently till mastered. It is a mere waste of time to spell over and over again words that pupils already know. Require pupils to define words more closely and gradually prepare them to use the dictionary.

WRITING AND DRAWING. Call attention to the relative height of the small letters. Continue movement exercises. Write from copy. Frequent exercises at the board. Let pupils draw objects from nature freehand. Do not permit the use of rulers in drawing.

LANGUAGE AND LITERATURE. Darius, the Persian Boy, should now be studied. He should be compared with Hiawatha, Kablu and boys in America as to home, clothing, food, schooling, social, industrial and political life and surroundings. The story appeals very strongly to children of this grade, and through it the teacher may shape their ideals of health, beauty, truthfulness, patriotism and manliness. From Aesop's Fables the children should study "The Dog and His Shadow." "The Paradise of Children" from Hawthorne's Wonder Book and "The First Thanksgiving," by Kate Douglas Wiggin, should also be studied.

There should be some good children's books in the library and pupils should read these under the supervision of the teacher. The different characters should be discussed in class.



NATURE STUDY AND GENERAL LESSONS. See outline for the fall term given under the first month's work.

MUSIC. See outlines.

ARITHMETIC. Multiplication table to 7's. Teach terms dividend, divisor, quotient, remainder, and how to "prove" examples in division. Give many practical problems. Require original problems. Give rapid addition drills to the whole school. Such drills may also include all the fundamental operations, and will arouse great interest, if rightly used.

#### FOURTH MONTH.

READING. The meaning of new words and phrases should be learned from their relation to other words in the text rather than by means of formal definitions. Read about fifteen pages and as much more supplementary work of slightly easier grade. Do not allow pupils to fall into the habit of depending upon the teacher to pronounce the difficult words while reading. Do not let the class attempt to read more than they can prepare well. A lesson has not been prepared when the pupil must continually stop reading for the teacher to pronounce words. The pupil has either been negligent or the lesson is too long; the teacher should ascertain where the trouble is and to take pains to remove it.

SPELLING. Cultivate the habit of carefully observing word forms. An interesting and useful exercise is to have words in large type pasted on cards, hold up the card for an instant and have pupils see if they can recognize the words at a glance. Phrases and sentences may be used in the same way, and children soon develop remarkable ability in getting the forms of words at a glance. To spell well is to form and retain accurate mental pictures or visual images of words.

WRITING AND DRAWING. Encourage pupils to write letters, notes of invitation, order for Christmas presents, items of news for the papers. Have them draw original designs, patterns and pictures. Encourage the use of paints. Show in every possible way the practical value and applications of writing and drawing.



LANGUAGE AND LITERATURE. Continue study of "Darius, the Persian Boy." Other materials are "The Hare and the Tortoise," "The Camel" and "The Blind Man and the Lame Man," from Aesop's Fables, "The Pygmies," Hawthorne's Tanglewood Tales, and "Don't Give Up," by Phoebe Cary.

Give training in oral expression in all classes. The teacher should have some good book on language teaching. One of the best is "Language Through Nature, Literature, and Art," or De Garmo's Language Lessons.

### NATURE STUDY AND GENERAL LESSONS.

---

#### OUTLINE FOR WINTER LESSONS.

1. *Plants.* Winter life and appearance compared with other seasons. How protected by nature and man. Study of evergreens. leaves, cones. Preparation of Christmas tree.
2. *Animals.* Winter homes, and covering, food, habits. enemies. Movements of different animals compared, their plays their commercial value. Lessons on kindness to animals. Stories of animals life. Drawings of animals, sketches, models.
3. *Hygiene and Physiology.* Physical exercises and games. Need of pure air, ventilation, rest, sleep. Care of the eyes. Contagious diseases, origin, spread, symptoms, treatment, dangers, use of disinfectants.. Bones, joints, muscles—structure and uses. Compare those of man and the different classes of animals. Food,—kinds, amount, cooking, proper manner of eating, teeth and their care, effects of narcotics and stimulants.
4. *Geography.* Lake basin, the surrounding country, inlets, or springs, outlets, shores, life, soil, color of water movements and results, coast line, harbors, gulfs and bays, straits. Weather record and calendar. Changes in soils and surfaces by wind, frost, water and heat. Nature and use of maps. Location of places named in lessons. Continue observations on the positions of sun, moon and constellations. The work here out-lined is intended to cover a period of two and a half or three months.



*Music.* As outlined.

*Arithmetic.* Multiplication table to 8's. All tables reviewed. Exercises in rapid work in the fundamental operations for the whole school. Drill in fractions. Actual measurements of the dimensions of school grounds, school house, floor, walls, windows, black-board boxes, height of children etc. Insist on the constant application of what the child learns. Knowledge is not power until it is coined into practice, and right practise soon becomes habit.

#### FIFTH MONTH.

**READING.** About twenty pages of the reader, with supplementary work. An excellent plan is to secure supplementary reading along the lines of the language or the nature study work. Continue lessons leading up to the use of the dictionary, showing how to find words in a small or academic dictionary, the meaning of the abbreviations used, how words are marked, how and why words have different meanings, how to select the right meaning. Do not let the recitation become dry and formal.

**SPELLING.** Let spelling be both oral and written. Whenever the pupil spells, insist upon good writing; whenever he writes, insist upon good spelling. Make frequent use of dictation exercises. Drill on synonyms and abbreviations.

**WRITING.** Have the copy well executed on practice paper before writing in copy-book. See that pupil does not bear too hard on pen, does not shade downward strokes, and makes like parts of the letter parallel. Make use of drawing in all lessons. See outlines for suggestions.

**LANGUAGE AND LITERATURE.** Continue the work from Miss Andrew's "Ten Boys." Select for study this month "Cleon, the Greek Boy." He represents the average child of seven or eight years. He has keen senses or vivid imagination, is restless, impulsive, suggestible and easily influenced. He is less affectionate than when younger, self-willed, inconsistent in purpose, but on the whole happy, careless, thoughtless and irresponsible. See suggestions for first month. Encourage all forms of



expressive work. Do not moralize but lead children to right conclusions by suggestions and comparisons. The "Three Golden Apples," from Hawthorne's Wonder Book, "Circe and the Swine," and "The Wind and the Sun," from Aesop's Fables, furnish good materials for language work. Through the study of "Cleon, the Greek Boy," very much can be done to interest children in Greek art. The teacher should procure if possible statues of Minerva, Diana, Niobe, Mercury and Apollo and pictures of Pandora, Apollo and Daphne, Raphael's Hours and his Days of the Week. The leading forms of Greek architecture should also be represented by drawings and pictures. The children should learn from the study of Cleon to appreciate and love beauty. The Greek motto, "The True, the Good, and the Beautiful" may be suggested as the motto of the school. Beauty and dignity of the body, personal cleanliness and purity of thought should be emphasized.

A good outline for teaching one of Aesop's Fables or similar story is given in the Illinois Course of Study for Common Schools as follows:

1. Reproduction Story. "The Wind and the Sun."
2. Picture Lesson. Have each pupil make a drawing to represent some incident in the story or fable. Describe the picture drawn or some other picture.
3. Information Lesson. Interesting facts about the sun and the moon.
4. Adverb. Use the story to teach and illustrate what an adverb is; location of adverb in sentence; distinguish between use of adverbs and adjectives after such words as *look*, *seem*, *feel*, etc.
5. Punctuation. Use of comma to separate name of person addressed from rest of sentence.
6. Plurals. Make a list of nouns ending in *o* and spell their plurals.
7. Word Study. Correct use of *real*, *awful* and *very*.

The above outline is suggestive and can be adapted to any story or to any grade.



NATURE STUDY AND GENERAL LESSONS as outlined for Winter Term under the work for last month.

MUSIC. See outlines.

ARITHMETIC. Multiplication table to 9's. Addition and subtraction of three-place numbers. Simple divisions. Work in long, square and cubic measures, also dry and liquid measures. Time table learned and applied. Drills in rapid work and in fractions.

### SIXTH MONTH.

READING. About twenty pages of advance work. Reviews and supplementary reading. Encourage children to talk about what they read at home. In order to read well the pupil must be pleased and interested in what he reads. When he reads orally he should read so well that his reading will give pleasure to others. Whatever tends to disturb his effort will hinder him in forming a good style. Therefore it is better for the teacher to make corrections *after* the pupil who reads has completed what he has to tell, and not interrupt him to correct errors during his reading.

SPELLING. Make list of words frequently misspelled and practice till pupil can spell them rapidly. Difficult words must be practiced upon again and again. Continue work of other months.

WRITING AND DRAWING. Give movement exercises. Make the oval, size of capital O, letting the pen move around the circumference a number of times in quick succession. See that the movement is uniform, not jerky. The work in drawing should consist of freehand representation of objects, exercises illustrating other lessons or parts of lessons, simple construction work from drawings made by the pupil, decorative designs, color and form work and the study of pictures.

LANGUAGE AND LITERATURE. Continue work as outlined last month for "Cleon, The Greek Boy." Other material can be found in Aesop's Fables, as "The Thirsty Crow and the Pitcher," and in Kingsley's Greek Heroes, and Hawthorne's Tanglewood Tales.



NATURE STUDY AND GENERAL LESSONS. Complete the outline for winter.

MUSIC. See outlines.

ARITHMETIC. Multiplication table to 11's. Select and use practical examples, applying operations already learned. In solving problems orally, pupils need not repeat a long form of words, but should state the process clearly and concisely.

### SEVENTH MONTH.

READING. Twenty pages of reader. Review and supplementary work. Bring interesting stories to the class and have them read. See that the lessons are prepared as assigned and all written work carefully and accurately done. Review the memorized selections frequently and see who can give the most selections. Let each pupil keep a list of the selections which he can give from memory. More and more accurate definitions should be given. Question pupils as to the uses of words, phrases and clauses, and have pupils learn to use the names of the parts of speech and write lists of nouns, pronouns, adjectives and verbs taken from the lesson.

SPELLING. See that words are syllabicated and pronounced. This is a great aid to reading and pronunciation. Cultivate the habit of mastering words syllable by syllable. It is an old fashion that should be kept up. Require each lesson to be pronounced promptly with open books, before spelling.

WRITING AND DRAWING. Practice on movement exercises. Do not let the side of hand or little finger rest or slide on paper; hand should rest on nails of fingers. The large muscles of the forearm should do the work in writing. Continue the drawing work according to the suggestions of last month and the outlines.

LANGUAGE AND LITERATURE. Study of "Horatius, the Roman Boy." Stories and poems of Roman life and history should be read. The statue of Augustus, or a picture, should be presented as a typical Roman face. The "Roman Boy" should be compared with the other types studied, as to appearance, mode



of life, characteristics and surroundings. Pictures of Roman houses, temples, buildings, and of Roman life should be shown to the class. Let the children learn that law, order, conquest, utility, authority were the Roman ideals. "The Dog in the Manger," "The Golden Fleece," and Macaulay's "How Horatius Kept the Bridge," will furnish additional material.

## NATURE STUDY AND GENERAL LESSONS.

### OUTLINE FOR SPRING TERM.

1. *Plants.* Make a systematic study of a few spring plants, roots, stem, leaves, flowers. Pupils plant seeds, watch their germination and growth. Make drawings. Study the relation of animal life to plant life. Study of buds and bulbs. Flower calendar. Comparison of colors, size, shape, texture and odor of different flowers, and leaves. Habitat of plants and conditions of growth. Poems on flowers and plants, legends and stories.

2. *Animals.* Study the spring habits of animals as they come out of winter quarters, migration north, change of fur or hair. Study insects, eggs, the bee, the relation of insects to flowers. Note carefully two or three types of metamorphosis, such as the change of the tadpole into the frog or the cocoon into the butterfly. The songs and calls of the birds, their nesting and care of the young are topics of unfailing interest to the children. But all these things should be studied in their environment, not from pictures or stuffed and mounted specimens.

3. *Hygiene and Physiology.* Gymnastic exercises and games. Correct position of body while studying or standing. Digestion, respiration and circulation should be explained simply. The relation of fresh air and sunshine to good health. The effects of stimulants and narcotics.

4. *Geography.* Forms of land and water. Study from nature and require pupils to draw what they see. Forests, plains, deserts. Geography of county,—physical features, soil, climate, vegetation, occupations of people, situation of towns, study of largest town, advantages, factories, lines of travel. Local history and government.



MUSIC. See outlines.

ARITHMETIC. Multiplication table completed and reviewed. Examples embracing all the fundamental operations and all the tables learned up to date. Actual measurements. Original problems. Rapid work in addition especially. Problems in time measure. Fractional parts of 100 thoroughly learned and reviewed. Tenths and hundredths written as decimals, as a shorter way, thus laying a foundation for intelligent and rapid work in percentage.

### EIGHTH MONTH.

READING. Twenty pages. Review work and supplementary reading. The class should read during this year about 140 pages of the Third Reader, an equal amount of supplementary reading of somewhat easier grade, and two or three books from the school library appropriate for third year work. The reader should be considered as a book in literature. The aim of the teacher should be to give the pupil mastery of words and the forms of language and to teach him how to interpret the printed page intelligently. "Indeed, the leading purpose of the entire school course is to enable pupils to *read*, meaning by that to interpret the printed page. It is because children cannot interpret the printed page, even after they graduate from high school, that the young people of today find so little interest in reading good books, and find their school course of so little value to them." *Report on Correlation of Studies by Committee of Fifteen, with annotations*, page 9.

SPELLING. Review of difficult words. New words in all lessons. Drill in the instant recognition of *word forms*. Careful drill in oral spelling dividing into syllables. Dictation work, Homonyms and synonyms and easy word analysis.

WRITING AND DRAWING. Continue form and movement exercises. In letters containing straight line, see that pupils make the line straight *nearly* to the base line before curving to join with the next line. Neat work in all lessons. Letter writing and easy business forms. Illustrative drawing work in all



lessons. Make this exercise contribute to the teaching of clear ideas in all studies. Through it the pupil should obtain a better grasp of all other lessons and subjects. See outlines.

LANGUAGE. Continue study of Horatius, the Roman Boy, according to suggestions already given, supplemented by work from Aesop's Fables and Hawthorne's Tanglewood Tales. The child should have accumulated sufficient information by this time to enable him to write original compositions from outlines given by the teacher. The subjects for such composition work should always deal with the pupil's actual experiences and reflections. Avoid all abstract themes, as well as subjects not related to his other lessons. Do not let language teaching become for the pupil a merely mechanical expression of ordinary commonplace ideas. The Committee of Fifteen condemn such language work as "teaching what is called prating or gabbing, rather than a noble use of English speech."

NATURE STUDY AND GENERAL LESSONS. The work for this month is included in the outline for the seventh month. This work should prepare the pupils for the intelligent use of a textbook in Geography, inculcate lessons in morals, manners and care of health, create an intense interest in nature and arouse an inquiring spirit in the pupil as to causes, meaning, nature and results of all natural phenomena. And besides this, nature study should appeal especially to the child's love of the beautiful and the wonderful.

MUSIC. Singing should also contribute to a better grasp of other subjects. Many an interesting lesson on fractions may be given on the scale, the division of notes into half notes, quarter notes, and so on. Singing should make the teaching of reading much easier and more effective, for correct pitch, time, tone, force, accent, pauses, and emphasis are essentials of good reading as well as of good singing. The melody assists the memory in committing choice selections. Copying songs is an excellent exercise in writing and language. No form of physical culture is more helpful than singing. And besides all this, singing should make the daily work of the school easier for pupils and teacher,



give school life an added interest, lessen the difficulties of school government, and render moral instruction more efficient and permanent. See outlines.

ARITHMETIC. Review former work. Complete the objective work on the tables learned, including simpler reductions from one denomination to another. Making of bills and computations of the cost of common articles. Continue rapid work in all the fundamental operations.

### *DANGER POINTS IN THIRD YEAR'S WORK.*

ARITHMETIC. Second step in subtraction. Rapid work. The sevens, eights and nines in multiplication. The use of the cipher in subtraction and multiplication. Division when naughts occur in the quotient. Relative size and value of numbers; children not seeing readily that 2,000 cannot be subtracted from 1989. Notation and numeration.

#### *Suggestions.*

Board work. Rapid addition. Dictation. Drill in subtraction and multiplication tables. Place figures on board using each in turn as multiplier. Individual work at board. Many examples using cipher.

READING. Danger Points. To read readily at sight. Expression. Articulation, particularly final consonants. Difficulty in recognizing words similar in form, as though, through, thought, thorough.

#### *Suggestions.*

To enable children to recognize words easily, take the difficult words in the lesson and write them on the board, and have pupils read them. Also teach the equivalent sounds of letters; divide words into syllables, teach formation of derivatives from primitives, and compound from simple words. For articulation, drill on oral elements. Give much practice on words.—*The Grading of Schools, by W. J. Shearer.*



*TESTS FOR PROMOTION.*

A knowledge of lessons and books should not be the sole test of promotion. Age, mental ability, health, general knowledge all enter into the problem. Ability to do the work of the next higher grade is the fairest test. Bright children must not be held back for dull ones, and dull pupils must not be crowded too hard. Grades and classes and divisions must not become rigid barriers of separation between pupils, especially in rural schools. Individual pupils must sometimes recite in different divisions. Classes must often be combined. New classes must be formed. Certain studies, as writing and drawing, must alternate. In general terms it may be said that unless pupils are able to do fair work in the course of lessons outlined for the third year, he should not be considered as a member of the fourth year class. If he is weak in Reading, Spelling or Arithmetic, he will be pretty sure to fail.

*HELPFUL BOOKS FOR TEACHERS.*

1. A Year with the Trees, Wilson Flagg. Educational Publishing Co.
2. Birds and Bees, Burroughs. Houghton, Mifflin & Co.
3. Special Method in Natural Science for the First Four Grades of the Common School, McMurry. Public School Publishing Co., Bloomington, Ill.
4. Guides for Science Teaching, D. C. Heath & Co.



## FIRST INTERMEDIATE DIVISION

### FOURTH YEAR.

#### 1. *Books and Materials Needed.*

Third Reader, elementary Arithmetic, first book in Geography. Music Reader, copy-book and practice paper, ruler, pen and ink, Spelling-book and tablet, pencils and drawing material. In some schools a text-book in Language will be required, also and elementary book in Physiology.

#### 2. *Studies.*

READING Third Reader completed. Much supplementary reading. Use of dictionary. Two or three books from the school library read under the direction of the teacher. Two recitations daily.

SPELLING: Words from all lessons. Use spelling-book.

WRITING AND DRAWING. Copy-book and much practice on free-arm movement. Writing letters. Drawing in connection with all studies may alternate with writing.

LANGUAGE AND LITERATURE. Reproduction and composition work. Picture stories. Parts of speech taught as to *use*. Classes of modifiers and use. The daily lessons of the children in other branches may be used as the basis of the language work. To learn how to use the mother tongue to express one's thoughts is the aim of language work.

GEOGRAPHY AND NATURE STUDY. Systematic work in the text-book in geography, supplemented by lessons on plants, animals and minerals. Field lessons should be given, and all out door observations encouraged to the utmost. The teacher should have the Teacher's Manual of Frye's Geographies, Ginn & Co. Read stories of travel. The principal facts under elementary physiology including the effects of stimulants and narcotics should be taught as science lessons.

MUSIC. There should be two divisions in music, reciting on alternate days, or one division should copy work while the other division sing.

ARITHMETIC. Rapid work in the fundamental operations. Original problems. Continue fractions. Long division. Denominate numbers. Decimals, and much drill in problems involving fractional parts of 100.



*OUTLINE OF COURSE FOR EACH MONTH.*

---

**FIRST MONTH.**

**READING.** Review lessons as may seem best. Read carefully all the suggestions in the three preceding years of this course on teaching reading. Accent, emphasis, and inflection should receive special attention in this grade. Teach pupils how to use the dictionary. Continue the practice of learning choice selections. In assigning lessons, fix upon some leading thought as the aim of the lesson and then plan the seat work of the pupils so that it will lead up to this leading thought or aim. Be ashamed to dismiss any class, every member of which has not learned at least one new thing. Plan your lessons with the individual needs of the pupils in the class vividly in mind,—think of the pupil who hesitates, the one who repeats, who articulates poorly, who miscalls words, who mispronounces, who cannot vary his reading, who can see only one word at a time, who is awkward and clumsy, who cannot picture clearly, who is neglected at home.

**SPELLING.** Do not spend time in spelling again words which pupils already know just because they happen to be in the spelling-book. Have pupils use words in sentences. Teach the use of the dictionary and compel pupils to form the habit of fixing in memory the form and meaning of the new words that they meet. Continue methods suggested for previous months.

**WRITING AND DRAWING.** Use suitable copy-book, but do not let the pupil write in the copy-book until he has thoroughly practiced the copy or the part of the copy he is to write. Urge each pupil to careful effort by promotion to next copy when the present one is mastered. Insist that pupils use the free-arm movement. Palmer's method of Business Writing is used in some counties with excellent results. There must be no restriction of movement, cramping of fingers and undue tension of muscle. All



this is a waste of the pupil's nervous energy. The outlines in drawing suggest appropriate work for the fourth year in color work, form, location and position, measurement, botanical drawing, decorative drawing and illustrative work.

LANGUAGE AND LITERATURE. The work in the third year was based on Jane Andrew's book, "Ten Boys," Aesop's Fables and Hawthorne's stories. The language and literature work for the fourth year may be based on these sources or it might follow the story of Robinson Crusoe, according to the outline given. Suggestions for teaching this work are given in the "Teacher's Edition of Robinson Crusoe, by Mrs. Lida McMurry, Public School Publishing Co., Bloomington, Ill. The educational value of teaching language from some such work as Hiawatha, Ten Boys, or Robinson Crusoe is much greater than the desultory and mechanical work founded on fragmentary selections of little or no literary merit.

GEOGRAPHY AND NATURE STUDY. A good foundation for work in the text-book in elementary geography has been laid in the oral lessons. Children have learned the directions, location, distance; have studied plants, animals, winds, climate, seasons; have observed the effects of water, winds, frost, ice and snow; have kept a weather record. They should receive special help now in representing these facts by drawings, chalk modeling, molding, measuring etc. "The expression of relief and drainage by geographical symbols is of the utmost importance. All map reading is dependent on the pupil's power to express and read by means of these symbols." See to it that a map means more to the child than a flat, many-colored bit of paper, covered over with black dots and lines. The little dot, marked on the map of Iowa as Des Moines, should call to the mind of the pupil a large number of houses, churches, stores, public buildings arranged in regular streets. It should suggest a definite, concrete picture of people at work, in the streets, children in school, railroads, and business of all kinds. No matter how long it takes, see that pupils acquire the ability to read into a map its real meaning. Cover about ten pages of the text-book in Geography. For this month review previous work in nature study.



MUSIC. The outlines in music should be carefully followed. Some teachers have killed all the interest of their pupils in music by teaching the theory of music too early. Freedom of expression is the chief aim in the lower grades. Do not talk much during the singing lesson. Let the pupils sing.

ARITHMETIC. There should be a thorough review of leading principles and drills in rapid work. Teach tenths very carefully as an introduction to decimals. Show pupils that 1-10 may be written .1. Teach pupils to write decimals to thousandths as readily as they write whole numbers. Associate the *name* of the decimal with the *number* of figures required to write it, as one figure for tenths, two figures for hundredths, three figures for thousandths. Continue actual measurements, estimates and original problems, and teach pupils to apply every new principle and definition to practical work. Study the geometric forms. Apply the knowledge of arithmetic to the lessons in other branches, as music, drawing, nature study, language, and geography. For illustration, show how we use arithmetic in computing the length of rivers, height of mountains, the boundary lines between countries, states, counties and farms, cost of products, building railroads etc.

#### SECOND MONTH.

READING. About fifteen pages. Drill in articulating difficult combinations of sound. See that final sound of one word is not blended with initial sound of following word as to impair enunciation. Choice selections memorized and recited.

SPELLING. Let spelling be oral, phonic, and written. Teach diacritical marking. Teach and encourage the use of the dictionary.

*Note.*—Do not teach diacritical marking as a hobby, as an aimless pastime, or as an end. Never lose sight of the main object, viz., to enable pupils to pronounce words intelligently and accurately as marked in the dictionary.

WRITING AND DRAWING. Observe order and system in this exercise as to distributing and collecting materials, practice work of pupils, kinds of materials used, position of pupils. Be clear



and specific in directions. Master one difficulty at a time. Show what you want done and how to do it. Follow outlines in drawing.

**LANGUAGE AND LITERATURE.** One of the aims of this study should be to build a firm foundation for the intelligent study of history. No surer way can be devised to make pupils "hate history" than to require them to begin the study of history from the ordinary brief text-book. The child should approach the study of history through fairy story, myth, adventure, legend, pioneer tales and biography, so that Hiawatha, Hawthorne's stories, Kingsley's Greek Heroes Jason's Quest, by Lowell, Lamb's Adventures of Ulysses, stories of Lincoln, Washington, and other great men form the only rational introduction to the systematic study of history. Keep this aim in mind during all the work of this year.

**GEOGRAPHY AND NATURE STUDY.** About fifteen or twenty pages of such a text-book as Frye's Elements of Geography, including lessons on the forms of land and water, the earth as a whole, its form and size, the air, mountains, plains, highlands deserts, oceans, continents and islands. Teach the children to observe the facts near at hand and the changes constantly going on about them. Nature study work should be based on the geography lessons. Geography represents everyone of the other sciences, physics, botany, zoology, chemistry, mineralogy, and astronomy. It is the right teaching of geography that opens the mind of the child to all these sciences. Continue lessons on the human body.

**MUSIC:** See outlines.

**ARITHMETIC.** Draw a yard-square and divide it into foot-squares. Divide a foot-square into inch-squares. Teach the table and have pupils apply it to the actual measurements of areas such as rectangles and triangles. Continue drill in long division, fractions, decimals.

#### THIRD MONTH.

**READING:** About fifteen pages with supplementary work. Do not pronounce words for pupil while reading; teach him to



read independently. Halting and lifeless reading usually arises from a failure to master the new words in the lesson, and to gather the thought. Cure the evil by removing the cause.

**SPELLING.** Teach meaning of monosyllable and dissyllable and have pupils classify list of words. Drill on accent. Continue work in dictionary.

**WRITING AND DRAWING.** Spacing of letters, words, sentences. Teach unit of width, u. Keep copy-books neat and clean and pens and ink in good condition. Drawing as outlined.

**LANGUAGE AND LITERATURE.** Require pupils to reproduce orally the stories which are used as a basis for this work. By means of questions and class discussions children should be made inquisitive and thoughtful. Biographies of great men and women should be used, but shun dates and dry statements suggestive of the encyclopedia. School journals afford excellent material for birthday exercises of such men as Washington, Lincoln, Longfellow, etc.

**GEOGRAPHY AND NATURE STUDY.** About twenty pages of the text-book. The seasons, winds, causes and results, the Gulf stream, races of people and conditions under which they live. Require pupils to express their ideas in drawings, paintings models and relief forms. Take imaginary journeys to different countries about which children are studying, read stories, show pictures and objects, and seek in every way to interest the children in the work.

**MUSIC.** Consult outlines constantly.

**ARITHMETIC.** Practice on the rapid writing and reading of decimals. Teach pupils to express one-half, one-third, one-fourth, etc., in hundredths. Continue the work in measuring and computing areas.

#### FOURTH MONTH.

**READING.** About fifteen pages with supplementary work. Review lessons passed over. Teach pupils how to read from their geographies, arithmetics, language books. Require the rapid reading of each other's writing in written class work.



**SPELLING.** Do not neglect this work in connection with all lessons. English orthography is a difficult study to master but it must not be neglected.

**WRITING AND DRAWING.** The writing of the pupils of a school is a fair index of the character of the work done. Writing appeals easily and readily to the parents as an index of the progress of their children, and reacts favorably upon the reputation and attendance of the school. It ought not to be necessary for pupils to be compelled to attend a commercial or business college in order to learn how to write decently. All pupils of the first six years of the course should have one lesson daily in writing or drawing.

**LANGUAGE AND LITERATURE.** Be careful not to give pupils choice stanzas of poetry to parody in the attempt to reproduce them. Require much original work. Distinguish the parts of speech by their use in the sentence. Practice in writing sentences to teach the correct use of such words as lie, lay; sit, set; rise, raise; teach, learn; these, those and them. Put life and variety into the language exercises. Continue the lessons on physiology and hygiene.

**GEOGRAPHY AND NATURE STUDY.** Give general lessons on North America and the United States, natural features, climate, people and their occupations. A geographical reader may be used with advantage as a supplementary book in reading. Pupils should read *Seven Little Sisters* by Jane Andrews. Map drawing should not consume too much time. Maps are a means, not an end in themselves.

**MUSIC.** According to former directions and the outlines.

**ARITHMETIC.** Do not permit children to use pencil or crayon when they can do the work without such aid. Arithmetic is not a system of manual training. Pupils should *think* out a process before trying to write it out. Give a great variety of oral work. Be independent of the book in giving these problems. Make the problems yourself. Continue work in fractions, decimals and denominate numbers.



## FIFTH MONTH.

READING. About eighteen pages with supplementary work. Let pupils tell purport of lesson in connected discourse, before reciting. Continue drill on all marks and characters in reader.

SPELLING. Give a lesson once a week for a few weeks on the use of the dictionary. To learn to use the dictionary properly is a difficult thing. Send pupils to find from the dictionary the correct spelling, diacritical marking, meaning, derivation, forms and part of speech of words in lessons. Have pupils do this work as a privilege, not as a punishment.

WRITING AND DRAWING. Be sure to keep the writing material in good condition. By a little energy and common sense the pens can be kept in good order, the copy-books neat, and the ink from freezing. Drawing with all studies. See outlines.

LANGUAGE AND LITERATURE. Teach a few biographies well. Choose typical men, as Columbus the discoverer; De Soto, the explorer; Daniel Boone, the pioneer; Washington, the general; Lincoln, the statesman; Longfellow, the poet; Morse, the inventor. Continue work in the use of words, the kinds of sentences, modifiers and parts of speech.

GEOGRAPHY AND NATURE STUDY. Continue work on the United States. Then study South America. Compare North America with South America in shape, size, physical features, people, cities, occupations, productions. Show pictures, bring objects to the class, require drawing, modeling, molding, and by all concrete means of expression secure vivid mental pictures of the facts studied. In selecting topics for nature study keep in mind the season and month, the age and previous training of the pupils, the local geography and conditions, the connection of such topics to the other lessons of the school.

MUSIC. As outlined.

ARITHMETIC: Continue denominate numbers. See that pupils are familiar with tables. Supplement the book by giving many practical examples, such as occur in everyday life. Teach



pupils to give an intelligent explanation of their work. In solving problems require pupils to mark the denomination of results at different stages of solution.

Continue work on tenths and hundredths, rapid work in the fundamental operations, actual measurements, and fractions.

#### SIXTH MONTH.

READING. About eighteen pages with supplementary work. Require lesson to be thoroughly mastered before recitation. Make lessons short enough for pupils to master them, and then insist upon thorough preparation. Give enough work to keep pupils profitably employed.

SPELLING. Practice upon list of words frequently misspelled. Teacher should continually keep adding to this list, from written work in all recitations and exercises.

WRITING AND DRAWING. Let pupils classify small letters with reference to height, as one space letters, two space letters, three space letters etc. Teacher names letters and pupils name the class, as a rapid drill. See outlines in drawing.

LANGUAGE AND LITERATURE. Give much practice in the correct use of pronouns in such sentences as, It is I, It was they, etc. Send home samples of the pupils' best work. Do not neglect oral descriptions and narratives. Find as many illustrations in the reading lesson as you can where the facts and principles of the language lessons apply. Memorize many choice selections. Plan your lessons with care and you will be surprised at the results of intelligent, systematic, earnest work.

GEOGRAPHY AND NATURE STUDY. Study Asia and Europe. Compare them in all points as in the teaching of North America and South America. Require expressive work from the pupils. Encourage reading of the lands you study. Explain all geographical references in the reading lesson and other lessons.

MUSIC. As outlined.

ARITHMETIC. Teach how to find what part one number is of another. Give a great variety of rapid oral work.



Take up greatest common divisor and least common multiple. See that the pupil understands what is meant by common divisor, common multiple, prime factor.

#### SEVENTH MONTH.

READING. About eighteen pages. More supplementary work for sight reading. Exercises in articulation, enunciation, and pronunciation. Secure correct expression; see that the tone is pure, and that pitch is not too high, or voice harsh and loud.

SPELLING. Make frequent use of dictation exercises. Drill on common homonyms and synonyms.

WRITING AND DRAWING. See that pupils do not shade downward strokes, do not press too hard with pen, do not grasp the penholder, and do not lean with face and eyes too close to paper.

LANGUAGE AND LITERATURE. Continue reproduction lessons, stories from pictures and objects, and work on the sentence and its parts.

GEOGRAPHY AND NATURE STUDY. Study Africa and Australia on lines of comparison already suggested. See that pupils picture vividly the objects and places described.

MUSIC. As outlined.

ARITHMETIC. Teach how to find a number when a specific fractional part of it is given. Give many examples of this nature as, 15 is  $\frac{3}{5}$  of what number? Teach how to compute volume. Require many practical examples. Continue work with multiples and divisors. Continue rapid work in decimals, reducing common fractions to decimals and to hundredths, dividing by 10 and 100.

#### EIGHTH MONTH.

READING. Finish Third Reader and review important lessons. Supplementary work. Drill on weak points. Cultivate rapid, silent reading. Try to have pupils put *music* into their voices in reading. Make the reading lesson a means by which to cultivate attention, imagination, and thinking. "We look at *pictures* and see stories in them, so when we read stories we should see pictures in them."



**SPELLING.** Teach pupils how to study their lesson. They should not try to commit the *order of the letters* by repeating them over and over, but should strive to fix in the mind a vivid picture of the *form* of the word and then remember how it looks. Good spelling is very largely a habit of the eye. Take great pains to encourage the habit of using the dictionary. Study words as to form, sound, derivation, meaning and use. Teach the history of interesting words.

**WRITING AND DRAWING.** Cultivate moderate speed in writing, but do not mistake careless haste for speed. Inspect all work. Allow no careless writing in any lessons. For work in drawing, see outlines.

**LANGUAGE AND LITERATURE.** If the language lessons for this year have been based on some book like Robinson Crusoe, the story has afforded material for information lessons on various subjects and by continuity of thought has laid the foundation for a love of literature. In each lesson pupils should be required to picture some incident of the story. It is believed that in the hands of a capable teacher this method of studying language from a book possessing literary merit and describing a form of life easily understood by children, will produce better results than are secured by the ordinary use of a language book. Continue work in biography as a preparation to the study of history.

**GEOGRAPHY AND NATURE STUDY.** Comparative study of plants and animals of the different zones. Effects of air, water, heat, cold, plants and animals on each other. Study of rocks as, quartz, limestone, sandstone and granite. Causes influencing climate. Study of the great wind and ocean currents of the world. Make good use of the pictures in the book and bring others. Study and discuss them. Drill on the maps. Appeal to the imagination. All the child's real knowledge of the geography of other lands must rest in his mind as a series of pictures. Questions on the map are for the purpose of helping the pupil to interpret the map and should never be assigned as lessons to be memorized. History stories connected with the places studied.



MUSIC. The children should review many of the songs of the third year. New songs should be learned, appropriate to the time of the year. Do not require pupils to commit inferior pieces. The words as well as the music should be of a high character but simple. See course as outlined.

ARITHMETIC. Multiplication and division of common fractions. Give special attention to *how*. It is not necessary at this early stage to tangle and confuse the pupil by attempting to show *why* the divisor is inverted.

Teach how to find any fractional part of a number. Give much drill in adding and multiplying. Require rapid work in all reviews. Measure rectangles of fractional dimensions and compute area. Give much practical work. Require original problems. Teach pupils to verify results and not to depend on the "answer" to test the correctness of their work. Let all the exercises in the recitation be vigorous thought work, not mechanical copy work and solving problems already old to the class. In factoring resolve the given number into any two convenient factors and then reduce these separately, thus: 72 equal to  $9 \times 8$ ; 9 equal to  $3 \times 3$ ; 8 equal to  $2 \times 2 \times 2$ . Teach pupils to factor at a glance all composite numbers below 100. Give continued exercises in business forms. Develop principles and rules before permitting pupils to commit them, then insist on *exact* statements. Do not let pupils try to apply principles which they have not carefully thought out.

### TESTS FOR PROMOTION.

READING. Ability to read with intelligence and expression any lesson in third reader and other reading of same grade; to pronounce any word in third reader and use it in a sentence; to state substance of what he reads; to recite a number of choice selections.

SPELLING. Habitual good spelling in everything written by pupil; ability to spell by sound, and to pronounce correctly short words as marked in dictionary.

WRITING. The pupil should show improvement in uniformity of letters, ease and elasticity of hand.



He should be able to write a legible hand with fair speed and should be able to read writing easily. He should have acquired a good knowledge of color, form, location, position, map sketching and botanical drawing. He should be able to illustrate his descriptive lessons or parts of lessons, and to show some skill in original designing and handwork.

LANGUAGE AND LITERATURE. Pupils should be able to write an intelligent exercise or essay on familiar subjects, in which capital letters, and punctuation marks, so far as learned, are properly placed. The spelling and grammatical construction should be generally correct, and the exercises properly arranged and neatly written. They should be able to compose a short letter, using the proper form, and should have a fair knowledge of sentences, subjects, predicates, objects, simple modifiers. They should have mastered many choice selections and read several good books from the school library.

GEOGRAPHY AND NATURE STUDY. A good knowledge of land and water forms, causes of winds and ocean currents, the grand divisions and their leading physical characteristics, people, plants and animals. Ability to interpret a map.

MUSIC. A fair knowledge of the work gone over.

ARITHMETIC. Ability to read, write, add, subtract, multiply, and divide simple numbers, compound numbers, common fractions; to perform operations with reasonable promptness and accuracy; to solve mental examples involving the processes learned; and to give definitions of terms used. The multiplication table must be thoroughly learned.

Ability to apply the principles learned to practical problems; to factor numbers to 100; and to verify results in all cases.

### *DANGER POINTS AND SUGGESTIONS FOR FOURTH YEAR.*

READING. Danger Points. Articulation and expression. Pronunciation of final consonants. Clear tones and easy recognition of words. Good understanding of the thought.



**Suggestions.** Children having defects in articulation should be shown the proper position of the vocal cords. To aid expression one pupil should be selected each day to read the lesson to the whole class. Teacher may call for difficult words and write them on the blackboard. Pupils may compose sentences containing them. Three or four easy readers should be used rather than hurry pupils to difficult words.

**ARITHMETIC. Danger Points.** In long division, subtracting from dividend and comparing remainder with divisor. The cipher in multiplication and subtraction. Rapid addition. Few hardest of the forty-five combinations. In subtraction, the alternate borrowing and use of ciphers in minuend. Dollar sign and point in United States money. Notation of numbers where ciphers are needed. Thoroughness in fundamental rules.

**Suggestions.** Constant drill on hard parts. Require pupils to add columns of figures, beginning with short columns with small figures. Gradually increase until they become ready and rapid in computation. Give little problems that require thought. Require quick mental work on line, having pupils pass above and below each other.

**LANGUAGE. Danger Points.** Dictated sentences, letter writing. Use of new words in original sentences. Use of period. The dot over "i" and "j". "I" as a capital. Avoidance of "and" in reproduction stories. Possessive forms. Use of capitals at beginning of sentences.

**Suggestions.** Give sentence in which the child can easily grasp the thought. Don't make him write words that mean nothing to him. Try to make letter writing interesting and easy. Require the pupils to form sentences orally, using the following analysis: "I first think about something; I use words to express my thoughts; as 'The tree grows.' These words express a thought and it is called a sentence." Dictate lessons daily, correct the papers and return, having pupils rewrite correctly. Read a story to the class, and have pupils bring in reproduction from memory. Correct, as far as sensible, the frequent errors of speech.

—*The Grading of Schools, W. J. Shearer.*



*HELPFUL BOOKS FOR TEACHERS.*

1. Hyde's Lessons in English, Book I.
2. The Mother Tongue, Book I. Arnold and Kittredge.
3. Old Greek Stories. Baldwin. American Book Co., 45 cents.
4. Plants and Their Children. Dana. American Book Co., 65 cents.
5. Our Own Country. Smith. Silver, Burdette & Co., 50 cents.



## SECOND INTERMEDIATE DIVISION.

## FIFTH YEAR.

---

1. *Books and Materials Needed.*

Fourth reader, spelling-book, elementary arithmetic, elementary geography, music reader, copy-book and practice paper, ruler, pen and ink, tablets, pencils, and drawing material, language book, and pocket dictionary.

2. *Studies.*

READING. About three-fifths of fourth reader with much supplementary work. Sight reading and choice selections memorized. Constant use of dictionary in preparing reading lessons. Two or three books from the school library read under the direction of the teacher. One recitation daily.

SPELLING. Spelling-book and important words in all lessons. Word analysis of English words. Homonyms. Synonyms.

WRITING AND DRAWING. Copy-book. Practice on movement. Business forms and letters.

Pictorial, botanical, geometric and decorative drawing encouraged in all lessons as a means of instruction and expression. See outlines.

LANGUAGE AND LITERATURE. Composition work, including reproduction, description, narration and letters, classes and uses of words, biography and stories, book reviews, and literature growing out of work in geography, reading and nature study.

GEOGRAPHY AND NATURE STUDY. Review of the grand divisions. North America, United States and Iowa studied particularly. Commercial geography emphasized. Science lessons.

MUSIC. Three lessons or more a week. See outlines and music reader.

ARITHMETIC. Review exercises. Factors, multiples, and fractions. Decimals. Denominate numbers. Simple mensuration. Business transactions.



## OUTLINE OF COURSE FOR EACH MONTH.

---

### FIRST MONTH.

READING. Study all the suggestions and directions in this course for teaching reading. Keep in mind that some of the objects of teaching reading in this grade are to give the pupil power to master the printed page, to cultivate the imaging power, to understand the language, and then to present the thought clearly, distinctly, and agreeably to the hearer; to enlarge vocabulary; to acquire the habit of reading, and a taste for good reading matter.

Observe suggestions for third reader. See that position of pupils when reading is erect, easy, and graceful. Insist upon pupils reading loud enough for all the class to hear distinctly, but check pupils who read rudely loud. Encourage the use of the dictionary. Have pupils bring selections of their own choosing to school and read them to the class. This will aid in creating the habit of home reading. Master all new words. If pupils do not call words readily, are careless readers or do not grasp the thought easily, require them to read a paragraph or sentence first silently and then give the meaning in their own words, finally reading the sentence or paragraph aloud from the reader. Give especial attention to pupils who are poor readers. Call on them to read paragraphs from the book in the recitations in arithmetic, geography, language etc. Use as a supplementary reader a first book in history, a science reader, a geographical reader or simple classics in leaflets. Many of our best English classics are printed in leaflets costing a few cents each. No wide-awake teacher will fail to secure a good supply of such material to use as supplementary reading. It is utter folly to expect children to become good readers by keeping them on one set of readers, containing only a few hundred pages of reading matter, for *eight years*. Good work in reading reacts favorably on every other branch of study. Much of the pupil's trouble



in arithmetic is due to the fact that he cannot *read* his problems correctly. Explain geographical and historical allusions figures of speech and obscure passages. Complete fifteen or twenty pages of the reader.

**SPELLING.** Every book that the pupil studies is a spelling-book and every class a spelling class. Do not neglect oral spelling. Vary the written work by using some words in sentences, finding homonyms for others, dividing into syllables, marking etc. The common rules for spelling should be taught. Teach the meaning of the common prefixes and suffixes as *re, sub, ad, circum, ex, er, ish, ing, like, ly*. Do not permit guessing; if pupils cannot spell the word let them fill the place with a blank. Avoid dialect stories and never allow pupils to see the incorrect form of a word, if you can help it. Drill on misspelled words. Assign a lesson occasionally on lists of words which are names of objects sold in a grocery, a hardware store, a dry goods store, fruit store, names of parts of a ship, a house, a locomotive, a harvester, a wagon, names of things raised on the farm, dug from the mines, made in a factory etc. With patient, persistent work you can make good spellers of your pupils. Do not permit yourself to think that some pupils cannot learn to spell. Read all the suggestions on spelling in this course.

**WRITING AND DRAWING.** Keep each pupil at work upon his individual copy until he can write it well, then let him do his very best work in the copy-book. Children of this age are apt to be careless. Some will not write as legibly as they did in the fourth year, unless you insist on good work, careful practice, neatness in all written work. Continue work of last year.

Read all the suggestions on drawing for the first four years of this course. Continue to emphasize drawing as a means of securing clear ideas and vivid pictures in all subjects. See outlines.

**LANGUAGE AND LITERATURE.** Systematic work from a language book should be carried on in this year as preparatory to the study of grammar in the next year. Continue work in reproduction, compositions on familiar topics, narration, description, imaginary journeys. Insist on correct use of capitals, punctua-



tion, paragraphing and neat writing. Show pupils how to make an outline for a composition. Apply the principles learned in the language class to the work in other lessons. It is the supremest folly for a teacher *not* to insist that pupils shall *apply* to all work the rules and principles which they learn. Teach classes of nouns, number and gender, personal pronouns, parts of a sentence and agreement of verbs, with subject. The aim of this work is not to teach grammar nor the rules of grammar, but to secure accuracy in the use of our mother tongue and a steady growth of vocabulary. Teach use and value of the dictionary. Continue letter-writing. Teach the biography of one historical character each month. For work in literature, have pupils read book and describe the character in it that they like best, the most interesting chapter or incident, the best quotations, the finest description, why they like the book, what people they have ever read of before like those in the book. Paul Revere's Ride is a good story for language work in this grade, also Browning's Pied Piper, The Barefoot Boy, Bryant's Little People of the Snow, and selections from Hiawatha, Ten Boys, or Seven Little Sisters. Read all the suggestions for previous years.

GEOGRAPHY AND NATURE STUDY. All the pupil's work in nature study has been a preparation for the intelligent study of geography. The work in this year should be systematic, and while many of the same topics have been presented before, they are now to be taught much more thoroughly and fully. Do not neglect local geography. Do not forget the close connection between geography and other studies, as reading, history, language, literature. Encourage pupils to read books of travel, stories of other lands, descriptions of wonderful natural objects, historical events. Review the geography of the county where pupils live—its natural features, towns, railroads, plants, animals, products. Then review the geography of Iowa in like manner. The leading facts of elementary science should be taught in connection with geography. Very many of the children will never have the opportunity to study physics, botany, zoology, chemistry, geology or astronomy from text-books, but the leading facts of all these sciences are easily taught in connection with geography. This class ought to be the most fasci-



nating in the school. You can make it such by carefully planning your work and interesting your class in real things around them, not by simply learning the text-book in geography.

**MUSIC.** Read all previous suggestions. Follow the work as planned in the music reader. See outlines.

**ARITHMETIC.** Review tables in denominate numbers, and also multiples and divisors. Continue work in fractions and decimals. Insist on actual measurements, the verifying of answers, rapid work in all fundamental operations, oral work, correct definitions and statements and neat board work. Give many practical problems. Use examples from other books, and do not give pupils too much help. Do not omit the "inductive exercises" in the book.

### SECOND MONTH.

**READING.** Teach pupils how to discover words requiring special emphasis. Commit to memory and recite choice selections. Give such definitions and drills as are usually found in the first part of the reader. Use of dictionary. Have pupils read silently in class and then tell the substance of what they have read. Let one read aloud while others have books closed, then ask those who listened to give the thought. Make good use of supplementary material.

**SPELLING.** Eight or ten pages of speller. Be thorough in pronunciation, articulation, accent, syllabication. Continue to spell difficult words in all class exercises.

**WRITING AND DRAWING.** Watch position of pupils while at their written work and require much careful practice on movement exercises. Continue the drawing work of previous years. Incidentally teach drawing in every study, and encourage pupils to express their ideas by means of cuts, diagrams, sketches, outlines, maps, pictures whenever possible. See outlines.

**LANGUAGE AND LITERATURE.** Progress in composition is marked by the ease, accuracy, rapidity and legibility by which a pupil puts his thoughts on paper. Expression of thought by means of writing should be a very important factor in all lessons.



Teach the different forms of the irregular verbs by use in sentences; also drill much in the use of nouns with irregular plurals as ox, oxen; goose, geese; mouse, mice; sheaf, sheaves. Select such stories, poems, biographies for literature work as are in harmony with the child's *present* surroundings, his interest in games, current events or other lessons, the season of the year, the national holidays, the subjects of local interest.

GEOGRAPHY AND NATURE STUDY. Review briefly from map and globe the earth as a whole. Make a good use of pictures, drawing, modeling and molding. Study the earth as a planet, shape, size, motions, zones, parallels and meridians. Study North America as a whole. Location and outline. Location of boundary oceans. Coast line; principal forms of land and water located. Mountain systems; drainage slopes and basins; principal rivers and lakes. Political divisions. Animal and vegetable life. Climate. Make daily use of outline map.

Study soils, the uses of plants and animals, and require pupils to keep a weather record.

MUSIC. As outlined.

ARITHMETIC. Keep up the drills in rapid work. Require rapid oral work in factoring numbers below 100. Insist that pupils shall write and read decimals as promptly as they write and read whole numbers. Secure as much practical work as possible in measuring, computing cost of bills of goods, lumber, and materials of all kinds.

### THIRD MONTH.

READING. About twenty pages. Silent sight reading should be carefully cultivated. See that pupils read well their own compositions. The teacher should frequently read English classics, fables, and fairy tales. Let pupils read same. Encourage home reading. Interest pupils in current news. Whole stories and pieces are much more interesting than fragments.

SPELLING. Pronounce and spell all difficult words in other lessons. Continue drill in homonyms and synonyms. For written work, use this form:



## HOMONYM WORK.

WORD.	PART OF SPEECH.	HOMONYM.	USE IN SENTENCE.
flew	verb	flue	The smoke escapes through the flue.
kernel	noun	colonel	The colonel ordered his regiment to charge.
hew	verb	hue	The cloud has a golden hue.

These words may be selected from the reading lessons. The same form may, with slight changes, be used for work in synonyms, definitions and dictionary work. Pupils using some such form will put their work in good shape, and the time required to look over the work is very greatly reduced.

WRITING AND DRAWING. Continue practice on paper. Write copies on black-board. The teacher should be able to set copies for the children.

See outlines for drawing.

LANGUAGE AND LITERATURE. Whenever a rule of language, orthography or syntax will aid pupils in expressing their thoughts, write the rule on the blackboard, and have the pupils learn and use it. Continue the dictionary work as suggested in previous lessons; also the memorizing of at least one new selection each month.

GEOGRAPHY AND NATURE STUDY. The New England states. Read text. Make a careful study of the map, then draw the map. Learn only the principal features, but master these. Associate some important fact with each city or place studied. Have pupils write letters to friends or relatives or to some pupil in New England describing the geography, climate, plants and animals of your own section and request a similar letter in reply. By such means very great interest can be aroused in the geography class.

MUSIC. See outlines.



ARITHMETIC. Give easy problems in percentage. Treat them as problems in fractions. Do not bother the child with formulas, but show how easy and convenient it is to multiply and divide numbers by 10 and 100. Continue work in fractions and factoring, also in business computations and actual measurements. Teach board measure, wood measure, the measurements of bins, boxes, etc.

#### FOURTH MONTH.

READING. About twenty pages. Remember that a reader should be a book of choice literature, and that literature is art—art filled with beauty and spirit and emotion. Reading must be more than language teaching—it should be genuine literary training. To read well the pupil must *feel* the beauty and importance of what he reads. Nothing so stimulates the pupil's vocal expression as the desire to impress upon others the beauty and feeling of a thought which he has really mastered; so that back of all good expression in reading, deeper than any mechanics of voice as pitch, time, quality, inflection and force, are imagination and thought and feeling. Pitch, quality, inflection and force in reading correspond to certain states of mind, states of thought and feeling. They cannot be taught from without mechanically, but are developed from within. Expression in reading is not a matter of nerves and muscles of the vocal organs. Unless the mind conceives the thought, unless the imagination puts life and vividness into the piece, unless the heart thrills with its sentiment and emotion, how can the vocal organs express it well? The successful teacher of reading must be a lover of the tender and the true, the beautiful and the good. The reading of her pupils is an index of the teacher's character; it is a reflection of her own mental status and moral qualities.

SPELLING. Eight or ten pages in speller. Use words in sentences to test pupil's knowledge of meaning. Continue to keep list of words frequently misspelled, and give daily practice upon them. Continue homonym and synonym work and use of dictionary. Study prefixes and suffixes, learning a few new ones each month.



WRITING AND DRAWING. Practice paper and copy-book. Secure good movement, rapidity, and correct form. Do not attempt to hear other recitations while the writing exercise is in progress. Alternate writing with drawing if there is not time for both as separate exercises daily. Follow outlines in Drawing.

LANGUAGE AND LITERATURE. The analysis of easy sentences. Adjectives uses and changes of form. Lists of adjectives from reading lesson. Literature work according to previous suggestions.

GEOGRAPHY AND NATURE STUDY. Middle Atlantic states. Location of principal mountains, rivers, lakes, capes, bays, and cities. The capital and chief city of each state. Reasons why great cities are located as they are. Historical events and interesting stories in connection with places. Imaginary journeys, letters, short talks by some older pupil or patron who has traveled in these states. Homes of authors and great men, pictures, maps and productions. Routes of travel. Study of distribution of plants and animals. Causes of changes of weather. Study of minerals, as limestone, giving its physical characteristics. kinds, uses, effect of heat in lime stone, how formed.

MUSIC. By outlines.

ARITHMETIC. Continue previous work. Give special attention to mensuration, requiring actual measurements and the solving of original examples. Give examples from many books. Continue work in computations by 10 and 100, varying the problems so as to include the different operations of percentage. Connect arithmetic work with other lessons, as geography, in estimating distance, height of mountains, length of rivers, miles of railroad, cost of making articles, value of products. Open the windows of the school towards the great, busy, practical, wonderful world just outside.

#### FIFTH MONTH.

READING. About twenty-five pages. Each pupil should frequently have an opportunity to read an entire selection to teacher and class. This will give pupils power in continuous reading.



and a love for reading that is not sufficiently cultivated by the usual class exercise of reading only a sentence or paragraph. Do not let pupils read to the *backs* of their classmates; let them *face* the class while reading. Teach the child to *get* the thought, make it alive, and then give it out to others. Sometimes let all the class close the books except the pupil reading. Note how much more expressive such a pupil's reading becomes as soon as he really tries to *give out* thought and feeling.

**SPELLING.** Eight or ten pages of speller. Give drills upon accent, primary and secondary. Give dictation exercises.

**WRITING AND DRAWING.** Practice paper and copy-book. See that each pupil does his best. Give individual instruction and criticism; general directions for avoiding common errors. Follow outlines for work in drawing. Encourage original designing. The work in drawing should help pupils to do better writing.

**LANGUAGE AND LITERATURE.** Continue the work with nouns, verbs, and adjectives. Teach the personal pronouns. Give daily practice in the correct use of these pronouns. Show why pronouns are used so much. Let the work in literature include many historical or semi-historical stories, like William Tell and the Apple, Robert Bruce and the Spider, Grace Darling, The Story of the Pilgrims, Selections from Miles Standish, and Ruskin's King of the Golden River.

**GEOGRAPHY AND NATURE STUDY.** The Southern states. Follow suggestions already given. Many of the stories and incidents of the Civil War should be brought out in connection with places studied. Have some old soldier give a talk to the pupils occasionally. Call attention to stories of the flag. Teach that true patriotism can be shown by children as well as grown-up people in peace as well as in war. Show that the school is a nation in miniature. Let the work in nature study grow out of the geography lessons. Study the plant life and the animal life of the Southern states. Show how climate determines products, and how this, in turn, affects the occupations of the people, their modes of living, food, clothing, and how these all enter into character.

**MUSIC.** As outlined.



ARITHMETIC. Continue former work. Review constantly. Give the class original problems. Teach the terms used in percentage. Give easy examples in profit and loss. Have much oral work. Teach pupils to read every problem carefully before trying to solve it. Make them think, judge, compare, investigate, reason. Be careful to have all written work neatly done.

#### SIXTH MONTH.

READING. About twenty-five pages. Use every means to counteract any tendency to mechanical and monotonous reading. This is usually caused by a lack of understanding and lack of interest; hence, to cure the evil, strike at the cause. It is of much importance that the teacher should thoroughly understand the lesson before attempting to interest the pupil in it.

SPELLING. Eight or ten pages in speller. Teach the diphthongs ou, ow, oi, oy, and their sounds.

WRITING AND DRAWING. Practice paper and copy-book. Do not let a pupil write at a desk that is too high or too low for him. Select seats suitable to the size of pupils. See outlines for drawing.

LANGUAGE AND LITERATURE. Study the use of the adverb. Require much drill in writing sentences containing adverbs, and analyze the simpler sentence. Continue composition work, letter writing, dictation works and analysis of easy sentences. Select stories and biographies which deal with the settlement of the Mississippi Valley.

GEOGRAPHY AND NATURE STUDY. The Central states. Follow directions for previous months. Teach the leading events connected with the history of this region, the discovery and exploration of the Mississippi by De Soto, Marquette and Joliet, LaSalle, the settlement of Kentucky, Lincoln's early life, pioneer days in Iowa, the Sioux Massacre in Minnesota, the Louisiana Purchase, Lewis and Clark on the Missouri. Do not turn these accounts into simple narratives and reproductions, but encourage questions, thoughtfulness and discussions. Make everything real and vivid. Compare these men with each other and with the



old Grecian and Roman heroes, Jason, Perseus, Hercules, Hector, Romulus and Cincinnatus. Remember that this work properly done will arouse an intense interest in history. Relate all this work to the other studies. For work in nature study review the plant and the animals life of the Mississippi valley, its soil, minerals, weather conditions, etc.

MUSIC. As outlined.

ARITHMETIC. Review denominate numbers and extend the work. Begin interest. Give many practical examples and require the pupils to verify answers. Continue rapid work and do not take the time of the recitation to work over examples which pupils have already solved, but give new examples involving the same principles.

#### SEVENTH MONTH.

READING. About twenty-five pages. Let pupils occasionally read a paragraph in a loud whisper, to improve articulation. Let pupils point out places in lesson where words would likely be run together by a careless reader. Test pupil's reading of the same.

SPELLING. Eight or ten pages of speller. Practice spelling by sound and determining silent letters.

WRITING. Practice paper and copy-book. Be systematic and orderly in distributing and collecting pens, ink and copy-books. Have a place for everything and everything in its place. Pupils whose writing is satisfactory should be excused from this exercise after the sixth year. Encourage every pupil to do his best. Send home specimens of the pupil's best work. Drawing as outlined.

LANGUAGE AND LITERATURE. Teach the use of prepositions and the kinds of phrases. Select these from the reader. Review and strengthen all previous work. For work in literature select stories describing western life.

GEOGRAPHY AND NATURE STUDY. The Western States. Follow suggestions for other groups. Make a good use of pictures, drawing, interesting objects and Indian relics. Read parts of Dana's Two Years Before the Mast. Study Fremont's Journey,



the Discovery of Gold in California, routes by which the gold-seekers reached California, dangers and hardships, places of interest, as Pike's Peak. Study the history of the Mormons and the settlement of Oregon. Select typical industries and study by means of pictures, stories and drawings—a silver mine, a gold mine, a fruit farm in California, a cattle ranch in Montana, an irrigated farm in Colorado, a salmon fishery on the Columbia river. In nature study, give considerable attention to the study of minerals and rocks, showing specimens of ores, petrified wood, lava, sandstones, geyser formations. Give special lessons on the Yellowstone Park, the "Garden of the Gods," and Pike's Peak, the Canyons of the Colorado, and the Yosemite Valley. Invite some patron who has visited these places to talk to the school about them.

MUSIC. As outlined.

ARITHMETIC. Give much attention to business transactions. Show the practical bearing of such topics in the arithmetic as profit and loss, interest, measurements. Plan to have a variety of work in every recitation. Make thought work your constant aim. Do not allow pupils to acquire pattering and mechanical habits. Adapt the lessons to the class.

### EIGHTH MONTH.

READING. About twenty-five pages. Encourage home reading. Ask pupils to report on books that they have read. Make the reading lesson a thinking lesson. "When you read, look steadfastly with the mind at the things the words symbolize. If you read of mountains, let them loom before you; if you read of the ocean, let its billows roll before your eyes. This habit will give to your voice pliancy and meaning." The first requisite of good reading is *interest* in what one is reading. If the teacher has not studied the lesson carefully, the class will have poor instruction and no inspiration. All random teaching is wasted effort, merely beating the air of marking time. In planning a lesson, keep in mind (1) the class, not as a whole only, but as individuals; (2) the time for study of the lesson and for recitation; (3) what the main topic of the lesson is,—the aim of



the lesson; (4) what knowledge the pupils already have on the main topic of the lesson; (5) methods, devices, illustrations, blackboard work and bearing on other lessons.

**SPELLING.** Eight or ten pages of the speller. Continue easy word analysis and study of homonyms and synonyms. Both oral and written spelling. Dictation work. Capitals, abbreviations, lists of words, difficult and technical words in all lessons.

**WRITING AND DRAWING.** Practice paper and copy-books. The teacher must be alert at all times to correct bad habits in writing. Practice on business forms, as notes, drafts, bills and receipts. For work in drawing see outlines.

**LANGUAGE AND LITERATURE.** Review the work of the year. Study causes and connectives. Pick these out from the reader. It is well to use a difficult reading lesson for a language lesson occasionally, showing pupils how to study the lesson so as to get the thought. Use of interjections, with list of common ones. Write out stories and quotations from memory. Write on lives of authors and great men studied. Write upon excursions, picnics, journeys, holidays, pets. *Black Beauty* or some such book may be read to the school at opening exercises. The pupil should learn to love such nature poems as *The Barefoot Boy* and Tennyson's *Brook*, such songs and stories as are found in *Songs of Labor* and the *Book of Golden Deeds*, such biographies as Irving's, *Washington* and *Columbus*. The surest safeguard against low fiction and vicious literature is a taste for *good* reading.

**GEOGRAPHY AND NATURE STUDY.** This last month may be devoted to review of the work of the year, to the learning of the political divisions of South America, Europe, Asia and Africa, or to the special study of Cuba, Porto Rico, Hawaii and the Philippines. The work in nature study and history should be adapted to the countries studied. The work in nature study, if well done, has taught children to be close observers, to respect and love things in nature, to put meaning into the commonest objects, to see beauty and wonder in the change of seasons, the sunrise, the clouds, the plant and animal life, the rocks and the stars.



**DRAWING.** The work suggested in the lower grades should be continued during the year. No set lessons in drawing as such can be as helpful as the training pupils should receive in all lessons in the free and rapid expression of their ideas by means of sketching, chalk modeling and painting. See outlines.

**MUSIC.** Pupils should find this exercise a delight. If the teacher cannot put life and soul into her instruction, if the music exercises become purely mechanical, if children are permitted and encouraged to scream and drawl and slur, it would be better to have no singing at all. See outlines.

**ARITHMETIC.** Review work. Commission. Interest, giving many practical problems. Mensuration. Do not assign too much home work and do not help backward pupils at the expense of the whole class. Require original problems and make the work as helpful and practical as possible. Remember that many pupils drop out of school at the end of the fifth year, who must fight the battle of life with no further school preparation.

### *TESTS FOR PROMOTION.*

**READING.** Ability to read with proper expression any selection in the reader so far as studied; to give substance of what has been read; to give meaning of words from context; to explain allusions in lesson; to recite choice selections.

**SPELLING.** Ability to spell well, especially in examinations and exercises in which the mind is occupied with other matter, thus showing that correct spelling has become a habit.

**WRITING AND DRAWING.** Same as last year, with marked improvement in form and symmetry.

Ability to illustrate by drawings all lessons where applicable.

**LANGUAGE AND LITERATURE.** Ability to determine parts of speech in selections from reader; to tell their uses in sentences; to analyze simple sentences; to use capitals and punctuation marks correctly; to write a neat letter in correct form, and a ready understanding and appreciation of the literature adapted to this grade.



**GEOGRAPHY AND NATURE STUDY.** A knowledge of the principal facts in mathematical geography, of the physical and political geography of North America, and especially of the United States. Ability to locate on the map the principal places and things taught, and to draw maps locating the principal geographical features, and a good acquaintance with the plants, animals, places of interest, industries and historical events connected with the countries studied.

**MUSIC.** Mastery of the work presented in the music reader.

**ARITHMETIC.** Ability to handle simple and compound numbers, common and decimal fractions in a general way; to solve examples involving easy combinations in percentage, simple interest, and measurements; to define arithmetical terms frequently used; to give an ordinary statement of the steps in processes.

### *HELPFUL BOOKS FOR TEACHERS.*

1. Child Life in Poetry and Prose.
2. Stepping Stones to Literature. Arnold & Gilbert; Silver, Burdette & Co.
3. Our American Neighbors, Coe. Silver, Burdette & Co.
4. Mara Pratt's Historical Series.
5. Pioneer History Stories, McMurry.
6. The making of the Great West, Drake. Scribner's Sons.
7. The Making of New England, Drake.



*SECOND INTERMEDIATE DIVISION.*

---

*SIXTH YEAR.**1. Books and Materials Needed.*

Fourth Reader, dictionary, spelling book, complete geography, language book, complete arithmetic, elementary physiology, copy book and practice paper, pen, ink, ruler, pencils, tablets and drawing materials.

*2. Studies.*

READING. Last part of fourth reader with supplementary reading from another fourth reader, a science reader, a geographical reader, easy English classics, or first book in United States history.

SPELLING. Spelling book, and new words in all lessons. Study of prefixes and suffixes. Dictionary work.

WRITING AND DRAWING. Continue Palmer's Method of Business Writing. Freearm movement and much practice on business forms. Care in all written work. Drawing as a means of expression and illustration. Alternate with writing.

LANGUAGE AND LITERATURE. The parts of speech, their classes, modifications and uses. Analysis of easy sentences. Most time given to composition work. Study of easy English and American classics. Books from the library read under the direction of the teacher.

GEOGRAPHY. Complete book begun. Careful study of the geography of Iowa. Study of the continents. An elementary history should be read in connection with the study of North America.

MUSIC. Reader and songs.

ARITHMETIC. Complete the book as far as Ratio or Percentage.



## OUTLINE OF COURSE FOR EACH MONTH.

---

### FIRST MONTH.

READING. Commence about the middle of the Fourth Reader, reviewing for a short time lessons previously read. Cover about twenty pages in advance work. Have appropriate supplementary reading. Aim to teach pupils how to get the thought from the printed page, to read aloud clearly, forcibly and agreeably, to acquire a mastery of words and a power of vivid picturing, to create a taste for good reading. Observe the directions given for previous work. There should be no relaxation of effort to teach prompt word recognition, distinct articulation, clearness of tone, and correct expression, but the teacher should bear in mind that the pupil is *growing* intellectually and is prepared to learn many things that have been beyond his power in lower grades; he is ready to work on a higher plane, to put pride and originality into his reading, to exercise taste, to have his favorite style of composition, to know authors, to grasp the ethical meaning of a story and follow the plot with intelligent interest. All reading matter for this grade should be of a distinctly literary character, both prose and poetry. Generally each selection should be complete in itself. Make a great deal of use of comparisons to develop observation and judgment,—compare prose and poetry as to structure, purpose, effects; compare figures of speech, authors, characters, incidents, and favorite expressions of different authors; compare the objects described by different authors, customs, places, ideals and aims of people.

SPELLING. Continue the habit of challenging every new word that pupils meet in their lessons. Have pupils keep a book for such words as they need to look up in the dictionary. More systematic work can be done in the study of roots, prefixes and suffixes. Give especial attention to the written work of the pupils. This is the best test of their real ability to spell correctly.



WRITING AND DRAWING. Copy-book and practice paper. Aim to secure legible, rapid and uniform writing. This class may alternate with drawing, if necessary. Practice on business forms. Require selections written from memory. Insist on neat and legible written work in all classes.

LANGUAGE AND LITERATURE. No effort should be made to teach grammatical theory, but rather a correct use of common words and forms, and simple sentence building. Teach sentence as a whole; subject, predicate, object. Rules for capitals. Have pupils explain the use of all capitals in the reader. The language and composition work should be continued, and all the work should be brought into touch with the most interesting topics in the child's other lessons, as geography, literature and supplementary reading. Give especial attention to the pupil's spoken language and insist on correct forms. To study the principles of language as mere theory while constantly violating these same principles in use and practice every day is a stultifying process that no teacher should permit.

Make a judicious use of library books. Study and memorize some of the choice poems, such as, *The Builders*, *The Day is Done*, Lowell's *September*, *The Barefoot Boy*.

GEOGRAPHY. Begin the complete text-book, such as Frye's *Geography*. Review definitions, natural divisions, relief forms, mathematical geography and climate. Compare different places and countries as to natural features, productions, people, customs, dress, education, religion. Study current history and connect events and places. Look up all geographical references in other lessons. Study all the phenomena of geography from the standpoint of the pupil's own experience and immediate surroundings. Appeal constantly to the child's imaging power, and see that he forms clear mental pictures of the places and the processes described. Require the pupil to express his ideas in drawing and in all forms of hand work.

MUSIC. Continue work of other grades. Give much attention to patriotic songs. Every pupil should commit to memory our standard songs, as *America*, *The Battle Hymn of the Republic*, *Hail Columbia*, and the *Red, White and Blue*. Use of *Music Reader* if possible. See suggestions in outlines.



ARITHMETIC. Pupils now begin some advanced text-book. Insist upon accurate definitions and correct use of terms. Notation, numeration, addition, subtraction. Teach numeration to six periods. The local value of figures. Practice adding long columns. Write numbers in the Roman notation. Drill for accuracy and speed in addition. Teach proof in subtraction. All formal definitions, principles, and rules should be carefully developed objectively before the pupil is required to commit them. Give pupils so many original problems that they will not form the habit of depending upon the answers in the book. Give a great deal of rapid oral drill in all operations and principles.

#### SECOND MONTH.

READING. About twenty-five pages. Have lesson carefully prepared. Do not allow pupils to assume that the reading lesson requires no preparation. Whether they do or not depends upon how the teacher conducts the recitation.

SPELLING. Do not neglect oral spelling. Cultivate the habit of using dictionary and teach pupils to find words quickly. Pronounce words clearly and only once, as a rule. Continue work in word analysis, homonyms and synonyms.

WRITING AND DRAWING. Look closely after position, form, movement and speed. Some work in mechanical drawing may be encouraged. Sketching, map-drawing and illustrative work.

LANGUAGE AND LITERATURE. Study nouns. Make list of nouns and use in short sentences. Point out the common nouns, proper nouns, singular and plural forms. Classify use in sentence, as subject, object, predicate, possessive. Watch the use of capitals and punctuation marks. Apply all principles, as fast as pupils learn them, to other lessons. Study *The Arrow and the Song*, *The Mountain and the Squirrel*, *The Landing of the Pilgrims*.

GEOGRAPHY. Study winds, ocean currents, tides. Begin the study of North America, its plains and valleys, plateaus and mountains. Make good use of pictures and natural objects, journeys, real and imaginary, relics, stories and descriptions in other books, maps and map-sketching. See outline for the study of a continent under the fourth month of this year.



MUSIC. From Music Reader. For suggestions, see outlines.

ARITHMETIC. Multiplication and division. Learn rules and methods of proof. Multiply and divide by factors. Show that multiplier and divisor are abstract numbers. How the denominations of multiplier, quotient and remainder are determined. Call attention to the importance of addition, showing that when the multiplier consists of two or more figures it usually requires more additions than multiplications, to secure a product.

### THIRD MONTH.

READING. About twenty-five pages. Do not let the pupil depend upon the teacher to pronounce the words for him while reading. He can now use the dictionary, and finding the pronunciation of words is just as much a part of preparing the reading lesson as finding the meaning of the words. A systematic course of reading in biography and elementary history should be planned for this year. See suggestions for this month's geography work.

SPELLING. According to previous suggestions.

WRITING AND DRAWING. See that pupils keep copy-book in good condition. Inspect all the work during the writing exercise. Use the blackboard. Cultivate a plain, legible, business hand. Make the work in drawing a means of developing the love of the beautiful in your pupils. Draw and paint pretty scenes from nature. Copy simple pictures from the great artists and study the meaning of the picture. —

LANGUAGE AND LITERATURE. Verbs. Make a list of common verbs. Divide into present, past and future. Construct sentences using these words. Drill upon forms of irregular verbs. Develop transitive verb. Compare effects of adding *s* to a noun and to a verb. Elements of the sentence. Poems for special study: The Childrens' Hour; The Village Blacksmith; Woodman, Spare That Tree.

GEOGRAPHY. Study the physical features of the United States—Mississippi valley, Atlantic slope, Gulf slope, Rocky mountains and Pacific slope. In connection with the geography and reading



work of this year the teacher should plan some systematic reading in biography and elementary history. It is the personal element in history that attracts and interests the pupil. The following books contain excellent material for such a course of reading. American History Stories by Mara L. Pratt; Baldwin's Four Great Americans; Pioneer History Stories by McMurry; Autobiography of Franklin; Grandfather's Chair; Uncle Tom's Cabin.

MUSIC. See outlines and Music Reader.

ARITHMETIC. United States money; bills and accounts; cancellation. Give many practical examples, and require oral as well as written solutions. Give much work in factoring. Read and follow directions for previous months.

#### FOURTH MONTH.

READING. About twenty-five pages. Give attention to expression as heretofore. Do not tell a pupil to read louder. Put weak-voiced children before the class and have them read while the class listen with books closed. Plan your lesson and determine the particular points you want to bring out. Pupils need a plan of study. Suggest that they follow some such order as this: 1. Read the piece as a whole silently and rapidly. 2. Select the leading thought of each paragraph. 3. Study the meaning of words, phrases and figures of speech. 4. Look up the biographical, historical and geographical references. 5. The author's motive in writing the piece. 6. The finest expressions and best thoughts in the lesson. 7. How to read the piece with expression.

SPELLING. Supplement the book work by using lists of words commonly misspelled by the pupils. Create a pride in correct spelling.

WRITING AND DRAWING. Good writing must become a habit with pupils. Compare their writing in the copy-book with the written exercises which they hand in. Practice on business forms. Continue the drawing work and picture study.

LANGUAGE AND LITERATURE. Adjectives. Make list of adjectives in common use. Use in sentences. Classify descriptive and definitive; the articles, use of *a* and *an*. Point out adjectives



in Reader. Modify subject, object, possessive, predicate noun. Use in predicate with copulative verb. Make easy comparisons. Connect the work in language with your study of classic pieces. Do not try to teach language as an abstract set of definitions and rules. Excellent material for this month are, Lowell's First Snow-Fall; The Psalm of Life; The Wreck of the Hesperus.

GEOGRAPHY. Study the continent of South America. Adapt the following outline to your class, omitting topics which may seem to you to be too difficult.

### *TOPICS FOR THE STUDY OF A CONTINENT.*

#### I. POSITION:

1. In hemispheres.
2. In zones.
3. In latitude and longitude.
4. In relation to other continents.

#### II. SIZE:

1. Absolute.
2. Relative.

#### III. OUTLINE:

1. General shape.
2. Projections.
  - a. Peninsulas.
  - b. Capes.
  - c. Isthmuses.
3. Indentations.
  - a. Seas.
  - b. Gulfs.
  - c. Bays.
4. Bordering oceans.
5. Adjacent islands.

#### IV. SURFACES:

1. Highlands.
  - a. Mountain systems

(1) Location.

(2) Direction

(3) Ranges

(4) Heights.

(5) Peaks.

(6) Volcanoes.

b. Plateaus.

(1) Extent.

(2) Height.

(3) Fertile.

(4) Arid.

2. Lowlands.

a. Plains.

(1) Location.

(2) Desert.

(3) Forests.

(4) Prairie.

b. Valleys—Location.

#### V. DRAINAGE:

1. River systems.
  - a. Main streams.
  - b. Source.
  - c. Direction.
  - d. Length.
  - e. Branches.
  - f. Navigable.



2. Lakes.
  - a. Location.
  - b. Extent.
  - c. Salt.
  - d. Fresh.
  - e. Value.

#### VI. CLIMATE:

1. Causes.
  - a. Latitude.
  - b. Elevation.
  - c. Mountains.
  - d. Winds.
  - e. Currents.
2. Peculiarities.
3. Healthfulness.

#### VII. LIFE:

1. Vegetable.
2. Animal.
3. Human.
  - a. Races.
  - b. Population.
  - c. Occupation.
  - d. Education.
  - e. Religion.
  - f. Government

#### VIII. RESOURCES:

1. Fur-bearing animals.
2. Fertile soil.

3. Minerals.
4. Forests.
5. Fisheries.

#### IX. POLITICAL DIVISIONS:

1. Name in order of size.
2. Name divisions about the same size.
3. Compare with the countries in other continents.
4. Capital and largest city in each division.
5. Name largest cities of the continent beginning with the largest.

#### X. COMMERCE:

1. Routes.
  - a. Land.
  - b. Water.
2. Exports.
3. Imports.
4. Commercial cities.

#### XI. COMPARISONS:

1. Physical features.
2. Life.
3. People and customs.

MUSIC. Songs and Music Reader.

ARITHMETIC. Greatest common divisor and least common multiple. See that pupil understands the difference between divisor and multiple. Determine at sight all prime numbers to 100. Teach how to find greatest common divisor and least common multiple by factoring. Show difference in selecting factors for greatest common divisor and least common multiple.



## FIFTH MONTH.

READING. Twenty-five pages or more. Select interesting short stories and let pupils each read one as test of sight reading. Ask class to select the best story and tell why they prefer that one.

SPELLING. Spell the difficult or technical words in all lessons. Make the pupils independent users of the dictionary. Give dictation work.

WRITING AND DRAWING. Practice upon forms of correspondence such as invitations, letters of acceptance, regrets, letters of recommendation. Illustrative and decorative drawing and study of pictures.

LANGUAGE AND LITERATURE. Personal pronouns. Find pronouns in reader. Find nouns for which they stand. Read, substituting noun antecedents for personal pronouns. Use in sentences as subject, predicate, object, possessive. See that pupils can name all the personal pronouns. Read carefully some book from the library and base the language work on the incidents of the story. Write character sketches, summaries of chapters, and compositions.

GEOGRAPHY. Study the continent of Europe according to the outline for South America for last month.

MUSIC. Reader and Songs. See outlines.

ARITHMETIC. Reduction of compound or denominate numbers. Have tables and abbreviations mastered. Teach the common units of different measures. Show that the multipliers and divisors used in reduction are abstract. Require pupils to mark denominations in their processes of reduction. Read examples and let pupils determine whether reduction ascending or descending is required thus: 240 bushels reduced to pints; 160 pints reduced to gallons. Teach board measure.

## SIXTH MONTH.

READING. The test of reading is the ability to understand the text readily in all the books adapted to this grade. Make the



instruction in reading helpful to the pupil in the study of all his other lessons. Put nothing but the best literature into the hands of pupils.

**SPELLING.** Correlate with all studies. Watch written work of pupils carefully. Have spelling and pronouncing contests as review work on Fridays. Emphasize diacritical marking, use of dictionary, definition and correct use of words, accent, and division into syllables.

**WRITING AND DRAWING.** Business forms and social correspondence. Practice exercises for freedom of movement. All written work in other studies neatly and correctly done.

**LANGUAGE AND LITERATURE.** Adverbs. Make list of adverbs showing *how*, *when*, and *where*, and use in sentences. Point out adverbs in reader, and classify as denoting *time*, *place*, and *manner*. Find what they modify, and show whether the modified words are verbs, adjectives, or adverbs.

Poems for this month may be Paul Revere's Ride; Lowell's Aladdin; Burn's A Man's A Man for A' That.

**GEOGRAPHY.** Study Asia according to the outline for the study of a continent.

**MUSIC.** Reader and Songs. Follow suggestions in the outlines.

**ARITHMETIC.** Addition, subtraction, multiplication, division of denominate numbers. Longitude and time. See that pupil has a clear conception of longitude and latitude. Compare time east with time west. Standard time. Carpeting floors and papering walls. Practical examples under all the principles studied.

#### SEVENTH MONTH.

**READING.** Twenty-five pages or more. Use easy English classics, biographies, history stories for supplementary work.

**SPELLING.** Give lists of words formed from the same root. Extend the list of prefixes and suffixes as rapidly as pupils can master them.



WRITING AND DRAWING. See that pupils do not grow more careless in their writing as they increase in rapidity. See that the writing materials are kept in good condition. Aim to secure muscular control and speed. In the drawing work require original designs and freehand sketching.

LANGUAGE AND LITERATURE. Prepositions. Make list of common prepositions and use in sentences. Show relation. Point out prepositions in reader and determine relations. Show that the preposition and its object form a phrase; find what the phrase modifies. Teach kinds and uses of phrases. Pay particular attention to the composition work. The subjects for composition should always be connected with the child's real experiences and surroundings. Perform simple experiments in the geography class, have pupils do the same, and then write up these experiments as language lessons. Commit choice poems and selections. Study some one of Irving's prose sketches for this month and correlate with language.

GEOGRAPHY. Continue the study of Europe by the outline suggested under the fourth month's work.

MUSIC. From Music Reader.

ARITHMETIC. Addition and subtraction of common fractions. Definitions thoroughly learned. Give much practice in all processes. Require pupils to find least common denominator by inspection, when numbers are not too large; encourage mental work, results only being put on slates. In addition and subtraction of mixed numbers, require pupils to use them as mixed numbers instead of reducing to improper fractions; write in columns same as whole numbers.

#### EIGHTH MONTH.

READING. Finish Reader and review the most helpful lessons. If the teaching has been properly done, the pupils should be good readers. Make good use of the library in this last month. Have pupils write reviews of the books they read, discuss favorite



characters, and quote choice passages. If the teacher of this class has a small range of information in the great fields of biography, history, travels, essays, stories and poetry, he will be circumscribed in his teaching and the horizon of the children will be correspondingly narrow. If the teacher has no liking for good literature, he will surely fail to inspire his pupils with a love for it. If the teacher dislikes work and shirks preparation, then these suggestions will be of no value to her or to the pupils. Mental and moral growth in the pupils is the result of wide-awake, intelligent work on the part of the teacher.

**SPELLING.** Review thoroughly all doubtful words. Write lists of prefixes and suffixes with two or three roots, and see how many words pupils can form by using these.

**WRITING AND DRAWING.** In all practice the pupil should *think* of his work, image the letter or word and the movements necessary to write it; use the large muscles of the arm; and maintain a good position. If pupils are good writers, they should be excused from the writing exercise during the seventh and eighth years. If they become careless in their written work, then they should be required to resume the work in the class. Drawing from nature. The work in drawing should be brought into close relation to the other lessons,—reading, geography, physiology. Let the children deal with real things and try to express what they see. See outlines.

**LANGUAGE AND LITERATURE.** Conjunctions and Interjections. Teach use of *and* and *or* in simple sentences. Show that they connect words of the same kind. Find these conjunctions in reader; show what they connect. Make list of common interjections. Show use and proper punctuation.

Teach compound sentences. Show that subject, predicate, object of simple sentence may be compound. Find examples in reader. Apply all principles as soon as learned. Study some of these poems; The Planting of the Apple Tree; Bryant's, The Gladness of Nature; The Ancient Mariner.

**GEOGRAPHY.** Study Africa and Australia by the outline suggested. Review all the continents by comparison of plants, animals, races of men, etc. Great care should be exercised all



through the year to connect historical events and the names and deeds of great men with the places studied. Every form of expressive work suggested in the work of other grades should still be used—drawing, chalk modeling, measuring, painting, making, keeping record of weather noting and recording the sun's position at noon, map-sketching.

**MUSIC.** Do not underestimate the moral value of music, when taught in the proper spirit. If you cannot teach music in the right spirit, cannot create interest, life, pleasure in this exercise, do not rest content till you acquire the power to do so.

**ARITHMETIC.** Multiplication and division of common fractions. Compare effects of multiplying and dividing the numerator by the same number; same with denominator; same with both terms. Show why a fraction is multiplied by multiplying numerator or dividing denominator; why divided by dividing numerator or multiplying denominator. Simplify the statement of a complex fraction by expressing it with the division sign. Review decimals.

### *TESTS FOR PROMOTION.*

**READING.** Ability to read any selection in the Fourth Reader intelligently and expressively; to grasp the thought of a selection of third reader grade without previous drill; to use the words of the Fourth Reader in original sentences; to determine the pronunciation and meaning of words from the dictionary; to recite well some selections from the reader.

**SPELLING.** Habitual good spelling in all written work and a good knowledge of prefixes and suffixes.

**WRITING AND DRAWING.** Ability to write an easy, legible hand, with fair speed and good movement. Power to draw well.

**LANGUAGE AND LITERATURE.** Power to write paragraphs and stanzas correctly from dictation; to write a letter which shall be clear in thought and accurate in language and form; to determine parts of speech in lessons from the reader and give their



use in the sentence; to analyze easy sentences, and use language properly in ordinary conversation and to give from memory some of the choice selections studied during the year.

**GEOGRAPHY.** A good knowledge of the leading facts in the physical geography of the different countries, their plants, animals, and people; power to sketch maps rapidly, trace routes of travel, give the leading historical incidents connected with prominent places, and to represent by chalk modeling or drawing any of the forms of land.

**MUSIC.** A good knowledge of the reader used. Many good songs committed to memory.

**ARITHMETIC:** Ability to read, write, add, subtract, multiply, divide, and reduce simple and compound numbers, and common fractions; to solve practical examples without reference to book; to give definitions of terms; to explain the steps in the solution of problems. Mastery of decimal fractions.

#### *HELPFUL BOOKS FOR TEACHERS.*

1. The Story of the Greeks, Guerber. American Book Co.
2. A Year With the Birds, Flagg.
3. Grandmother's Stories, Holmes.
4. Modern Europe, Coe.
5. Madam How and Lady Why, Kingsley.
6. Epochs of American History—The Colonies, Thwaites. Longmans, Green & Co.



*ADVANCED DIVISION.*

---

*SEVENTH YEAR.*

---

*1. Books and Materials Needed.*

Fifth reader, spelling-book, complete arithmetic, grammar, geography, history, physiology, dictionary, pen and ink, paper, tablets and drawing materials.

*2. Studies.*

READING AND LITERATURE. Fifth Reader first-half or choice selections from standard authors.

ORTHOGRAPHY. All new and difficult words in lessons. Derivation of words. Dictionary work. Dictation exercises. Spelling book.

GRAMMAR. Elementary book completed. Composition work throughout the year.

GEOGRAPHY. Study the United States and Europe.

PHYSIOLOGY. An elementary book. The effects of stimulants and narcotics.

ARITHMETIC. Complete arithmetic to square root.

HISTORY. To 1844. The controversy over slavery in the territories.

MUSIC AND DRAWING. Instruction must be in connection with other grades or only incidental, as separate classes cannot be formed in these studies for all the different divisions in a rural school.



should be given, and the derivation and history of interesting words should be given. Be clear and definite in the assignment of lessons. Study the classes of elementary sounds, as vocals, sub-vocals and aspirates. Teach and illustrate three or four common rules for spelling, each month. Give lists of words for diacritical markings, as apricot, vagary, squalor, Arab, dishonest, chasten, hovel, forge, lever, nomad. Spelling does not teach itself; it is not absorbed from other lessons. Spelling correctly is a habit, and, like other habits, is formed only by long and patient practice.

GRAMMAR. Teach the parts of speech thoroughly. Give special attention now to their properties. Teach the formation of possessive, singular and plural. Show advantage of learning the declension of personal pronouns. Let the pupil understand that I is always nominative, me always objective, you always plural in form, and when subject, always requiring a plural verb. Comparison of adjectives and adverbs.

*Note.*—The following simple rule for forming possessives may be helpful: Spell the word correctly either singular or plural, in the common or nominative form; add the apostrophe; add *s* if the common form does not end in *s*.

GEOGRAPHY. Study United States as a whole, the distribution of people, government, climate, winds, rainfall, the cotton belt wheat areas, corn, forests and fruits. Animal products. Mineral products as gold, silver, copper, iron, lead, coal, petroleum. Show how these products reach the markets and explain how great trade centers are built up. Explain the government land survey, and show its utility. Adopt the outline given elsewhere to the United States. Unify the work in geography, reading, literature and history as much as possible.

PHYSIOLOGY. In beginning this subject from the text-book, do not limit your work to the book in use. Remember that you are teaching the science that deals with *life*, and do not make it a matter of learning the hard names of dry bones and muscles. Compare all through the study of plants and animals as to organs, structure, uses of parts, life; also compare the different animals and man. Lay a good foundation for the study of



## OUTLINE OF COURSE FOR EACH MONTH.

---

### FIRST MONTH.

READING AND LITERATURE. The teacher should refer to all that has been given in this course on teaching reading. The reading lessons of this month should be studied in literature. Study only the best selections in the readers and supplement the work with such classics as *Evangeline*, *Miles Standish*, *Sella*, *Rab and His Friends*, *Peasant and Prince*. Interest pupils in authors by stories, photographs, pictures of their homes, choice selections, and by giving the circumstances under which they wrote the selections which the pupils are studying. Correlate these reading lessons with the lessons in geography and history. Form as many associations as possible between the different lessons of the day. There is a great gain to the pupil if while he is studying the New England states in his geography lessons he may at the same time read *Miles Standish* and prepare a history lesson on the settlement of Massachusetts. "The works of literary art in the readers, re-enforced as they ought to be by supplementary reading at home of the whole works from which the selections for the school readers are made, will educate the child in the use of a higher and better English style. Technical grammar never can do this. Only familiarity with fine English works will insure one a good and correct style."—*Report of the Committee of Fifteen*.

ORTHOGRAPHY. Continue the practice of having the difficult words in all exercises spelled. Classify words as simple and compound, primitive and derivative. Teach use of hyphen in compound words, leading pupil to depend upon the dictionary when he is not certain as to the use of the hyphen or any other characteristic of words. More difficult work in word analysis



should be given, and the derivation and history of interesting words should be given. Be clear and definite in the assignment of lessons. Study the classes of elementary sounds, as vocals, sub-vocals and aspirates. Teach and illustrate three or four common rules for spelling, each month. Give lists of words for diacritical markings, as apricot, vagary, squalor, Arab, dishonest, chasten, hovel, forge, lever, nomad. Spelling does not teach itself; it is not absorbed from other lessons. Spelling correctly is a habit, and, like other habits, is formed only by long and patient practice.

GRAMMAR. Teach the parts of speech thoroughly. Give special attention now to their properties. Teach the formation of possessive, singular and plural. Show advantage of learning the declension of personal pronouns. Let the pupil understand that I is always nominative, me always objective, you always plural in form, and when subject, always requiring a plural verb. Comparison of adjectives and adverbs.

*Note.*—The following simple rule for forming possessives may be helpful: Spell the word correctly either singular or plural, in the common or nominative form; add the apostrophe; add *s* if the common form does not end in *s*.

GEOGRAPHY. Study United States as a whole, the distribution of people, government, climate, winds, rainfall, the cotton belt wheat areas, corn, forests and fruits. Animal products. Mineral products as gold, silver, copper, iron, lead, coal, petroleum. Show how these products reach the markets and explain how great trade centers are built up. Explain the government land survey, and show its utility. Adopt the outline given elsewhere to the United States. Unify the work in geography, reading, literature and history as much as possible.

PHYSIOLOGY. In beginning this subject from the text-book, do not limit your work to the book in use. Remember that you are teaching the science that deals with *life*, and do not make it a matter of learning the hard names of dry bones and muscles. Compare all through the study of plants and animals as to organs, structure, uses of parts, life; also compare the different animals and man. Lay a good foundation for the study of



botany and zoology. Omit the chapter on the bones and teach for the first month digestion and absorption. Trace the food from mouth, or better still from the plant, to the blood and tissues. Pupils should make drawings of the organs, first from chart or cuts in the book, then from memory. Foods. Care of digestive organs. Keep constantly in mind that the main purpose of teaching physiology is that the pupils may care intelligently for their bodies.

ARITHMETIC. Ratio, simple proportion, compound proportion. See that pupils understand the meaning of terms and their relation. In proportion show that when any three terms are given the fourth can be found. In compound proportion train the pupil to reason from what was done to what is proposed to be done. If properly taught the pupil will state and solve a problem in compound proportion with as much confidence and accuracy as he adds a column of figures or secures a quotient in long division. Provide many examples not found in text-book.

HISTORY. If the suggestions in this course of study for teaching geography, language and literature have been followed, the pupil is well prepared to begin the serious study of history from a text-book. Such a biographical study of exceptional individuals has accomplished three things,—the historical interest has been aroused; the pupil has learned what difficulties our present civilization has been attained, and has received a great moral impetus. The chief aim in the study of history is to trace the origin and growth of our present complex civilization. First the individual is prominent. Soon his interests become bound up with his neighbors. Then with his colony, preventing inter-colonial union; next with his state, developing state sovereignty, and finally there is a national interest, tested by the great civil war. Thus gradually should the pupil be led to see that freedom in its best sense is obedience to the just laws of a strong government. With the development of some great idea as a goal history can never be dry and uninteresting or result in a mere memorizing of facts. Care should be taken that the text is modern in its spirit and aims. Insist on much supplementary reading. By this means only can one obtain a broad view of our historical problems. It has heretofore been customary to spend as much



time on the history preceding the Revolution as on that which follows: This plan is deemed unwise and has not been followed here, because the latter part is more difficult and because the biographical study in the lower grades has naturally been chiefly on the explorers, discoveries and early revolutionists. It is not expected that each pupil shall read all of the references given for each month, but every pupil should read *something* besides the text. Make history alive. Put yourself in the place of the people studied. How would you have acted? What things could have been done better? Does this or that far-off incident have any bearing upon us today? Keep the geographical influence constantly in mind. Draw maps whenever possible, and assign topics for special study. Memorize patriotic poems.

1. *Discovery and Exploration, 1000-1600.* 2. *Colonization, 1600-1660.* The period of discovery and exploration is really European history, and should be regarded as introductory. The object of study in this period should be (1) to find out the *motives* of individuals and nations, (2) what nations claimed territory, and why, (3) what effect each had on our life and institutions, (4) how England came to get most of it. It is not so important to learn the name and date of each explorer as it is to find out why America stayed discovered after 1492 and not after 1000. This necessitates a study of European conditions. Study also the physical features of North America and enough about the Indians to show the effect on the character of the settlers and on the development of the country. Maps and special topics.

The purpose of study in the colonization period is to trace the growth of the government, the church, the school, industries and the home. Trace carefully the growing difference between the English and colonial idea of the nature and purpose of a colony. Study all the effects of tobacco culture. Origin and value of the First Colonial Assembly; the Mayflower Compact; the New England Confederation. Why did so many people leave England between 1630-1640? In which colony would you prefer to have lived? Why? Maps. Special topics.



SUPPLEMENTARY READING: Channing's *School History*, 1-46; Fiske's *U. S. History*, 59-133; Eggleton's *U. S. and Its People*, 91-113; McMaster's *School History*; Montgomery's *Leading Facts in U. S. History*, 1-100; Sheldon-Barnes *American History*; Fisher's *Colonial Era*; Irving's *Knickerbocker History*; Longfellow's *Miles Standish and Hiawatha*; Moore's *Pilgrims and Puritans*; Webster's *Plymouth Oration*; Helen Hunt Jackson's *Ramona*; Prescott's *Conquest of Mexico*, etc. *American History Leaflets*, Nos. 1, 3, 9. Hart's *Source-Book*, 6-9; 39-76. Caldwell's *American History Studies*, 2-23. Study simple source material carefully whenever possible.

#### SECOND MONTH.

READING AND LITERATURE. Give oral drill in expression by paragraphs, then let entire lesson be read by individual pupils. Occasional exercises in concert reading may be practiced, but do not form a habit of conducting classes in this way. Use all exercises for voice culture that are found in the reader., and give such additional drills as are helpful.

ORTHOGRAPHY. About twelve pages in speller. Rules for formation of plurals and much practice on application of the rules. Make lists of abbreviations and let pupils write words in full. Carefully watch the spelling in all written work.

GRAMMAR. Distinguish between relative and interrogative pronouns. Teach pupils to name the few words used as each. Show that the antecedent of the relative pronoun is nearly always expressed, and require pupils to find it. Show relation of pronoun to antecedent. Drill upon the case of pronouns in the reader.

GEOGRAPHY. The New England states. Read text and study maps. Sketch the group as a whole, then study each state in the group.

#### LIST OF TOPICS FOR THE STUDY OF A STATE.

1. Position and boundary.
2. Size and population.
3. Soil and surface.
4. Waters,—coast, if any, rivers and lakes.



5. Climate.
6. Products,—vegetable, animal, mineral.
7. Occupations of the people.
8. Cities,—capital and a few chief cities.
9. Places of interest.
10. History.

Have many tracing lessons and imaginary journeys and voyages. Be sure that pupils image the places described vividly. Have stories, descriptions, bits of travel, historical facts, poems connected with the places studied, read and discussed in class.

PHYSIOLOGY. Study the circulation, structure of heart, uses of valves, arteries and veins. Effect of tobacco and alcohol on the heart and the circulation. Health of the organs of circulation. Drawings and dissections. Circulation in plants and animals.

ARITHMETIC. Percentage, profit and loss. Show relation between percentage and profit and loss. Compare terms used in each. In the solution of problems, teach pupils to determine base, rate, percentage, cost price, selling price profit, loss, before attempting solution. After he determines the above points, be sure he knows how to proceed. The best test is to give problems not found in text-book and with answers not known to pupils.

HISTORY. *Colonization, 1660-1760.* The change in the government of England at this time makes this a convenient dividing line in colonial history. Study the laws—navigation and manufacturing acts—made about colonial commerce, with the reasons. Were the New England colonies hard to govern? Reasons. Compare the Massachusetts Quaker policy with our immigration policy today. Was Bacon a rebel? Efforts toward union. Special topics. Review French and English claims and work. On which side would you rather have fought? Reasons. Why did the struggle begin in the Ohio valley? Why was the capture of Quebec important? What was the great question settled by this war? Maps. Note how England and the colonies grew apart during this period.



READING. Channing, 47-72; Fiske, 133-180; McMaster, 93-108; Hart's *Source-Book*, ch. vii.; Sheldon-Barnes; Caldwell's *American History Studies*, 26-46; Montgomery; Sloane's *French War and the Revolution*; Coffin's *Old Times in the Colonies*; Parkman's *Pioneers*; Cooper's *Last of the Mohicans*; Hawthorne's *Gray Champion* in *Twice Told Tales*; Longfellow's *New England Tragedies* and *Evangeline*.

#### THIRD MONTH.

READING AND LITERATURE. It should not be necessary to devote much time in class to the mechanical element in reading. Pupils of this grade should be able to so enter into the spirit of the selection that pitch, force, quality, tone will take care of themselves. Not till reading ceases to be a drill, not till the pupil has a mastery of words, will the reading exercise become an important factor in the pupil's literary culture. Let every teacher read again and again the literary classic which has been selected for class work. For the teacher to fully understand, appreciate and enjoy such a piece as Lowell's *Vision of Sir Launfal* is the first and greatest step toward preparation for teaching it successfully. Make a judicious use of home reading from the school library.

ORTHOGRAPHY. About twelve pages. Teach the principal rules. Hold pupils responsible as individuals for all the words they miss by requiring each one to keep a list of his own misspelled words.

GRAMMAR. Special attention to the properties of verbs; mode, tense, person, number. Regular or irregular, transitive or intransitive, active or passive.

Drill pupils in the correct use of language in composition work rather than on definitions, parsing and diagrams.

GEOGRAPHY. Middle Atlantic States and Southern States. See outline elsewhere for the study of New England States. Take great pains to correlate the work in geography with that in history and literature.

PHYSIOLOGY. Study respiration. Organs and structure and functions. How the blood is purified. Necessity of pure air. Ventilation of rooms. Care of lungs and throat. How plants and animals breathe.



ARITHMETIC. Insurance, customs, or duties, capital and stock, taxes. Show application in business and bring illustrations as near home to pupils as circumstances will permit. Give practical problems.

HISTORY. *Colonial Union, 1760-1774.* This is a very difficult and very important period. Compare England's early policy with the later one, and account for the change. Explain clearly the difference between English and colonial ideas of representation. Were the acts of Parliament legal? Were they expedient? Popular in England? Just why and how did the colonists object to the Stamp Tax? Show that it was the "last straw." Compare with our present stamp duty. Why did Pitt "rejoice that America had resisted?" Show that the same struggle was going on in England. Give *your own* causes of the Revolution. Why should the English historian, E. A. Freeman, say "In the war of Independence there is really nothing of which either side need be ashamed?" Origin and results of the non-importation agreements. Is it right to call the Boston trouble a massacre? Reasons. Why was it necessary to destroy the tea in Boston? Cause and work of the First Continental Congress. Assign special topics.

READINGS. Channing, 73-96; McMaster, 110-122; Fiske's *War of Independence*, 39-86; Montgomery, 163-173; Sloane 124-185; Lossing's *Field-Book of the Revolution*; see English histories, also; Irving's *Washington*; Longfellow's *Paul Revere's Ride*. Cooper's *Lionel Lincoln*; Franklin's *Autobiography*; Hart's *Source-Book*, 137-146; Caldwell's *Studies*, 48-69.

#### FOURTH MONTH.

READING AND LITERATURE. Require careful preparation of every lesson. Teacher must also prepare for the recitation if he would forcibly bring out the thought of the selection and arouse and maintain an interest in the subject. Interest pupils in home reading, and direct them what to read.

ORTHOGRAPHY. About twelve pages. Teach rule for doubling final consonant, and illustrate with examples. Require pupils to read words and definitions in the dictionary until they understand the signs, abbreviations, diacritical marks, etc.



GRAMMAR. Careful study of phrases, their kinds, uses and introductory words. Select phrases from other lessons. Treat them as single adjectives, adverbs and nouns. Continue drill in the correct forms of the personal pronouns and the irregular verbs. The order of study should be: (1) develop the definition or principle inductively in class, showing the relation of the new to what the pupil already knows; (2) require pupils to state orally and in writing the definitions and principles so developed; (3) assign work for the pupil which requires the application of these definitions and principles, and see to it that pupils prepare this work without assistance in school or at home; (4) test the pupil's preparation and hold him responsible for results, and require pupils to apply the definitions and principles in the reading class or other classes and in original compositions; (5) continue this work of application until pupils respond readily and correctly. Not till then are you prepared to go on to new subject matter. Review frequently.

GEOGRAPHY. Study Central States and Canada. See outline.

PHYSIOLOGY. The bones, their structure, nourishment, growth, coverings, uses and health. Study the joints and cartilages. Compare the skeleton and movements of the different classes of animals with those of man.

ARITHMETIC. Interest and partial payments. Drill in short methods, and give many practical problems. See that pupils do not learn to depend on the answers in the book. Pupils who have "solved" all the problems in the book often fail to compute interest correctly on a real note.

HISTORY. 1. *War of Independence, 1775-1783*; 2. *The Confederation, 1783-1787*. Study the causes and effects of the campaigns as a whole rather than the details. Use and make maps constantly. Preparation and fitness of each side for war. Reasons for making Washington commander. Why did he say after the battle of Bunker Hill, "The liberties of the country are safe." Why attack Canada? Why should the British land at New York? Trace the growth toward independence. Study the Declaration and its effects. Is our basis of government the same today? Purpose, wisdom and results of Burgoyne's inva-



sion. Why was the war transferred to the south? Should Arnold have died at Saratoga? Effects of the surrender at Yorktown on America, France and England. Why so many loyalists? Reasons why America won. Chief weaknesses of the Articles of Confederation, with reasons for. Trouble over western lands. Ordinance of 1787.

READINGS. Channing, 97-137;; Sheldon-Barnes, 152-189; McMaster; Fiske's *War of Independence*; Montgomery; Sloane, 192-346; Cooper's *Lionel Lincoln Spy, and the Pilot*; Coffin's *Boys of '76*; Abbott's *Paul Jones*; Holme's *Grandmother's Story of Bunker Hill*; *The Independence Bell*; Jane Porter's *Thaddeus of Warsaw*; Roosevelt's *Winning of the West*; Mitchell's *Hugh Wynne*; Hart's *Source-Book*, 147-172.

#### FIFTH MONTH.

READING AND LITERATURE. Do not be tied too closely to the reader. At least one-half the time should be given to the study of English and American classics. Select such material as will correspond to the environment of the school, the season of the year, the dominant political, religious, economic, or social questions of the day. The pupils that leave school this seventh year without having acquired a taste for good reading are very likely never to acquire such a taste and have failed to get out of the school the best gift it can bestow.

ORTHOGRAPHY. About fifteen pages. In teaching suffixes let pupils make lists of as many words as they can containing each suffix. Continue dictation work. See that pupils spell correctly in all their written work.

GRAMMAR. Clauses. Difference between principal and subordinate clauses. Find clauses in reader and show whether principal or subordinate. Show that subordinate clauses are used as nouns, adjectives, or adverbs. Treat these clauses as single adjectives, adverbs and nouns. Give much practice in expanding words into corresponding phrases and clauses and in contracting clauses and phrases into equivalent words. Give special attention to connectives in dependent clauses.

GEOGRAPHY. Study the Western States, Alaska, Mexico, and Central America, according to outline.



**PHYSIOLOGY.** Study the skin, its structure, uses, health. Compare with covering of plants and animals.

**ARITHMETIC AND BOOKKEEPING.** True and bank discount, bonds and exchange. Give many examples from practical business life. Select problems from other books. Teach pupils to verify their results, and inspire them with confidence in their own work. Give many oral problems, and make every recitation an exercise in *thinking*. The work for this year consists of business arithmetic. In connection with this work it is strongly recommended that pupils study the elements of bookkeeping during the winter term. Study cash accounts first. Simple accounts of a person in ordinary business. Dictate a few transactions each day. Write checks, notes, drafts, etc. This work will add greatly to the interest in arithmetic.

**HISTORY.** I. *Making of the Constitution, 1787-1789, and The Federalist Supremacy, 1789-1801.* The leading topics of this period are the origin and progress of political parties and of the tariff legislation. Compare with the same topics today. Which party would you have joined? Why? Show that all the difficulty in the making of the Constitution arose because the people were loyal to their state rather than to the nation. Study the plans proposed and compromises made. Show advantages over Articles of Confederation, Hamilton's financial measures. Why object to the whiskey tax? Study the Farewell Address. Account for Republican sympathy with France. Effect of the X. Y. Z. affair on party feeling. Theories on which the Kentucky and Virginia Resolutions were based. Election of 1800. Special topics.

**READINGS.** Channing, 137-180; Fiske's *Critical Period*; Sheldon-Barnes, 203-214; McMaster, ch. xiv; Coffin's *Building the Nation*; Eggleston, ch. xxxiv; Bolton's *Famous Americans*; Holme's *Ode on Washington's Birthday*; *Biographies in American Statesmen Series*; Hart's *Source-Book*, 172-194; Caldwell's *Studies*, 72-98.

#### SIXTH MONTH.

**READING AND LITERATURE.** Require much reading at sight. Teach figures of speech carefully. Call attention to the



different forms of prose and poetry, as narration, description, essay, oration, epic, drama, ballad. Interest pupils in favorite authors. Read selections from their best works. Read interesting parts of biography. Commit to memory and recite choice poems. Read loyal and patriotic selections.

ORTHOGRAPHY. About fifteen pages. Pupils should seldom misspell words now. If they do they should be compelled to recite in a lower class. Do not permit a pupil to mistake laziness and carelessness for being "born short" on spelling. Continue work in dictionary and word analysis.

GRAMMAR. Sentences; simple, complex, and compound. Classify sentences found in reader and in original composition work. Contract compound sentences to complex and simple ones. Express the same thought in different forms of sentences.

GEOGRAPHY. The British Isles. Study first as a group, then as separate divisions, mountains, lakes, rivers, and places of interest. Compare descriptions in Scott's *Lady of the Lake* with those in the geography. Read selections from *Ivanhoe*, *Marmion*, and *Beside the Bonnie Brier Bush*. Study some of Tom Moore's poems of Ireland. Interest pupils in the pictures and magazine descriptions of English cathedrals and Westminster Abbey. Take trips to the homes of Burns, Shakespeare, Tennyson, Ruskin, Gladstone, and Scott. Study the occupations of the people, their customs, home life etc. Try to *account* for England's great wealth, many large cities, immense colonies, extensive commerce and powerful navy. Compare British life, customs, homes, laws, government, products and occupations, literature and education with our own.

PHYSIOLOGY. The nervous system,—organs, uses, hygiene. Show how necessary it is to keep the brain and nerves in a healthy condition; how, if once injured, they can never be the same; how study depends upon the nervous system, and how tobacco and alcohol, late hours, loss of sleep, lack of fresh air, want of bathing, may interfere with our wealth, happiness and usefulness.



ARITHMETIC AND BOOKKEEPING. Equation of payments, partnership, average of accounts, brokerage. Explain the character of the business in each, and give practical example. Continue the work in bookkeeping begun last month. Show the use of day book and ledger. Have pupils rule their own forms, and become familiar with business forms and terms.

HISTORY. *Republican Supremacy Under the Jeffersonians, 1801-1812.* The development of the West is the leading idea in this period. Study the cause and effect of inventions. Conditions of the country in 1800. Compare with 1790. Why had manufactures received so little attention before the Revolution? How encouraged since then? Louisiana Purchase,—value then and now. Was it constitutional? Account for Federalist attitude. Effect on Republican principles. Why had the African pirates been paid tribute before? What reasons for fighting England rather than France? Why was the Embargo a failure? Account for the Indian trouble. What is meant by the “rising spirit of nationality?” Special topics. Map Study.

READINGS. Channing, 181-206; Sheldon-Barnes, 215-231; McMaster, Montgomery, 247-266; Fiske, 271-281; Coffin's *Building the Nation*; Johnston's *Orations*; Drake's *Making the Ohio Valley States*; Hale's *Man Without a Country* and Philip Nolan's *Friends*; *Biographies of Clay, Calhoun, Robert Fulton, Eli Whitney*; Hart's *Source-Book*, 200-216; Caldwell's *Studies*, 100-114.

#### SEVENTH MONTH.

READING AND LITERATURE. Cultivate power of attention by letting one pupil read a new selection, and require the others to give the substance of what they hear read. Let them try again until they can tell the story in good easy language.

ORTHOGRAPHY. About fifteen pages. Let class prepare lists of nouns from lessons in geography, physiology, and history; drill on spelling these lists. When spelling lesson is written, see that proper names begin with capitals, all other with small letters.



GRAMMAR. Analysis of sentences. Do not depend very much on diagrams, for they should never be used except as a *short method of analysis*. Pupils should analyze the sentence *before* they are permitted to diagram it. A diagram is not a picture in the ordinary meaning. A child may draw a very crude picture of a horse, or a cat, and yet be greatly benefited by his effort, because he has a definite image in his mind of the real horse or cat. But every crude attempt which the pupil makes to picture the office and relation of words in a sentence is an injury to him, revealing the fact that he has no clear mental image to guide him and serving only to increase his confusion of ideas and encourage the habit of guessing. Rather than to encourage the miserable performances that have disgraced our schools in the name of "diagrams," the teacher had better discard them entirely. Give special attention to the composition work, but do not use the subjects in the book. Let the composition work grow out of the pupil's lessons in all branches.

GEOGRAPHY. Study Southwestern Europe.—France, Spain, Belgium, Netherlands, Germany, Austria-Hungary, Switzerland and Italy. Give special attention to such topics as the Alps, the Rhine, Paris, Rome, Florence, the great cathedrals, libraries, picture galleries and works of art. Interest pupils in these countries and their people by means of pictures, stories, poems, and strive to create vivid images of all places studied.

PHYSIOLOGY. *Special senses*.—Structure of organs, uses, care. Show pupils how to sit while studying, how to hold the book to make the work less trying on the eyes. Test pupils for defective eyesight and hearing. Be sure that pupils can see all the board work without straining the eyes.

ARITHMETIC AND BOOKKEEPING. Give special attention to business correspondence and business law, rapid calculation, short methods in arithmetic, making bills and accounts, banking business. Review taxes, showing how assessed, levied, paid, for what purposes applied. With a little energy and study any teacher can easily master the simple forms and principles of bookkeeping and teach enough of it in connection with arithmetic to show the practical bearing of arithmetic on the real business world.



HISTORY. *Republican power continued.* War and peace. 1812-1829. Why call this the "Second War of Independence?" Strength of the parties. Object and result of land campaigns. *Maps.* Reasons for American naval successes. Did the battle of New Orleans do any good? Effects of the war? Hartford Convention—compare with Kentucky and Virginia resolutions. Which was now the National party? Reasons for purchase of Florida. Review slavery to 1820. The cotton export in 1820 amounted to \$20,000,000 and the value of slaves had trebled. Suppose you had been a cotton planter. Reasons for and against the admission of Missouri and Maine. Terms of the compromise. Which side got the better of it? Why? Object and result of the Holy Alliance. Monroe Doctrine. Was it a new stand? Do we have to follow it? Election of 1824. Candidates and principles. How would you have voted? Should Clay have been made Secretary of State? Election of 1828. Why called "the triumph of the people?"

READINGS. Channing 207-237; Sheldon-Barnes, 232-242 Fiske; Montgomery; McMaster; Caldwell's *Studies*, 114-120; Coffin's *Building the Nation*, 149-231; Lodge's *Webster*; Schürz's *Clay*; Roosevelt's *Naval War of 1812*; Holmes' *Old Ironsides*; Goodwin's *Dolly Madison*; Dana's *Two Years Before the Mast*; *Star Spangled Banner*; Drake's *American Flag*; Eggleston's *The Graysons*.

#### EIGHTH MONTH.

READING AND LITERATURE. Urge constantly the value of mastering the thoughts and feelings expressed or suggested by the author. Encourage pupils to see pictures in what they read. A leading authority says "it is universally conceded that the public schools fail to give children any power as readers." Another authority asserts that, after the child's twelfth year, his ability as a reader steadily declines. One of the main reasons for the unsatisfactory results in reading is the lack of appreciation of the best literature on the part of the teacher. The fifth reader is a book of literature, and no one who does not read and love literature can teach it properly.



ORTHOGRAPHY. Give dictation work, requiring use of capitals and punctuation marks. Interest pupils in the derivation of words. Show how many of our words are mere imitations of sounds, objects, and processes which they name, as buzz, hiss, rush, clang, shock, howl, groan, flap, roar. Tell the pupils something of the historical development of our language, trace the changes in meaning of difficult words show how new words are made to name new ideas and inventions; how words die out. Give lists of words for the children to mark, trace history, hunt synonyms for, and find in good literature.

GRAMMAR. Continue the work in analysis, reviewing subjects in which pupils are weakest. Teaching grammar is apt to degenerate into a dull, mechanical, worthless grind, yet no other study will arouse more interest or exceed in valuable mental discipline the study of grammar when well taught. To learn how to *speak* and *write* the English language correctly is the aim of this study. Pupils must acquire this power, not by parsing and diagraming, and mere memorizing, but by using the language to express their own thoughts, and by a constant application of the principles of grammar to their reading and other lessons and by studying the masterpieces of our mother tongue.

GEOGRAPHY. Northern and Eastern Europe—Norway and Sweden, Denmark, Russia, Balkan Peninsula. The plan of study has been sufficiently indicated in the work for the sixth and seventh months. Select the most important topics and emphasize these by every possible means.

PHYSIOLOGY. Review the work of the year. Require pupils to describe organs by drawings. Teach by the comparative method and keep in mind, as the aims of the instruction in this branch, the formation of right habits, as cleanliness, sensible clothing, correct breathing, regular living, care of eyes shunning needless exposure, abstaining from all things harmful, and the moderate use of things needful.

ARITHMETIC. Give this month to the review of most important topics, rapid calculation, original problems, tests and easy mensuration.



**HISTORY.** *National Democracy, 1829-1844.* This is another difficult but very important period. Study especially causes and results of inventions and discoveries, westward expansion, growth of cities and sectional divergence. Compare conditions in 1830 with 1800. Note the effect of good roads and railroads on commerce, education, politics. Make a list of things up to 1830 which had caused the north and south to grow apart. Jackson, public services, strong and weak points. Why is his administration called a "reign"? Review the tariff since 1789. to show how gradually it became a sectional question. Why should the north oppose the growth of the west? Was the idea of nullification new? Who came out ahead? Your reasons. Learn some of Webster's reply to Hayne for its patriotism. Why and how did Jackson object to the bank? Results. (This is too difficult for more than a brief study.) What is done with the **nation's** money today? How would you have voted in 1840? Tyler's party? Show by a diagram the change in parties since 1789. Reasons for the Webster-Ashburton treaty, 1842. Special topics.

**READINGS.** Channing, 237-264; Fiske, 304-321; McMaster, 279-312; Sheldon-Barnes, 238-255; Montgomery, 296-346; Burgess's *Middle Period*, 108-209; Lodge's *Webster*; Schurz's *Clay*; Sumner's *Jackson*; Johnston's *Orations*; Coffin's *Building the Nation*, 251-313; Roosevelt's *Winning of the West*; Hale's *Stories of Inventions*.

### TESTS FOR PROMOTION.

**READING AND LITERATURE.** See close of eighth year.

**ORTHOGRAPHY.** See close of eighth year.

**GRAMMAR.** Ability to determine parts of speech in any sentence or lesson; to name their properties; to select phrases and clauses; give their class and use; skill in composition, and power of quickly analyzing any ordinary selection suitable to this grade.

**GEOGRAPHY.** A ready and accurate knowledge of the geography of North America and Europe, with a good general knowledge of the earth as a whole, its physical features, pro-



ducts and people. Ready skill in illustration and map-sketching.

**DRAWING.** The habit of ready illustration by means of drawing wherever such illustrations are possible.

**PHYSIOLOGY.** Power to describe in words and by drawings the organs studied; to state the means of keeping the body in good health, and the *habit* of observing the laws of hygiene that pertain to school life and study.

**ARITHMETIC.** Ability to define all terms used and to show their application; to solve problems involving principles taught, without preference to text-books; to tell how solutions were performed, and to give reasons for all steps taken. A good knowledge of business arithmetic, business forms and accounts.

**HISTORY.** See requirements for graduation.

### *HELPFUL BOOKS FOR TEACHERS.*

1. Epochs of American History—Formation of the Union. Hart.
2. Views in Africa, Badlam, Silver, Burdette & Co.
3. King's Methods and Aids in Teaching Geography.
4. Suggestions in History and Literature, Emily J. Rice.
5. Lessons on Continents, Eliza H. Morton.
6. Special Method in Literature and History, McMurtry.



## ADVANCED DIVISION.

---

EIGHTH YEAR.

---

1. *Books and Materials Needed.*

Fifth reader, English and American classics, dictionary, arithmetic, history, geography, grammar, spelling-book, pen, ink, pencils, tablets and drawing materials.

2. *Studies.*

READING AND LITERATURE. Fifth Reader completed. English and American classics.

ORTHOGRAPHY. Same as seventh year.

GRAMMAR *Complete the book.* Composition work throughout the year.

GEOGRAPHY. Study South America, Asia, Africa and Australia. Review important topics.

PHYSIOLOGY. Advanced book. Subject completed.

ARITHMETIC. Square root, cube root, mensuration and review of most difficult problems.

HISTORY. The text-book should be completed by the middle of the year. One month or more may be given to review of important topics, and three months devoted to civil government.

CIVIL GOVERNMENT. Local, state, and national.

DRAWING. Continue to use this study as a means of grasping clear ideas and expressing them. Every lesson in history, geography, physiology and arithmetic offers abundant opportunities for illustrative work.



*OUTLINE OF COURSE FOR EACH MONTH.*

---

**FIRST MONTH.**

**READING AND LITERATURE.** If the reader is used, the class should make a careful study of the best pieces rather than to merely "read the book through." At least a part of the year should be spent on the masterpieces of literature. Such whole pieces as Whittier's *Snow-bound*, Irving's *Sketch Book*, and Hawthorne's *Great Stone Face* should be carefully studied. Teachers should read in connection all the suggestions for teaching reading in this course of study. See especially the outline for the seventh month of this year.

**ORTHOGRAPHY.** Pupils, who are deficient in this subject must recite with the seventh grade. Others may be excused, but should be held responsible for the correct spelling of all words in their lessons.

**GRAMMAR.** Classes of nouns. Phrases and clauses used as nouns. Properties of nouns. Rules for formation of plurals. Case and construction. Rules for possessives. In parsing nouns give most attention to construction, that is, use in sentence, whether subject, predicate, object, possessive, appositive and why. Practice in reader. Require written compositions, using subjects in geography, history and commonplace matters.

**GEOGRAPHY.** Study South America, following the suggestions in the seventh year for the study of a continent. Use the library.

**PHYSIOLOGY.** The skeleton. Use of bones; of cartilage. Bones of the skull, trunk, upper extremities, lower extremities. Nice adaptation to their use. Why most bones are hollow. Why skeleton is composed of many bones. Tendons. Vertabrae. How skull is joined to backbone. Sutures. How bones are nourished. How bones of children differ from bones of adults.



How broken bones heal; why they must be "set"; use of "splints." Alcohol as a medicine. Should be taken, like other dangerous medicines, only under direction of physician. Alcohol in the arts and sciences.

ARITHMETIC. Square root and cube root. Develop the rules carefully. Give many problems not found in text-book. Commit to memory the squares of all numbers from 1 to 20 and the cubes of all numbers from 1 to 10. Review square measure and cubic measure, giving many practical problems.

HISTORY. *Slavery in Territories*, 1844-1859. Use and make maps freely. Show that the attitude toward slavery was determined by geographical conditions. Suppose *you* had lived in South Carolina. The evil of slavery was more easily seen where it was unprofitable. Garrison, and his methods. Why opposed by the North? Why did the South try to stop the slavery petitions? Why was this a blunder? Reasons for and against the annexation of Texas. Campaign of 1844. Oregon boundary. Causes, real and alleged, and results of the Mexican War. Which section sent most troops? Why? Effect? Arguments for and against the Wilmot Proviso. Explain reasons for California's stand on slavery. Terms of compromise of 1850. Which side got the better of it? Proof. Underground railroad. Personal liberty bills. Were they constitutional? Uncle Tom's Cabin. Candidates 1852. Who was chosen? Why? Necessity for the Kansas-Nebraska bill; terms; weak point. Origin of Republican party—compare with the Jeffersonians. Dred Scott decision. Why did this alarm the north? Lincoln-Douglas debates. John Brown's raid—was he a traitor? Rhodes says that if the poor whites could have read, slavery would have been doomed. Why?

READINGS. Channing, 265-294; see other texts; Coffin's *Building the Nation*, 314-324; Caldwell's *Studies*, 124-170; Hart's *Source-Book*, 248-296; Burgess' *Middle Period*; Jefferson Davis' *Confederate Government*; Bolton's *Famous Americans*; Lodge's *Webster*; etc. See Whittier, Longfellow, Lowell, for poems on slavery—commit one or more. Read southern authorities whenever possible.



## SECOND MONTH.

READING AND LITERATURE. Fifth Reader or Masterpieces. The selection should first be read for its general meaning and purpose. A second reading should follow for the better appreciation of the piece, noting the subject matter, plan, sentence structure and choice of words. Then there should be oral reading of the best passages.

GRAMMAR. Verbs. Transitive, intransitive, copulative. Show how they differ. Take time to practice much in reader. Regular and irregular. See that pupil understands the rule for adding *ed*. Voice. Have pupils classify verbs in reader as active and passive. Let them rewrite the sentences, changing active to passive, passive to active. Teach forms of the different participles. Show that participles are generally used as adjectives, nouns, or principal verbs. Teach the distinctive characteristic of each mode and tense.

GEOGRAPHY. Africa and Australia, emphasizing these topics: Map studies, general surface, climate, slopes, river basins and systems, plateaus and mountains. Egypt and the Nile, the pyramids the Sphinx, Sudan, the Niger, the Kongo, South Africa, its settlement, history, people, products and present condition. Australia, size, general surface, trade winds and rainfall, Murray river basin, lakes, trees, animals, products and people.

PHYSIOLOGY. Joints and muscles. Structure of hip joint. Ball and socket joints. Hinge joints. Pivot joints. Use of cartilage and ligaments. Synovial fluid. Dislocations and sprains.

Kinds of muscles. Use of muscles. Contraction the leading characteristic of muscles. How controlled. Voluntary and involuntary. Tendons and their use. Results if tendons were elastic. Exercise a developer of muscle. Alcohol and fatty degeneration of the muscles. Effects of alcohol and tobacco on the heart.

ARITHMETIC. Measurements of surfaces. Master definitions and terms. Find areas of squares, rectangles, rhomboids, triangles, circles, etc. Find length of lines, such as base, perpen-



dicular, hypotenuse, circumference, diameter, radius, etc. Develop all definitions and rules carefully. Give many original problems.

**HISTORY.** *Secession, 1860-1861, and War for the Union to the Emancipation Proclamation.* Use maps and assign special topics constantly. Put yourself in the place of the south. Show that secession was the natural outcome of the principles of the Kentucky and Virginia resolutions, the Hartford convention and South Carolina nullification and that these principles became sectional finally because of geographical conditions. Views of Greeley. Condition of the country, 1860—compare with 1830; 1800. Compare north and south as to conditions of workingmen, cities, mental activity, etc. Campaign of 1860—candidates, platforms. Just why did the south secede? Suppose Jackson or Taylor had been president. Possible results of successful secession. Southern blunders. Efforts to compromise. Confederate constitution. Why was Virginia so divided? Sum up causes of the war. Advantages of each side. Study the field of war with the geographical advantages and disadvantages. Plans of each side. Study campaigns rather than battles. Use Lincoln and Grant as centers of study. Plan and result of Peninsular campaign. Importance of the Memphis and Charleston railroad. Suppose the Monitor had been captured? Value of New Orleans and the lower Mississippi. Purpose and result of Lee's invasion.

**READINGS.** Channing, 295-326; McMaster, 360-387; Eggles-ton; Caldwell's *Studies*, 172-186; Hart's *Source-Book*, 296-320; Sheldon-Barnes, 308-339; Dodge's *Bird's Eye View*; Lincoln's *Inaugurals* and *Gettysburg Address*; Jefferson Davis' *Confederate Government*; A. H. Stevens' *War Between the States*; War Songs; Read's *Sheridan's Ride*; poems of Lowell, Longfellow, Whittier, Bryant. Biographies of northern and southern statesmen.

### THIRD MONTH.

**READING AND LITERATURE.** Appropriate selections for study are: Bryant's *Little People of the Snow*; Burrough's *Birds and Bees*; Merchant of Venice.



GRAMMAR. Verbs continued. Give careful drill in conjugation. Teach pupils to compare the various forms in conjugation, and to detect the shade of difference expressed by the use of different auxiliary verbs, as in the sentence: *I have been* and *I had been*; *We shall go*, and *We will go*; *He may sing*, and, *He can sing*. Drill upon the different forms of the verb *to be* until pupil knows them at sight. Show that some form of the verb *to be* as an auxiliary, with the perfect participle of a transitive verb always shows passive voice, and that the passive voice *cannot* be expressed without the verb *to be* with the perfect participle. Lay much stress upon the office of the individual auxiliary verbs in the sentence. For example: *The letters may have been written*. Show that *written* is the principal verb; *may have been*, auxiliaries. Give principal parts of *written*, showing that it is the perfect participle, and irregular. *Been*, a form of the verb *to be*, shows passive voice, with the perfect participle *written*. *Have* denotes perfect, or completed tense, *may* present tense, potential mode. The subject *letters* shows that the verb is third person plural.

GEOGRAPHY. Study the principal islands of the Pacific. Make a special study of the Philippines from enlarged map. Review Cuba and Porto Rica.

PHYSIOLOGY. Food. Why we need food and drink. Why the body is warm. Uniform temperature of the body. Effect of starvation on the muscles. Hibernation of some animals. Fat as reserve supply in sickness. What foods must contain, Albuminous foods. Fats and oils. Mineral foods. Office of each. Advantages of a variety of animal and vegetable food. Why foods are cooked. How food reaches the blood. Assimilation. Effects of over-eating; of going to work immediately after eating a hearty dinner; of retiring for the night immediately after a hearty supper. Time necessary for digestion. Alcohol as a food; as a drink.

ARITHMETIC. Measurements of solids. Master definitions and terms. Find solid contents of parallelopipeds, cylinders, pyramids, cones, spheres, etc. Find areas of surfaces of same.



Develop principles carefully, have pupils learn them, and apply to practical work. Give many problems from other arithmetics.

HISTORY. *War for the Union* (continued) Maps and special topics as before. Origin, progress and effect of the blockade. Trent affair. Lincoln's inaugurals as to slavery. Slaves made contraband. Why? Slaves in the District of Columbia and in the territories. Why was not the emancipation proclamation issued sooner? Authority for it? On what would its enforcement rest? What slaves did it affect? When were the others freed? Position of the armies January, 1863. Reasons for the capture of Vicksburg; for Lee's second invasion of the north. Why did not Vicksburg and Gettysburg end the war? Learn the Gettysburg address. Account for draft riots. Chickamauga and Chattanooga. Why make Grant lieutenant-general? Objects and results of the "march to the sea?" Grant and Lee in Virginia—compare as to generalship, resources, etc. What aid had England given to the south? Presidential campaign, 1864. Why did the fall of Richmond end the war? Terms of surrender. Could Grant have offered less? Effect of Lincoln's death on the south. Was the war a "rebellion?" Why did the north succeed? Should Davis have been hung? Political, social, economic effects of the war.

READINGS. Continued from second month.

#### FOURTH MONTH.

READING AND LITERATURE. Continue methods suggested in former months. Pupils should read books from the school library, but under the direction of the teacher, and should make oral or written reports on the books read.

GRAMMAR. Adjectives and adverbs. Teach the several classes of each. Thorough drill in comparison. Show how and what they modify. How some adjectives may be changed to adverbs.

Call attention to Ruskin's use of adjectives, Shakespeare's, Scott's. Show how much a vivid style depends upon adjectives. Give much composition work in description.



**GEOGRAPHY.** If the class is composed of mature pupils, and if the subject of geography has been completed with a good degree of thoroughness, the study of elementary physics, as outlined for the ninth year, may now be taken up. In most of the schools however, it will be best to review a few of the most important topics in geography. The topics suggested for this month are: 1. The Pacific ocean as a whole, its size, boundaries, winds, tides, islands, value and influence on the climate, products and history of the lands that border upon it. 2. The great commercial routes of the world. By means of reference work to books of travel, history, biography, newspapers, magazines, by use of pictures, stories, imaginary journeys, tracing the routes by which tea, coffee, oranges, silks, spices, diamonds, ostrich feathers, cocoa, India rubber, come to us, this work can be made very practical and valuable as well as intensely interesting.

**PHYSIOLOGY.** Digestion. The mouth, teeth, tongue, salivary glands, gullet, stomach, gastric glands, intestines, liver, pancreas. Function of each. Objects of digestion. Use of saliva, gastric juice, bile, intestinal juices. Chyme and chyle. Lacteals and other absorbents. Appetite. Care of the teeth. Abuse of the stomach. Diseases of the digestive organs. Proper time to eat. Digestion affected by severe physical or mental exercise. Effects of eating too much and too often. Effects of alcohol upon the appetite, digestion, lining of stomach, liver; tobacco, on the appetite and digestion.

**ARITHMETIC.** If the work in arithmetic has been well done, and the pupils are masters of the book in use, it may be better to begin the study of algebra as outlined for the ninth year. This plan would accomodate larger pupils who can attend school during the winter months only, and is recommended in advanced schools. If it is thought best to review the arithmetic, the teacher must select the topics for study and should give a great deal of supplementary work.

**HISTORY.** 1. *Reconstruction and Reunion*, 1865-1869. 2. *From Grant to Cleveland*, 1869-1889. Make this period an opportunity for teaching the pupils their public duties. Discour-



age any partisan spirit. Why was reconstruction a difficult problem? Compare the plans of Lincoln, Johnson and congress. Reasons for the freedmen's bureau. Your opinion of the Fourteenth amendment. Reasons for Johnson's impeachment. Why a failure? Carpetbaggers, Scalawags, and Ku-Klux-Klan. Issues in campaign of 1868. Fifteenth amendment. Value of Alaska to us. Treaty with England, 1871. Political scandals. Compare financial panics of 1873 and 1837. Contested election of 1876—how settled? Cause of Garfield's murder. Explain civil service reform. Why so difficult? Compare with the spoils system. Significance of Cleveland's election. Events of his administration. Special topics: Chicago fire, etc.

READINGS. Channing, 358-381; McMaster, 427-441; Eggles-ton; Fiske; Sheldon-Barnes, 399-402; Hart's *Source-Book*, 299-365; Caldwell's *Studies*, 196-246. Biographies; Mary Livermore's *My Story of the Civil War*; Andrew's *Last Quarter-Century*; Hale's *Mr. Merriam's Scholars*.

#### FIFTH MONTH.

READING AND LITERATURE. Pupils should have much practice in sight reading. They should continue to memorize choice passages. They should learn something of the great writers and the different departments of literature.

GRAMMAR. Pronouns. Declension of pronouns. Drill on naming all the personal, relative, and interrogative pronouns until pupils know them thoroughly. Classify all the pronouns in a reading lesson. Compare personal and relative pronouns. Show that personals usually have a distinct form for person, gender, number and case; relatives do not; relatives are never found in independent sentences, but always in subordinate clauses; personals may be found in each relative; relatives are always used as connectives, joining subordinate clauses to the antecedent of the relative; personals are never used as connectives. Explain the interrogative in direct questions, as *Who discovered oxygen?* Also in indirect questions, as, I know *who discovered oxygen*. Show that the relative clause is always an adjective and modifies the antecedent of the relative; that the interrogative clause is always a noun.



GEOGRAPHY. Study (1) coal mining in Iowa and in the United States; (2) iron mining and smelting in Pennsylvania; (3) a sugar plantation in Louisiana; (4) a cotton plantation in Mississippi; (5) a wheat farm in Dakota; (6) a stock farm in Iowa. In each topic study the surrounding conditions, as soil, climate, surface. Study the processes involved, machinery, cost, kind of labor required; trace the raw materials to factories and markets; show how these different occupations influence the life of the people.

PHYSIOLOGY. Circulation. Why we need blood. Composition of blood. Coagulation and its value. The organs of circulation. Functions of each. The heart and vessels connected with it. How the heart is nourished. Arteries, veins, capillaries; their properties and uses. Arterial and venous blood. Lymph. Heart beats and pulse. Daily work of heart. How it rests. Valves. How blood returns in veins. Why no valves in arteries; no pulse in veins. How long it takes blood to complete the circuit. How cold is taken. Why nose frequently runs while taking cold. How to stop bleeding of arteries. Why veins usually stop of their own accord. Effects of alcohol on circulation, blood, heat of body.

ARITHMETIC. Review topics selected by the teacher. Problems solved by algebraic methods. Practical problems and supplementary work.

HISTORY. *National Development*, 1889-1900. This period deals with our present political problems. The duties and privileges of each individual can be made very clear. Study especially our industrial development and our world or international privileges and responsibilities. Make the silver and tariff legislation as simple as possible, and avoid a partisan treatment. Study the main campaigns in the Spanish war. Could this war have been avoided? Terms of peace. Value of the Hawaiian Islands.

Spend at least two weeks of this month in a general review. Let the purpose be to trace the continuous development of any topic suggested. Trace our foreign relations from the beginning; our industrial development; our territorial development. Note what important matters have been settled during the cen-



ture. In what way? Could it have been done better? The ingenuity of the teacher will make the review both profitable and interesting.

READINGS. The newest text-books, magazine articles, any short, interesting account of the Spanish war; Hart's *Source-Book*, 374-382.

#### SIXTH MONTH.

READING AND LITERATURE. Aim to make reading a means of knowledge getting. Require constant use of the dictionary. Have frequent spelling exercises and pronouncing contests. Encourage judicious home reading.

GRAMMAR. Prepositions, conjunctions, interjections. Explain that the preposition shows the relation of its object to the word modified by the prepositional phrase. Parse phrases as wholes. Show that co-ordinate conjunctions join words to words, phrases to phrases, and sentences to sentences; that subordinate conjunctions join clauses usually to words. Teach use of interjection. Give drills in reader.

GEOGRAPHY. Study New York as a trade center and compare with Chicago and San Francisco. Compare Minneapolis and New Orleans as trade centers. Study Boston as a literary center and city of great historical interest, its monuments, public buildings, educational institutions. Make a list of great events and great men connected with the history of Boston.

PHYSIOLOGY. Respiration. Object of breathing. Larynx trachea, bronchial tubes, air cells, lungs. Respiratory movements. How the air is renewed in the lungs. Amount breathed daily. The diaphragm and other respiratory muscles. How oxygen reaches the blood in the lungs. How the impurities in the blood reach the air in the cells. Changes undergone by the blood in the lungs. Changes produced in air by being breathed. Need of ventilation. How long it will take pupils to breathe all the air in the school room if tightly closed. Results of wearing tight clothes. Bad effects of wearing tight, elastic bands on the limbs. Air tainted with nicotine not pure. Influence of tobacco and cigarettes in youth. Simple experiments with candle to show the function of oxygen.



ARITHMETIC. Review topics selected by the teacher. Business arithmetic should be given careful attention.

CIVIL GOVERNMENT. There are two methods of teaching this subject. By the first method the pupil begins with the study of the local government, the town; then he studies the county, the city, the state, the nation. By the second method the national government is studied first, then the state, while the county and town are left until the last. It would seem that a judicious combination of these two methods would secure the best results. The township may be studied as a little state by itself, its officers, how chosen, when chosen, term of office, salary, duties. The purpose of political parties should be made clear, their organization, caucus system, nominations, platforms. Then the county may be studied as a larger state than the township, with greater interests, a more complex system of government, but working on the same lines and principles. The duty of sharing in the work and in the expenses necessary to carry on the town and county governments, attending caucuses, voting at all elections, paying one's fair share of taxes, discharging one's duty faithfully when elected to office, should be firmly impressed on the minds of the pupils.

#### SEVENTH MONTH.

READING AND LITERATURE. Recite with seventh year class. In most rural schools it will not be advisable to have two classes in the fifth reader. It is much better to combine the seventh and eighth years' work, thus securing one good class and a longer period for the recitation. No attention need be paid to the order of the lessons in the book in fifth reader work. Select the lessons from any part of the reader that are on the same topics that the pupils are studying in language, geography and history. Cover about one-half of the reader in this way during the seventh year and the other half during the eighth year. The supplementary reading for the two years should be different, so that pupils need not repeat anything in the eighth year that they have read in the seventh year.

GRAMMAR. Syntax and composition work. Rapid analysis of sentences. Words, phrases and clauses as subjects, predicates



objects, attributes, appositives. Review the verb. Make a special study of participles and infinitives.

GEOGRAPHY. Study: (1) the Great Lakes and the St. Lawrence basin; (2) Rocky mountains as a whole; (3) Yellowstone park; (4) Colorado river; (5) Amazon river; (6) Nile river.

PHYSIOLOGY. Nervous system. Nerve centers and nerve fibers. Uses of each. Nerve force. Compare nerve center to electric battery; nerve fiber to telegraph wire; nerve force to electric force. The brain and spinal cord as nerve centers. Divisions of the brain and the function of each. Cranial and spinal nerves. Pairs of nerves. Sensory and motor nerves. Sympathetic nervous system. Use of pain. Reflex action. How repetition forms habit. How tippling forms the drink habit. The only safe way to avoid forming bad habits. Effects of alcohol on the nerves, brain, and will power.

ARITHMETIC. Review topics selected by the class. Original problems. Tests on lists of questions prepared for entrance to college or for teachers' examinations. Short methods.

CIVIL GOVERNMENT. After pupils have studied town and county government, as suggested in the work of the sixth month, they should begin the comparative study of national and state government. Review the historical steps which led to the formation of the United States constitution. Call attention to the great compromises of the constitution, and in doing so review the different forms of colonial government. Study the text of the United States constitution and compare its provisions with the corresponding ones of the constitution of Iowa. Compare the legislative departments of state and nation as to houses; organization of each house; officers and their election, duties, term, privileges, qualifications and salary; special powers of the house of representatives; special powers of the senate; law-making, all the steps in the process. Study the constitutions themselves, rather than comments on them.

#### EIGHTH MONTH.

READING AND LITERATURE. Review of choice selections in the reader. Study of authors, sketches, quotations, works.



ORTHOGRAPHY. As was suggested in the outline for the first month, pupils who are very proficient in orthography may be excused from this branch during the eighth year, or a portion of the year at least. There are few rural schools where the teacher would be justified in organizing classes in spelling for each year's work. By using an extra speller and by giving considerable attention to word analysis in the seventh year, the seventh and eighth year classes may recite together and not repeat any of the work previously done.

GRAMMAR. Review difficult subjects. Written tests. Rapid composition work. Debates. Analysis of difficult sentences. Critical study of one or two classics as wholes.

GEOGRAPHY. Study these topics: (1) Washington as the center of our national government; (2) Study in like manner London, Paris, Berlin, St. Petersburg; (3) Study from the historical standpoint, Athens, Jerusalem, Rome Alexandria; (4) The Anglo-Saxon race—history, nations and their colonies, commerce, literature.

PHYSIOLOGY. Special senses. The eye and its parts. How image is formed on retina. Office of optic nerve. Short sight and long sight, how caused; kind of lenses for correction: Care of eyes. Hearing. External and internal ear. Care of ears. Touch; use of; where most sensitive. Smell; use of; structure of nose. Taste: use of; organs of.

Organs of voice and their functions. Vocal cords. How voice is produced; how modulated. Pitch of voice. Speech.

Physiology should not be continued beyond the seventh year. There is no good reason why pupils should pursue this study for the entire eight years of the course to the exclusion of every other science. Above all the teacher should give instruction in the effects of stimulants and narcotics in a simple, sensible way, without bias or exaggeration, and if possible, without offense to the sensibilities of pupils or patrons, and in the spirit of sincerity. It seems hardly necessary to state that no true man or woman will consent to teach for pay what he does not practice. No more



effective example of contemptuous disregard for law can be given than to employ a smoker or a tippler to teach the evil effects of stimulants and narcotics to the children of our schools.

ARITHMETIC. Review most essential points. Give much attention to mensuration and compound proportion. Rapid work. Short methods. Square root and cube root.

CIVIL GOVERNMENT. Study the executive departments of the state and nation by the comparative method outlined in work of last month. Contrast the president of the United States with the governor of Iowa as to qualifications, mode of election, powers and duties, term, salary, assistants and removal from office. Then study the judicial departments of state and nation in the same way. By this comparative method pupils will see how very closely state constitutions have copied the provisions of the United States constitution and the relation of the state to the nation will be clearly understood. The "bill of rights" and the later amendments should be studied carefully, then let pupils suggest other amendments that they think ought to be made. Teach some of the main provisions which the state has made for education. Since the public school is maintained in the interest of good government and worthy citizenship, all pupils should have a chance to learn the fundamental principles of state and national government. If no class in civil government can be organized, let the teacher give some instruction in this line during general exercises. Let us strive to teach an intelligent patriotism in our common schools.

### *TESTS FOR GRADUATION.*

READING. Ability to read intelligently, with proper expression, clear enunciation, and distinct articulation; to modulate the voice at will; to define words and explain allusions; and to recite from memory, selections equal to five pages of the reader. A specific and accurate knowledge of three or four classics, and a good understanding of eight or ten others, which have been included in the work of the seventh and eighth years. Some knowledge of authors and their chief works.



**ORTHOGRAPHY.** Habitual good spelling in all written work; habit of consulting dictionary on all doubtful points, ability to read the dictionary intelligently; ability to apply the most common rules for spelling; a general knowledge of derivative words as affected by prefixes and suffixes.

**WRITING AND DRAWING.** A good business hand and ability to use properly the rules for capitals, punctuation and paragraphing. Ready skill in the use of drawing as a means of expressing ideas.

**MUSIC.** A fair knowledge of the theory of music. Ability to read music easily. Many choice songs committed to memory.

**GRAMMAR.** Ability to analyze ordinary sentences and to parse the words, phrases and clauses, to outline and compose an essay, using accurate phraseology and correct form, punctuation and spelling. The pupil's early education and environment may make it difficult for him to use grammatical language in general conversation, but he should be able to detect errors in his own language, as well as in that of others, and to explain why they are errors.

**GEOGRAPHY.** A fair comprehension of the principal facts in mathematical and physical geography; a good understanding of the physical and political geography of the countries of the world, and a more minute and detailed knowledge of the United States, Iowa, and individual county. Ability to use maps to advantage, and proficiency in map drawing. A good knowledge of commercial geography, chief trade centers, leading industries and manufacturing processes. A fair acquaintance with the chief places of interest, the people and the customs of other lands.

**PHYSIOLOGY.** Ability to give the general plan and functions of the different systems and organs of the human body; to give so much of the hygiene of each as is necessary for a fairly intelligent care of the body, and for avoidance of errors that impair the functions of the organs; to give the general bad effects of the use of alcoholic drinks and tobacco.

**ARITHMETIC.** Ability to define all terms and perform all operations usually found in a common school arithmetic; to give a clear statement of processes and the principles involved;



to state rules for performing operations; accuracy and rapidity in combining figures; a knowledge of business forms in common use. A knowledge of simple bookkeeping.

**HISTORY.** A thorough knowledge of the important events, with the ability to show the connection of each event with what precedes and follows. The pupil should be able to take a topic or an idea and trace the growth from the beginning,—e., g., slavery; colonial union; religious liberty; political parties; relations with England or France; cause and results of some inventions, as the cotton gin or the reaper; state sovereignty; the tariff; territorial growth, etc. The study has been a failure unless the pupil sees that every past event is a link in the chain of our present life and all its problems.

**CIVIL GOVERNMENT.** A fair knowledge of national, state and local government; an appreciation of the meaning of citizenship, the worth of suffrage and free institutions, and of the duties and responsibilities of the individual citizen; a high standard of political morality and civic virtue; a sincere love of our own country, and a just appreciation of our obligations to other nations.

### *COMMON SCHOOL DIPLOMA.*

Pupils who complete the eight years work of this course should receive a common school diploma on passing a satisfactory examination under the supervision of the county superintendent. To indicate the nature of this examination, a list of questions is printed below.

**READING AND LITERATURE.** 1. Define reading. Why so important a study? Upon what qualities does good oral reading depend? 2. Name three examples of descriptive prose; three of narrative prose; three great speeches; three famous dramas. Give the author of each piece named. 3. Give a short quotation from Holmes, Milton, Bryant, Scott, Tennyson. 4. Define force, pitch, emphasis, inflection. How may emphasis be indicated? 5. Write in outline form a good plan for reading a book. What books have you read this year? Which did you like best? Give reasons.



ORTHOGRAPHY. 1. Make a table of all the diacritical marks. Give equivalent sounds for a, e, u, a, i, o, k, z. 2. What information about words does the dictionary give us? 3. From what other languages have we borrowed many of our words? Write the plural form of radius, seraph, phenomenon, nebula, crisis, stratum, beau, genius, corps, fairy. 4. Write a list of ten prefixes; ten suffixes; ten roots or primitive words. Now from these affixes and roots, see how many words you can build up. 5. Spell this list of 25 words: (Teacher pronounce words). Write homonyms for the first five; synonyms for the second five; analyze the third five; mark and divide into syllables the fourth five; write a paragraph in which you use the last five.

GRAMMAR. 1. Define etymology, syntax, prosody, grammar, word. 2. Give the principal parts of do, am, see, arise, blow, cast, choose, come, sit, drink. 3. Define relative pronoun. Give the list of personal pronouns; and use objective plural form of each in a sentence. 4. Define participle, infinitive. Write sentences to illustrate as many uses of the participle and the infinitive as you can. 5. Analyze this sentence and parse the underlined words: "*Train up* a child *in* the way *he should go, and when* he is *old* he will not depart from *it*."

GEOGRAPHY.—1. Draw a map of your county, showing its divisions into townships, its streams, railroad, towns. 2. Locate the state institutions of Iowa. Give its five largest cities, its principal rivers, its leading lines of railroad, its chief products. 3. If you were to move away from Iowa, in what other state would you rather live? Why? 4. Where and what are the steppes, the selvas, Manila, Cape Town, Borneo, Vesuvius, the Parthenon, Yosemite, Obi, Panama? 5. Give five points of likeness and five points of difference between the U. S. and Brazil.

PHYSIOLOGY.—1. Give the use of the joints, the lacteals, the valves of the heart, the synovial fluid, the gastric juice. 2. Describe a cell. Draw its parts. Tell how cells multiply. 3. Name the chief kinds of tissue in the body. Name the organs included in the motory system; the digestive system; the circulatory system. 4. Make drawings to show the structure of the bones; the pulmonic, or lesser, circulation; the structure of



the skin. 5. Give reasons for frequent bathing; loose clothing; erect position; good ventilation; well-cooked, simple food; abstinence from the use of tobacco, alcohol and opium.

ARITHMETIC. 1. Define ratio, proportion, commission, geometrical progression, root, power, mensuration, decimal fraction, reciprocal, insurance. 2. What is the effect upon the remainder of adding a number to the minuend; subtracting a number from the minuend; multiplying or dividing the minuend by a number. 3. Give practical applications made of square root; cube root; least common multiple; mensuration; the metric system. 4. A cylinder has a diameter of 6 feet and an altitude of 8 feet. Find its perimeter, entire surface and volume. 5. A merchant sold  $\frac{1}{3}$  of his stock at a loss of  $12\frac{1}{2}$  per cent. For what per cent of gain must he sell the remaining  $\frac{2}{3}$  to gain 25 per cent on the entire stock?

HISTORY.—1. What part of the New World was claimed by Spain, Portugal, England, France, Holland? Upon what did each nation base its claim? 2. When and how did the U. S. acquire the Northwest Territory, Iowa, Florida, Oregon, California, Alaska, Porto Rico, Hawaii? 3. What causes have led to the rapid growth and development of the U. S.? 4. Name what you consider the chief service to the U. S. of George Washington, Thomas Jefferson, Henry Clay, Daniel Webster, Andrew Jackson, Abraham Lincoln, Charles Sumner, General Grant, Admiral Dewey, Grover Cleveland. 5. What presidents have been elected by the Whig party? the Democratic party? Give an important event in each of these administrations.

ELEMENTARY CIVICS.—1. Name the officers of your township. Give the duties of each. What do we mean by "the duties of citizenship." Name ten such duties. 3. What are the three departments of our state government? Give the nature of each. How is our General Assembly composed? How does it pass laws? 4. Compare the legislative department of Iowa with Congress, as to houses, number of members, term, salary and powers of each house. 5. Contrast the governor of Iowa with the President of the U. S., as to term, salary, mode of election, duties and qualifications.



*HELPFUL BOOKS FOR TEACHERS.*

1. Leonard and Gertrude, Pestalozzi.
2. The Philosophy of Teaching, Tompkins.
3. General Method, McMurry.
4. The Method of the Recitation, McMurry .
5. How to Keep Order, Hughes.
6. How to Secure and Maintain Attention, Hughes.
7. Theory and Practice of Teaching, Page.
8. Education, Herbert Spencer.
9. Art of Questioning, Landon.
10. Mistakes in Teaching, Hughes.
11. Apperception, Rooper.
12. The study of the Child, Taylor.
13. The Art of Teaching, Ogden.
14. Educational Reformers, Quick.
15. Organic Education, Scott.
16. Helps in Teaching Reading, Hussey.
17. Roark's Method in Education.
18. The Teacher at Work, Bender.
19. The Story of the Mind, Baldwin.
20. McMurray's Books on Special Methods of Teaching History, The Sciences, etc.
21. Phelps and His Teachers, Stephens.
22. Jean Mitchell's School, Wray.
23. Type Lessons in Nature Study and Literature, McGovern.



## *OUTLINES IN SPECIAL SUBJECTS.*

---

### NATURE STUDY AND HYGIENE FOR PRIMARY DIVISION.

---

#### PRIMARY DIVISION.

This work in Nature Study is planned for the first and second school years, pupils of these grades reciting together.

#### SEPTEMBER.

##### 1. Trees.

Can you name some trees that you have seen? Can you tell their leaves? Have the trees stopped growing for this year? How can you tell? What tree do you like best? Why? What trees have fruit on now? What is the fruit for? Collect as many kinds as you can. Draw or paint a tree.

##### 2. Animals.

Have you seen any animals today? Where did you see them? What were they doing? Choose some one or two examples, as the butterfly, and study it carefully, its wings, coverings, habits, form, color, size food. Draw and paint the actual object.

##### 3. Geography and Physics.

Study the school ground, location, direction, the soil, the effect of rain on the school ground, clouds, change of winds. Show how water, left in a vessel and exposed to the air, evaporates. Teach the conditions under which it evaporates most rapidly.



#### 4. Hygiene and Behavior.

Give simple oral lessons on keeping the body neat and clean, the care of the hands, face, nails, clothing, shoes, books, desk, floor. Teach how to be polite to schoolmates, parents, visitors, strangers. Teach children that politeness does not consist in any mere form of words or any set form of actions, but in saying and doing things to help others because you feel kind toward them.

### OCTOBER.

#### 1. Plants.

Why do the leaves change color? Why do they fall? Continue the collection of fruits and nuts. Study the means by which seeds are scattered. Examine the dandelion, the thistle, the milk-weed. How do animals help to scatter seeds?

#### 2. Animals.

Put some caterpillars in boxes covered over with netting, and feed them with leaves from the plant on which you found them. Watch their changes. If they live all winter, what will they become in the spring? What becomes of the insects in the night? In the winter?

#### 3. Geography and Physics.

Change of seasons, names, months included in each season, most striking differences. Illustrate by pictures, drawings, paintings. Call especial attention to differences of prevailing color, storms, position of sun, temperature. Continue exercises in location and direction, soils, and draw map of school grounds, giving the location of a few objects and indicating directions. Keep a daily record of the weather, dew, frost, fogs, clouds, direction of wind, rain, snow. Trace the history of a drop of water from the ocean back to the ocean showing the effects of heat and cold and explaining more fully the nature of evaporation.

#### 4. Hygiene and Behavior.

Show the need of exercise to keep the body strong and beautiful. Give simple exercises in rising, sitting, resting position, stepping forward, backward and sideways, movements of the



arms, head, trunk, legs. Ask for things that harm the body, introducing in this way the lessons on the effects of stimulants and narcotics. Show how the body reacts upon the mind,—how hard it is to be good and pleasant when we do not feel well, so that if we want to be good, polite and learn fast, we must take good care of the body. With all nature study work combine language work and especially encourage original experiments, observation, modeling, drawing, painting.

### NOVEMBER.

#### 1. Plants.

What becomes of the leaves that fall? Do they do the trees any more good? How? What provisions have the trees made for next year's growth? What plants live only one year? What shall we call them? What shall we call plants that must live two years in order to bear seeds? Then what shall we call trees? How long do trees live? How can you tell how old an oak tree is? Do trees rest in winter?

#### 2. Animals.

What has become of the birds? What ones stay with us all winter? What covering do plants have? What covering do animals have? What covering do men have? Is your clothing in winter just the same as it is in summer? How is it different? Name some animals that do not go away in winter, but hide in some warm place. Find as many as you can.

#### 3. Geography and Physics.

What causes dew? Frost? Which cools faster, land or water? How does this affect climate? What is the cause of winds? What causes sunset and sunrise? Where do birds go in winter? Locate these places. Continue the weather record. Explain the calendar.

#### 4. Hygiene and Behavior.

Continue the physical exercises as suggested in the work of the second month. Introduce new exercises as needed. Let some of these be simple song exercises. Give simple lessons on food, how



prepared, how it should be eaten, care of the teeth. Show how the body is injured by unfit food and drink. Some are more hurtful than others; alcohol and tobacco are especially harmful.

## DECEMBER.

### 1. Plants.

Examine some of the buds on the different trees. Open the buds. Are they frozen through? Are they wet through when it rains? How are they protected? What trees are most easily broken by winds and sleet? What are trees used for,—leaves, fruit, wood? How prepared for use? Compare the wood of different trees as to hardness, color, weight, uses.

### 2. Animals.

Movements of animals. Differences of movement. Why can the cat move so quietly? The animal skeleton,—secure skeletons of different small animals. Compare them with each other, pointing out differences and resemblances. Interesting stories about animals.

### 3. Geography and Physics.

Explain the lever and show its relation to the movements of animals. Heat, its sources and movement. Weather record. Use of the thermometer. Positions of sun compared with that of former months. Meaning of horizon, latitude, longitude. (Avoid the use of technical terms and do not ask for exact definitions of any of these terms.) Effect of freezing on water and on soils. How are pumps kept from freezing?

### 4. Hygiene and Behavior.

Physical exercises. Continue lessons on food and its preparation. What foods are best for children? Why are some foods harmful to children and not so harmful to older people? While striving faithfully to fulfill the spirit and the letter of the law requiring instruction to be given in the effects of stimulants and narcotics, do not exaggerate the physical effects, and do not reflect on the parents of the children nor permit any personal allusions. The great lesson of this month should be true benevol-



ence. Make the instruction center around the Christmas time,—reasons, good and bad, for giving presents. Let the little ones make some presents for their parents and friends, or some ornament for the school room. Have a good picture of the Madonna in the room.

## JANUARY.

### 1. Plants.

Winter condition of buds and seeds. Examine a large number of buds. Have many of them been killed? Make a collection of different kinds of wood. Do trees grow in winter? Where is the sap?

### 2. Animals.

How do the animals that do not migrate in winter store up their food? Write a list of all the wild animals that you have seen this winter. What does each one eat in winter? Talk of the habits of these animals, how they drink, make their homes, etc.

### 3. Geography and Physics.

Weather record. Cause of winds and air currents. Shape of the earth. Phases of the moon.

### 4. Hygiene and Behavior.

Keep feet warm and dry. Do not sit or lie on damp ground. Avoid sitting in a draft when you are warm. Temperance means moderation in the use of things not harmful and total abstinence from that which is injurious.

## FEBRUARY.

### 1. Plants.

Examine some twigs and branches. How are the buds arranged on the branches? Examine the evergreens. Do their leaves fall off? Do some evergreens have a pitchy substance? Where? Of what use is it to the tree? Of what use to man?



## 2. Animals.

How do animals eat? How do they take hold of their food? Study these habits in horse, cat and birds. Mastication of food. Digestion.

## 3. Geography and Physics.

How is the air heated in a room with stove? With furnace? Where in the room is the air warmest? Why? How ventilate a room? How tell that the air is impure? Use of the siphon. Pressure of liquids. Weather record. Constant exercise in location, direction and estimating distance.

## 4. Hygiene and Behavior.

How to keep the school room neat and clean. Effects of breathing impure air. How diseases are contagious. How alcohol hurts the brain. How tobacco injures the teeth. How to make animals love you. How to make people love you.

## MARCH.

## 1. Plants.

A tree selected by each pupil for special study. Compare with other trees. When does the sap begin to flow up the tree? What for? Are the buds changing any? Watch them carefully. Draw them. Where does the tree grow? When would you transplant trees?

## 2. Animals.

Keep some cocoons in the school room for daily study. Keep a record of the return of the birds. Watch their movements. Observe their habits, food, nesting. Make a list of birds' enemies. How do birds defend themselves from their enemies?

## 3. Geography and Physics.

Easy lessons in weight and gravity. Why the earth moves and results of these movements. How clocks are made and regulated. Pendulums. How light is reflected and refracted. Weather record. Vernal equinox. March contrasted with September.



#### 4. Hygiene and Behavior.

How we take cold. What diseases colds may lead to. How to avoid colds. How to cure colds. Why prevention is so much better than cure. What the use of alcohol and narcotics may lead to. Truthfulness, courage, honor. In teaching lessons on morals, lead children to form their own conclusions. Don't preach.

#### APRIL AND MAY.

##### 1. Plants.

Study of roots and seeds. How seeds germinate. Plant some seeds and watch their growth. Drawings of roots, buds, and growing plants. Study the blossoming of trees. What wild flowers bloom early? Keep a record of all you find, with date and place. Plant some seeds at home and watch them. Learn the parts of a flower. Draw and paint them, and cut some paper flowers. Study leaves as to form, margin, use, and color.

##### 2. Animals.

Study earthworms. Continue the bird record. Study birds' nests, habits, enemies, etc. Procure some frogs' eggs. Watch them hatch, and study the young tadpoles through all their changes. Study the snail, clam, crab and turtle. Make a collection of insects and butterflies.

##### 3. Geography and Physics.

Secure a small magnet and show the children how to experiment with it. Teach use of the compass. Experiment in sound. Let the children test each other for pitch, intensity and tone, or quality. Test pitch by the voice, vibrating strings, pieces of metal of different lengths. Test the pupil's ear for tones by blindfolding him and then striking different objects, requiring the pupil to tell the object by sound. The watch may be used to test the ear for intensity of sound. Make these tests as games, purely informal. Keep daily weather record. Call the attention of pupils to examples of erosion, to natural forms of relief, land forms, water forms, roads and lines and methods of travel.

##### 4. Hygiene and Behavior.

Lessons on the care of the ear. Teach a high regard for personal cleanliness. Teach bodily purity as essential to mental and



moral purity. The *spirit* of the teacher will be the most potent factor in teaching morals, and her own manners will be copied by pupils. (Read Huntington's *Unconscious Tuition*, published by E. L. Kellogg, N. Y., price 15 cents.)

## 2. OUTLINES IN LANGUAGE AND HANDWORK FOR PRIMARY DIVISION.

The language lessons here suggested are based on the story of Hiawatha. This story is easily understood by children five or six years old. It pictures the growth and development of a typical human being in a simple state of society. It deals with the fundamental wants of man,—food, clothing, and shelter—and describes the primitive industries by which these wants are supplied. It brings the child in touch with nature, teaches him kindness to animals, cultivates the senses, imparts keenness of wit in contriving, affords an exhaustive wealth of material for all kinds of handwork, such as drawing, modeling, making, cutting, sewing, painting, measuring, and presents lofty ideals of all the family, social, and civic virtues. Of course the work as outlined here must be adapted to the needs of each particular school. It is not meant that the outlines for each month shall be strictly followed; they are suggestive only. If these lessons on Hiawatha are not used regularly, their occasional use will give newness and variety to the language work. Try them.

This outline can be used in the first three years of the course.

### FIRST MONTH.

#### *Hiawatha's Home.*

##### 1. The Story.

“By the shores of Gitche Gumee  
By the shining Big-Sea-Water,  
Stood the wigwam of Nokomis,  
Daughter of the Moon, Nokomis.  
Dark behind it rose the forest,  
Rose the black and gloomy pine-trees,  
Rose the firs with cones upon them;



Bright before it beat the water,  
Beat the clear and sunny water,  
Beat the shining Big-Sea-Water."

Read the description of the wigwam of Nokomis. Show pictures of a wigwam. Explain its construction. Describe its furniture. Tell of Hiawatha's cradle.

## 2. Comparison.

Lead the children to make constant comparisons between their own homes and that of Hiawatha. Call for contrasts and likenesses between their homes and his as to construction, material, cost, size, windows, doors, warming, chairs, cradles, lamps, bedding. Describe the situation of the wigwam, the lake, the forest, the kind of trees so that the children picture the scene vividly.

## 3. Information Lessons.

Valuable information in nearly every branch will be obtained from these lessons if taught properly,—what homes are for, how people live in poor homes. Lessons in numbers, geography, history, can be given indirectly. For instance, show the class a picture of Lincoln's early home and show how many of our forefathers lived in homes only a little better than Hiawatha's wigwam.

## 4. Handwork.

Let the children make a wigwam and furnish it like Hiawatha's making some rude dishes, spoons, little stools, a cradle, a bow and arrows. Encourage children in every way to use their hands to express their ideas,—to cut, draw, paint, measure, model and make,—thus getting clear percepts and concepts and laying the foundation for manual skill.

## 5. Language.

Every step in this process is a training in language. It is all folly to expect children to learn to write well on topics which do not interest them and which they do not understand. Before they attend school, children describe well what they see and readily express what they know. If their language work grows out of their real interests and appeals to their motor activity, they will not become tongue-tied in school.



## SECOND MONTH.

*Hiawatha's School.*

## 1. The Story.

Many things Nokomis taught him.

\* \* \* \* \*

Then the little Hiawatha  
 Learned of every bird its language,  
 Learned their names and all their secrets,  
 How they built their nests in summer,  
 Where they hid themselves in winter,  
 Talked with them whene'er he met them,  
 Called them 'Hiawatha's Chickens'.  
 Of all beasts he learned the language,  
 Learned their names and all their secrets, ✓  
 How the beavers built their lodges,  
 Where the squirrels hid their acorns,  
 How the reindeer ran so swiftly,  
 Why the rabbit was so timid,  
 Talked with them whene'er he met them,  
 Called them 'Hiawatha's Brothers.' "

## 2. Comparison.

Children compare Hiawatha's schooling with their own, as to where he studied, teacher, conveniences for study, subjects, hours of study, cost of schooling.

## 3. Information Lessons.

Legends of the flowers, the moon, the winds, the robin, the woodpecker, the owl. Study of the squirrel and rabbit and other animals.

## 4. Handwork.

Draw, color, model, cut and make objects described. Tell the stories and legends studied, acting out parts that can be easily dramatized.

## 5. Language.

All this work affords most excellent opportunity for training in language, narration, description, biography, legend, and



natural history. Natural expression is secured easily, for pupils grasp the thought and are intensely interested in what they say and do and write.

### THIRD MONTH.

#### *Hiawatha's Clothing.*

##### 1. The Story.

“From his lodge went Hiawatha,  
Dressed for travel, armed for hunting;  
Dressed in deer-skin shirt and leggings,  
Richly wrought with quills and wampum;  
On his head his eagle-feathers,  
Round his waist his belt of wampum,  
In his hand his bow of ash-wood,  
Strung with sinews of the reindeer;  
In his quiver oaken arrows,  
Tipped with jasper, winged with feathers;  
With his mittens, Minjekahwun  
With his moccasins enchanted.”

Read or tell the descriptions of Hiawatha's deerskin skirt, mantle, moccasins and leggings, his wampum belt, the feathers in his hair, and his magic mittens. To show how he got the material for his clothing, read his killing of the deer.

##### 2. Comparison.

Have pupils compare their clothing with that of the Indian boy as to its material, form, manner of making, implements used in making, its durability, ease of washing, cost and adornment. Compare with dress of other nations.

##### 3. Information Lessons.

The habits and home of the deer and the wild turkey. The process of tanning deerskin.

##### 4. Handwork.

Stringing of beads of different colors according to certain patterns, making clothes for a doll, matching colors, drawing pictures, making moccasins, a fan of turkey feathers, etc. Require



actual measurements of all dimensions in the construction of these articles, actual counting of beads and stringing in groups of certain definite numbers.

### 5. Language.

Conversation lessons. Oral reproduction. Written work. Description of articles made and their process of construction.

#### FOURTH MONTH.

#### *Hiawatha's Food.*

### 1. The Story.

“First they ate the sturgeon, Nahma,  
And the pike, the Maskenozha,  
Caught and cooked by old Nokomis;  
Then on pemican they feasted,  
Pemican and buffalo marrow,  
Haunch of deer and hump of bison,  
Yellow cakes of the Mondamin  
And the wild rice of the river.”

The material for this month will be found in Hiawatha's Fasting and Hiawatha's Wedding Feast.

### 2. Comparison.

The pupil should be led to compare our food with that of the Indians, as to procuring it, storing and preserving, buying and selling, preparing, cooking and serving.

### 3. Information Lessons.

The growth of corn from the seed, its husking, shelling, grinding, cooking, in connection with the story of Mondamin from Hiawatha. The growth of other vegetable foods used by the Indians, as squashes, pumpkins, wild rice, berries, grapes, melons, and maple sugar. Descriptions, pictures and stories of the animals used for food, as the deer, buffalo, bear and fishes.

### 4. Handwork.

Drawing pictures, collecting specimens of the grains used by Indians for food, making dishes of clay, mortars for grinding the corn, baskets to carry it, spears, fishing material and wooden bowls.



### 5. Language.

Sentences properly written. Copy parts of the poem Hiawatha and commit to memory. Use of capitals. Proper names. Punctuation.

#### FIFTH MONTH.

#### *Hiawatha's Friends.*

##### 1. The Story.

“Two good friends had Hiawatha,  
Singled out from all the others,  
Bound to him in closest union,  
And to whom he gave the right hand  
Of his heart, in joy and sorrow;  
Chibiabos, the musician,  
And the very strong man, Kwasind.”

##### 2. Comparison.

The children compare their friends with those of Hiawatha, as to age, appearance, strength, knowledge, skill in music, games, helpfulness, sympathy, loyalty, parties and feasts. Stories of other loyal friendships such as Damon and Pythias, David and Jonathan, should be read. From this work the children should form a high ideal of real friendship.

##### 3. Information Lessons.

Social life among primitive people should be brought out. The necessity of co-operation should be illustrated and stories of the customs of different races read and explained.

##### 4. Handwork.

Teach the children to play some of the games that Hiawatha played. Encourage them to be strong and helpful like Kwasind and to sing and play as sweetly as Chibiabos. Let them represent by pictures, drawings and acting the stories concerning these three friends. Review by letting each one tell a story to the class.

##### 5. Language.

The simplest stories may now, perhaps be written from memory, on the board first, then on tablet. Look over this work, letting the pupil correct his mistakes as they are pointed out. But ability to talk must precede ability to write.



## SIXTH MONTH.

The material for language study this month is taken from Hiawatha's Sailing and Hiawatha's Fishing.

*Hiawatha's Work.*

## 1. The Story.

“Thus the Birch Canoe was builded  
In the valley, by the river,  
In the bosom of the forest;  
And the forest's life was in it,  
All its mystery and its magic,  
All the lightness of the birch-tree,  
All the toughness of the cedar,  
All the larch's supple sinews;  
And it floated on the river  
Like a yellow leaf in Autumn.  
Like a yellow water-lily.”

## 2. Comparison.

The construction of the canoe is studied step by step and compared with our modern boats and ships, as to size of vessel, material used, tools employed, purpose of building, products carried, and cost. The clearing of the rivers by Kwasind is compared with our great dredges and similar machines. Hiawatha's fishing is described and compared with the fishing excursions in which the children have had a part.

## 3. Information Lessons.

The children study the life-history of the materials used by Hiawatha,—the bark of the birch tree, the wood of the cedar, the roots of the tamarack, the fibres of the larch, the balsam of the fir-tree, the quills of the hedgehog. They learn how man's wants are supplied by nature, and how man must study nature in order to find out what trees and plants and animals are suited to supply his several needs.

## 4. Handwork.

The building of a small canoe like Hiawatha's will afford opportunity for a great variety of hand-work in measuring, cutting, drawing designs, preparing material and adorning. The



reproduction on this small scale of these primary industrial activities will teach the children very many of the most essential lessons in our social and industrial economy.

## 5. Language.

Children must describe accurately all that they do, and these descriptions, questions, explanations and suggestions, growing as they do out of the child's own activity and circle of thought secures the most effective drill in the right use of language. Children use sentences as a means of conveying their own thoughts. They learn to pronounce, spell and use words as they need them for a specific, definite and immediate use. We do not store knowledge of words and grammatical forms for future use, but we store them by using them to supply a felt need.

### SEVENTH MONTH.

#### *Hiawatha's Work.*

Keep in mind the simple truth that language is a means of expression, and that clear thinking is an absolutely necessary pre-requisite to clear speaking and accurate writing. Hiawatha's Hunting and Farming will be studied this month.

#### 1. The Story.

"Then he said to Hiawatha,  
Go, my son, into the forest,  
Where the red deer herd together,  
Kill for us a famous roebuck,  
Kill for us a deer with antlers.

\* \* \* \* \*

Day by day did Hiawatha  
Go to wait and watch beside it;  
Till at length a small green feather,  
From the earth shot slowly upward,  
Then another and another,  
And before the Summer ended  
Stood the maize in all its beauty."



## 2. Comparison.

Here a general view of occupations is given,—what people do now to gain a living, what they must learn, what tools they must use, how we should live if we all depend upon hunting, what farming is, how the farmer helps other people, how they help him.

## 3. Information Lessons.

The particular occupations in which the children of the school are most interested should receive special attention. They should trace common articles of food, furniture and clothing through all the processes of their manufacture from the raw material,—where raised, or how produced, how manufactured, how transported, sold etc.

## 4. Handwork.

Cutting, measuring, carving, planting, drawing, picturing. Each child should be encouraged to make some article of use as a present to some friend or for sale. There is an endless variety of such work that children can do, and it is their own self-activity that really develops them.

## 5. Language.

Children can be called on for more written work. They can make lists of things that the farmer raises, articles sold in a grocery, furniture store, hardware store, etc. All words should be correctly spelled. Punctuating and capitalizing should receive careful attention.

### EIGHTH MONTH.

#### *Hiawatha's Patriotism.*

The work in language this month is based on the service of Hiawatha to his tribe and people. This idea of service for the common good is the fundamental thought of all real patriotism, and children should be early impressed with this truth.

### 1. The Story.

“Go back to your home and people,  
Live among them, toil among them,  
Cleanse the earth from all that harms it,



Clear the fishing-grounds and rivers,  
 Slay all monsters and magicians,  
 All the Wendigoes, the giants,  
 All the serpents, the Kenabeeks.

\* \* \* \* \*

You shall hear how Hiawatha  
 Prayed and fasted in the forest,  
 Not for greater skill in hunting,  
 Not for greater craft in fishing,  
 Not for triumphs in the battle,  
 And renown among the warriors,  
 But for profit of the people,  
 For advantage of the nations.

\* \* \* \* \*

Thus it was that Hiawatha  
 In his wisdom taught the people  
 All the mysteries of painting,  
 All the art of Picture-Writing,

\* \* \* \* \*

Forth then issued Hiawatha,  
 Wandered eastward, wandered westward,  
 Teaching men the use of simples  
 And the antidotes for poisons,  
 And the cure of all diseases."

## 2. Comparison.

Compare Hiawatha's pen and writing materials with ours. This may be a good time to introduce the use of pen and ink. Compare the Indian medicine-men with our doctors, their tools with ours, their teachers with ours, showing why schools are necessary and what teachers try to do.

The pupils compare the great men they have heard of with Hiawatha,—Washington, Lincoln, Pestalozzi are shown to be great because of their service to others. They also learn that every person who makes life pleasanter, safer and better for others is a true benefactor and patriot,—all who invent and discover and teach and heal and toil with right motives are like



Hiawatha. Not all the giants and serpents were killed by Hiawatha. There is work still for all, even little boys and girls. Are some of them right here in our school?

### 3. Information Lessons.

Any amount of excellent material is furnished by this story of Hiawatha,—how the invention of writing has helped man, how fevers and diseases are cured by proper medicines, what these medicines are, how prepared, antidotes for posions, what great inventions have been made and by whom, how they make life easier and happier.

### 4. Handwork.

Encourage pupils to invent some useful article, make some machine, showing that all machines are made by combining a very few simple ones. Experiment with the juices of plants, teaching what common plants are used as medicines, dyes, and for other useful purposes, and what plants are poisonous. Show specimens of the Indian picture-writing and ask pupils to draw those described in the poem of Hiawatha. Compare the picture-writing of the Indians with that of the Egyptians. Children will delight to draw these symbols in expressing their ideas, and will invent others. Show how our writing and printing has grown out of this picture-writing of people who lived a long time ago, and encourage children to take pride in their own writing so as to be like Hiawatha. In all this work appeal constantly to the expression of ideas through motor activity, use of the hand in harmony with the eye, for these real activities of the child are the only solid basis on which to found a practical and thorough mastery of the 'mother-tongue.

### 5. Language.

More written work can be given. Pen and ink may be used during the latter part of the year if thought best. Paragraphing should receive attention. Portions of Hiawatha should be copied and committed to memory.

### 3. *Outlines In Drawing.*

Teachers have hardly begun to realize the great educational value of drawing. Children draw fearlessly, and this tendency,



if encouraged, will grow into the habit of ready illustration in all studies. No attempt should be made to secure fine work in the lower grades. Freedom of movement and rapid work should be encouraged from the first. The work cannot be outlined here by months, since the time devoted to drawing in the different schools must vary greatly. It is well to have regular instruction in drawing when possible, and in such cases drawing may alternate with writing. But no such instruction should take the place of using drawing as a means of instruction in all lessons—a means of grasping new ideas clearly and of expressing them graphically and easily. The work in drawing should include lessons on color, form, location, measure, botanical drawing, decoration and illustrative sketching.

#### FIRST YEAR.

**COLOR.** Experiments with a prism. Teach the colors of the spectrum. Call attention to color in nature, the grass, the sky, leaves, flowers, clouds, etc. Collect and match colored objects, mounting them on cardboard in the order of the colors of the spectrum. Connect this work with nature study and language.

**FORM.** Sphere, cube, cylinder, half sphere, half cube, half cylinder. Place the object before the child and let him do his best to represent it. Encourage the crudest effort. From these type solids, develop the terms plane surface, curved surface, face, edge, square, circle, oblong. Study the direction and relation of edges. Cut circles, squares, and oblongs from colored paper. Represent these surfaces by free hand drawing.

**LOCATION AND POSITION.** Teach terms of position—vertical, horizontal, oblique, and distinguish top, bottom, left, right.

**MEASURE.** Teach the use of the ruler. Show how to measure distance from one to four inches. Apply to measurements of lines, surfaces and solids. Require forms and patterns cut and made of certain dimensions.

**BOTANICAL DRAWING.** Teacher draw a few simple leaves and flowers. Classify real flowers according to forms already learned. Have pupils draw these forms, and find illustrations in other leaves and flowers. Show how the parts of a flower *repeat* them-



selves. Show how leaves and buds are *arranged* on the stem. Have pupils illustrate by drawing, stick laying, cutting and making. Apply the work in a similar way to animals.

DECORATION. Repetition and alternation in stick laying. Simple borders and rosettes in colored paper. Colored crayon work. Pretty molded designs painted, as an apple with stem and leaves, a cherry, a peach or strawberry, birds' eggs, pine, cone, acorn, etc.

ILLUSTRATIVE SKETCHING. Let the children illustrate, whatever is in their minds, a battle, a brownie, a ship, a locomotive, a rainy day. Select part of the lessons in reading, language, nature study, for illustration in as many different ways as possible.

#### SECOND YEAR.

COLOR. Review the spectrum colors. Distinguish between tint, hue and intensity. Make a color wheel. Match colors, and teach two or three shades of the leading colors. Apply all this work to the child's immediate surroundings.

FORM. Review the forms taught during the first year. Teach the square and the triangular prisms, spheroid and ovoid. Develop from these solids the terms, angle, acute angle, right angle, obtuse angle, rectangle, triangle, diameter, diagonal.

LOCATION AND POSITION. Teach base, perimeter, circumference, parallel, bisection, trisection, margin.

MEASURE. One inch to twelve inches, from the ruler. Teach half inch. Teach length, width, height. Cut paper into halves, thirds, fourths. Compare such parts with the whole. Draw similar figures on different scales, as one-half inch, one inch, two inches, three inches, etc. Apply this work to cutting, drawing and modeling, requiring pupils to work according to specific directions as to dimensions, except in original work or illustrations, where they should be allowed to exercise entire freedom. The pupils are not to use their rulers in this work; they must judge of the dimensions by the eye while doing the work, and use the ruler in class to verify their estimates.



**BOTANICAL DRAWING.** Draw simple leaves, stems, flowers, buds and fruits, and classify them according to the geometric figures learned. Classify leaves as to angle at the apex. Apply the work in nature study to animals as well as plants.

**DECORATION.** Borders and designs, using the geometric forms already studied. Colored paper forms, models and painting as suggested for first year. Alternation of figures and repetition of forms at regular intervals.

**ILLUSTRATIVE SKETCHING.** Blackboard work. Picture studies. Illustration of stories, poems, descriptions, journeys, problems in arithmetic, geographical terms.

### THIRD YEAR.

**COLOR.** Review spectrum colors. Group each of the six positive colors with its two hues. Have pupils match these different hues with flowers, leaves, or other objects. Lay scales of color, using two tints and two shades of each. Select contrasts.

**FORM.** Type solids, as cone, square pyramid, vase form, triangular pyramid. Model these type forms in clay and construct from cardboard or paper. Study all surfaces, edges and angles in the typical forms.

**LOCATION AND POSITION.** Teach center, radius, diameter, apex, zones, axis and the relative direction of points from other points.

**MEASURE.** Simple construction of objects by exact measurement, as articles of furniture, triangles, rectangles, pyramids, cubes, boxes, book covers and toys. Teach quarter inch and have pupils reduce the fractional parts of the foot already taught to equivalent forms. Teach the yard, and lead pupils to estimate distance in inches, feet and yards.

**BOTANICAL DRAWING.** Draw leaves, flowers, stems, trunks, buds, germinating seeds, plants as wholes. Paint some of these in natural colors. Classify leaves as to base, apex, margin. Teach as a law of growth the principle of *radiation*—(a) from a point, (b) from a line or axis, (c) from a center. Apply the work to animal life also.



DECORATION. Picture studies. Color studies with flowers and birds. Borders composed of one or more of the spectrum colors and its hues and shades arranged in regular succession. Borders of leaves and flowers.

ILLUSTRATIVE SKETCHING. As in previous years. Drawings from memory. Original sketches. Copies of pictures. Apply to all lessons.

#### FOURTH YEAR.

COLOR. Teach the complete scale of color, comprising the six principal spectrum colors and the twelve intermediate ones. Match colors. Vary arrangement of parts of the color scale, encouraging pupils to invent pretty combinations. Teach dominant harmony and contrasted harmony and find examples of these harmonies in nature and in standard decorations.

FORM. Review type forms and all the terms used in connection with them. Have pupils image these type forms and describe them from memory, giving the number of faces, corners, points, edges, kind of faces, etc.

LOCATION AND POSITION. According to previous directions.

MEASURE. Estimate distance, then verify by measurements. Construct objects to a scale. Teach eighth inches, and reduce fractions of inches to equivalent fractional forms.

BOTANICAL DRAWING. Review geometrical forms and figures and classify leaves and flowers according to them. Watch the growth of seeds and make drawings. Teach the principle of *symmetry* in plants, radial and bilateral. Apply all this work as far as possible to animal life, coloring and preserving the best drawings of the pupils.

DECORATION. Teach how leaves are conventionalized, and show how common this form of decoration is in art present and historic, as well as in all manufactures, as prints, wall paper, carpets, curtains, chinaware, glassware, bronze and all forms of architecture.

ILLUSTRATIVE SKETCHING. Apply in all lessons, as suggested in work of previous years,—to coal mines, strata, land forms, water forms, bridges, ships, water falls in geography; to



plants, flowers, insects, organs of animals, eggs, in nature study; to tents, guns, fort, bows and arrows, routes and flags, in history to stories, pictorial words, poems, figures of speech, in reading and language; to lines, surfaces, solids, boxes, and illustrative examples, in arithmetic.

#### FIFTH YEAR.

Continue, the work on the lines already indicated. Review scales of color and dominant harmony. Study color in nature and in decorations. Continue exercises in drawing to a scale. Teach regular polygons and the circle. Review leaves and the classification of the same according to geometric forms. Teach contrasts of color, form, size, of the arrangement of parts. Teach variety in color of leaves and flowers, unity of purpose in the whole plant, and the rhythm as shown in its regular multiplication of parts. Give the pupils simple leaves to conventionalize and encourage originality. Study historic decorative work. Teach picture plane, field of vision, center of vision, eye level, guide line, and line of direction. Teach that position changes the apparent *form* of objects; distance affects the apparent *size* of objects; horizontal planes *below* the eye level appear to rise as they recede, and horizontal planes *above* the eye level appear to fall. Teach convergence. Show that foreshortening is governed by the length of the line of direction. Continue the work in illustrative sketching in all lessons. Encourage originality and rapid work. Do not attempt fine work for show, but foster talent in this line as in others.

#### SIXTH YEAR.

Study carefully all the work of the sixth year in other studies and determine when and how drawing can best aid in forming habits of close and accurate observation and giving a clearer grasp of ideas. Let the children observe closely and try to express what they see. Preserve drawings made at different seasons of the year and note the contrasts in outdoor objects. Preserve colored sketches in the same way and note contrasts in color. Continue work to teach the effects of change of position, distance, and of intervening objects. Study standard pictures.



Show in what respects they excel,—some in design, some in coloring; some in isolating one striking feature, others in combining many features or incidents into one harmonious whole. Teach complementary colors. Continue botanical drawing and the work of conventionalizing simple buds, leaves and flowers. Give constant drill in estimating and judging of length, area, solid contents, and train the eye to do such work rapidly and accurately. It is not intended that children shall have a regular drawing book during the first six years. If the work is continued during the seventh and eighth years, the pupils may use a drawing book.

#### SEVENTH AND EIGHTH YEARS.

Pupils of the seventh and eighth years should continue this study from a drawing book with such assistance from the teacher as she is able to give.

Encourage drawing from nature, sketching, copying, decorative work, and designs in architecture. Some of your pupils will develop special talents for such work. Send home some of the pupil's best work occasionally.

Continue geometric, decorative and pictorial drawing, and make constant use of illustrative work in all lessons.

Cultivate the power to use drawing as a means of getting clear ideas and expressing them correctly in all lessons.

#### 4. OUTLINES AND SUGGESTIONS IN MUSIC.

There are reasons why the singing in an ungraded school is often unusually pleasing and satisfactory. The ability of older pupils is an incentive to the younger ones, and the desire and effort to help the younger pupils never fail to develop the older ones. The voices of old and young united in common song, particularly on a melody or tune, combine with good effect. *The successful teacher* of music in the rural school will make much of song singing, of the singing spirit, of song interpreta-



tion and the good fellowship established through general singing, for there are difficulties in this school not found in the graded school.

Chief among these probably is the difficulty of finding suitable material for the singing lesson—that which will call forth an earnest effort from the advanced pupils and yet not prove discouraging to beginners.

These outlines are prepared for the rural school as it exists in Iowa today. Our programs are crowded. It is almost impossible for the teacher to give two periods each day to music. If the numbers are sufficiently large to warrant a division, better results, no doubt, can be obtained; but it is a poor plan to make the divisions very small. There is inspiration in numbers, and timid pupils join in singing under cover of a volume of voices. The work must be adapted to the needs of the average pupil. The teacher must take the school where she finds it and adjust her work to its conditions. It is folly to try to adjust the school to a certain series of books.

The outlines have been arranged in three divisions in the hope that the teacher may more nearly measure her pupils, progress, and because it is not possible to give eight different lessons to the eight grades each day.

Mr. C. A. Fullerton's "Choice Songs and Practical Suggestions" and "The Common School Book of Vocal Music" (Modern series, Silver Burdett & Co.) are each excellent books adapted to the needs of the ungraded school. For primary songs no better nor cheaper collection can be had than the "Modern Primer," (Silver Burdett & Co., 25c) and every teacher of little children should know Mrs. Jessie L. Gaynor's "Songs of the Child World," No. 1, published by The John Church Co., Chicago, 75c.

#### FIRST AND SECOND YEARS.

Here the work consists largely of singing songs appropriate to time and season, songs of home, of God, of nature, of child play, of patriotism, etc. Make no mistake here. Because no technical work is assigned, do not think the work un-



important. This is the time to give the child a musical experience and a love of joyous, uplifting song. Some thirty songs, or more, should be sung in these two grades. Upon the way in which these songs are presented and interpreted to children, depends largely the success of the future work.

As primary reading is taught by analysis rather than by synthesis, so in music, the whole is presented before its parts. The teacher of reading teaches a whole sentence—a complete thought. She is careful that it shall express some thought, or explain to the child an idea already held by the child. She then calls attention to the words which begin and end the sentence, to the principal words in it, finally to all the words included. These words are now studied as wholes, and then as to their elements, sounds, and letters. The process is one of tearing apart. We find an analogy to this in music. After the child has sung songs several months (which corresponds to the talking he does in his home before he enters school) the teacher selects some very simple song, like “May Comes Tripping,” or “The Squirrel”, or “Mother’s Prayer”, and teaches it as a rote song, or “by heart.” This is probably after six or seven months of school. She then calls attention to the four phrases that compose the song, then to the measure, and then to the syllable. The children learn to sing the syllables to the entire song—the first time they have had syllables. They soon find that “do” is always the same—always below “re” and above “ti”. Soon they notice that sol, fa, mi, re, do, and similar musical phrases sound always the same. (?)

Teach several simple songs this way. After these have been sung by syllable show the representation of what has been sung on the blackboard and drill on individual intervals. This is an important point and requires great thoroughness. Soon the class may be asked to write certain syllables on the staff and so begin the work of construction, or building up.

The purpose of school music the world over is two fold—1st, The cultivation of the musical sense—the appreciation and love of music; 2nd, The development of the understanding of the elements of music—ability to read at sight. By teaching the



child first to sing beautiful songs we emphasize the first purpose. The natural order of things is to proceed from this to the second—to approach the technical through the artistic. We want fluent readers. We find that this way of proceeding from the song to its elements conforms to the best pedagogy.

By the end of the second year the children should be able to read at sight very easy exercises in all keys. So far, however, the names of keys, sharps, flats, etc., have not been taught. They notice that if "do" moves, the entire family move up or down, and the teacher must be sure that the pupils have the location of "do" in mind before they begin to read a given song.

Even in the exercise, the buoyant singing spirit must be maintained. The work must never get heavy or humdrum. Expect your results from the beginning. Children like to work.

#### THIRD, FOURTH AND FIFTH YEARS.

Pupils may now learn something of the technical in music. During these three years the names of lines and spaces and the names and key signatures of at least nine major keys should be learned—C, G, D, A, E, F, B, E flat, A flat. The terms staff, G clef, measure, bar, notes and rests of various denomination, tie, dot, hold, sharp, flat, etc., are explained and mastered and sharp 4 and flat 7 are used. Simple problems in time must be understood, and the pupils should be taught to beat time to double, triple, and quadruple rhythm. All this is required, but the essential thing in all grades is skill and fluency in sight singing. No amount of accuracy in board work or knowledge of keys can take the place of reading music and singing songs. Aim to make your school independent of your help. Aim to bring them to the place where they feel their own ability. Do not be satisfied unless you find your pupils steadily advancing in this branch.

Much board work is useful. Dictation work where teacher sings short phrases and pupils reproduce them on the board is excellent ear training. It is a test of their knowledge of intervals, and perfect knowledge of intervals is the secret of correct sight singing.



Part singing is introduced in the third grade but is not called alto and soprano. Use instead the terms "upper and lower parts" and let each child in turn sing each part. Let nature divide the voices when she is ready. There are very few pronounced altos or sopranos below the sixth grade. Encourage boys to sing soprano so long as nature will permit. Don't hurry them to a low part. Tenor voices are scarce. Concert and opera managers look the world over for high voices in men, and they pay them large prices. Never forget to use the rote song in which all may heartily unite.

#### SIXTH, SEVENTH AND EIGHTH YEARS.

It is not necessary to anticipate trouble in these grades, but the fact remains that many pupils coming to these grades without ability to read music, grow discouraged, lose interest, or think the time in music poorly spent. Some boys find their voices hard to manage. Remember, our first purpose in music—to cultivate a love for the beautiful and melodious and to acquire a new means of expressing lofty thought. Rather than have the pupils think the music "dry" or "dull", sing plantation songs, hymns, folk songs, etc., in which some can carry a simple bass. Ginn & Co. publish a three cent Code which contains several good plantation songs. Old Scotch and Irish songs and German folk songs generally appeal strongly to pupils here.

There is much to be accomplished in these grades. Part singing now assumes a different shape. There are voices which nature designates as alto, mezzo soprano, soprano, bass, or tenor. These must be assigned to their own places. The chromatic scale should be learned, also the harmonic minor scale and its relation to the major. The bass clef is now introduced. Study musical terms of expression and tempo such as "andante", "piano," "presto", "cantabile." Continue ear training and give black-board drill in rhythm. The life of some musician may form an occasional language lesson. The Educational Publishing Co., for ten cents, will send you a charming booklet upon Handel, Haydn, Mozart, or others.

But the final test of the music lesson is found in the pupil's ability to take a well written song and at sight to give the correct interpretation to the words, using easy, pleasing tones and



buoyant rhythm. What you do, do well, and keep always in mind the high ideal of music as an ennobling, enriching art—one within the reach of all.

#### DIRECTIONS FOR ALL GRADES.

Each teacher must be supplied with a pitch pipe, or better, a Congdon pitch. Do not allow pupils to "start" songs and exercises. The teacher must see that the pitch is accurately given and understood by pupils.

Practically all children can learn to sing. No larger per cent are deficient here than in spelling and mathematics. Encourage all to try. Arouse interest in music but remember that little good is done by compelling people to sing against their desire. See that the desire is right.

Do not be surprised to find that a number of beginners cannot carry a tune. While all children enjoy singing and try to join in it, not all are able to move their voices about freely. These are not monotones. They may be taught to sing. Tooting like a whistle, crying "Cock-a-doodle-doo," on a high key, calling mamma as though she were a great way off, help many voices. There are very few monotones in the world.

Insist on round, soft, pleasing tones, and buoyant, rather rapid singing. Avoid harsh, shrill, or loud singing. It is somewhat common in schools when teacher and pupils are enthusiastic. A song may sound very merry or jolly without being exceedingly loud.

In the work of sight singing and study, sing for the children not with them. Do not hurry. See that two-thirds of the class understand a difficult point before leaving it. The interest of a school in any study is very often measured by the interest of the teacher in that branch.

A good direction for position is either "sit tall" or "sit with your chests high." Either will insure a good singing position. The book should be held in two hands, with its lower edge resting on the desk. "Keep sweet" is a good motto for the teacher during the music lesson.



Fifteen minutes is enough to allow for the singing lesson. Ten is better for small children. Let us remember that results are few and poor when interest is lacking.

Achievement is very dear to children. Always have the work hard enough to call forth an earnest effort. The normal child likes work. Try something hard occasionally—tell them it is hard and see how earnestly they try.

Select songs of real merit. They have the same relation to the musical nature that good food has to the physical.



ADVANCED COURSE OF STUDY  
FOR  
VILLAGE SCHOOLS.

This course is intended for advanced rural schools and for small graded schools. In many rural schools a part of this work, say one or two studies, can be pursued to advantage during the winter months at least.

The first-year of this course is the ninth year in school, and the second year is the tenth year in school.

*FIRST YEAR.*

Grammar and Composition (6 months).

Rhetoric (3 months).

Arithmetic and Bookkeeping (9 months).

Physics (6 months).

Botany (3 months.)

General History (9 months).

Review Study or General Lesson.

*SECOND YEAR.*

Rhetoric (3 months).

American Classics (3 months).

English Classics (3 months).

Algebra (9 months).

Botany (3 months).

Physiology (6 months).

United States History (6 months).

Civil Government (3 months).

Review Study or General Lesson.



## FIRST YEAR.

*GRAMMAR AND COMPOSITION.*

The work should be conducted on the lines already suggested for the seventh and eighth years, and should consist of the careful and thorough study of an advanced book on grammar. Great pains should be taken with the work in composition themes, essays or debates should be required each week of every pupil.

---

*RHETORIC.*

Begin this study as soon as grammar is completed, say the seventh month of the year. Use an elementary book.

## FIRST MONTH IN RHETORIC.

Nature, meaning and value of rhetoric. Simple sentences, parts and modifiers, punctuation, practice in writing. Complex sentences with adjective clauses, adverb clauses, noun clauses, punctuation of complex sentences. Compound sentences.

## SECOND MONTH IN RHETORIC.

Contraction of sentences and clauses. Expansion of phrases and clauses. Synthesis of sentences into a paragraph, and paragraphs into a theme. Theme writing: (1) selection of subject; (2) accumulation of material; (3) construction. Themes of description, narration and argument.

## THIRD MONTH IN RHETORIC.

Qualities of style,—use of words, propriety, purity, precision, errors to be avoided. Arrangement of words, phrases and clauses. Unity, strength and clearness of sentences. Order of words and phrases, natural, transposed, climax, variety of expression and arrangement.

---

*ARITHMETIC AND BOOKKEEPING.*

Advanced work on the same lines suggested for the seventh and eighth years. The division by months will be similar to that given in those years. A commercial or higher arithmetic may be used, and the work continued for the entire year.



*PHYSICS.*

The work in physics should be carried for at least six months. Do not use a very difficult text book.

## FIRST MONTH.

Definitions developed. The mechanical powers,—lever, inclined plane, wheel and axle, wedge, screw, and pulley. Matter, its general properties, specific properties. Motion and force, energy, center of gravity, falling bodies. Let pupils perform many simple experiments to develop the principles. Encourage pupils to construct home-made apparatus.

## SECOND MONTH.

The pendulum. Liquids, hydrostatics, specific gravity, capillary attraction, hydraulics and water machines. Give many practical illustrations and experiments. Teach pupils to be exact in their experiments. Use the black-board freely, and teach pupils to draw the machines described. Each pupil should keep a blank book.

## THIRD MONTH.

Pneumatics. Experiments performed by pupils. Making of apparatus and development of principles. The atmosphere. Barometer, pumps, siphon, air-pump. Practical application of principles. Tests. Heat. Experiments to develop definitions and principles. General effect of heat on solids, liquids and gases. Temperature, thermometer, convection, conduction, evaporation, distillation, latent heat, specific heat. The steam engine. Illustrate freely by drawing and making and have pupils keep a record of experiments.

## FOURTH MONTH.

Sound. Develop definitions and principles experimentally. Construct simple apparatus. Study the production, transmission and velocity of sound waves. Reflection of sound, intensity, pitch, tone. Musical sounds, noise and music, musical instruments. Make all the work as practical and suggestive as possible.



## FIFTH MONTH.

Light. Follow suggestions for previous months in regard to experiments and home-made apparatus. Teach the laws of light as to intensity, velocity, transmission, reflection and refraction, diffusion and absorption. Study images, lenses, color, mixing colors, the rainbow, optical instruments, the eye as an optical instrument.

## SIXTH MONTH.

Magnetism and electricity. Experiments with magnets. Explain the compass. Study nature and kinds of electricity, induction. Describe electrical machines, voltaic cells, the telegraph, the telephone, the dynamo, the arc lamp, the storage battery, and the electric car. It is believed that all this work in physics can be made very interesting and helpful in the hands of a competent teacher. A fair knowledge of these practical subjects treated in physics would seem to be a necessary part of a common school education. The last two months of the year should be given to the study of botany.

---

*BOTANY.*

The work in botany should begin in the spring term and should be completed the following fall term.

## FIRST MONTH IN BOTANY.

Study of typical plants. Seedlings. Plant seeds and have pupils watch them and describe progress; require drawings in all stages of growth. Parts and coats of the seed. Collect buds and classify as to position, describe and draw. Study roots of all forms and select the type forms. Make drawings of these forms. Collect and classify stems. Remember that you are to study nature, and do not be satisfied to teach merely what is in the book. See that pupils find in nature illustrations of all the terms used in their lessons.



## SECOND MONTH IN BOTANY.

Study plants as *living organisms*. The classification and analysis work is of very little value unless the pupil grasps the fundamental facts and laws of the growth, variation, life and uses of plants. Study a tree as a whole, root, trunk, bark, stems, leaves, flowers, fruit. Compare it in all these points with a tree of the same family, but of different species, then with tree of different family. After considerable such study, have pupils classify leaves found in nature as to apex, base, margin, general form. Study and classify stems and buds.

## THIRD MONTH IN BOTANY.

Inflorescence and its various forms. Floral envelopes and parts of flowers. Modification of parts. Fertilization of flowers. Insects as an aid to fertilization. A few plants should be carefully analyzed.

---

*GENERAL HISTORY.*

One entire year is given to the study of general history. Much reference work should be done, and the main topics should be thoroughly taught. Much of the text book should be omitted. The division into ancient, mediaeval and modern is merely for convenience. History should always be regarded as one continuous whole. In so short a time especial care should be taken to learn thoroughly those facts necessary to develop only the great *ideas and institutions*. Trace these with their causes and effects down to the present. Show how people from the earliest times were forging chains for us as we are for those who are to follow. Sketch maps to get location. Study the effect of physical geography on history. Read something outside the text books always.

## FIRST MONTH.

THE EARLIEST GROUP OF NATIONS. Locate and discover why civilization developed first here. Study enough of these nations to learn in what they excelled, reasons for their decline and what



succeeding nations owe them. *Special topics*: Egyptian architecture, science and industries. Babylon. Damascus. Ancient commerce. Pagan religions compared.

REFERENCES AND READINGS. Myer's *Ancient History*, Fisher's *Universal History*, Fisher's *Brief History of the Nations*, Sheldon's *General History*, Sayce's *Ancient Empires of the East*, *Stories of the Nations* series, Lord's *Beacon Lights*, Ebers's *An Egyptian Princess*, *Uarda*, and *Through Goshen to Sinai*, Crawford's *Master of the Magicians*, Kingsley's *Hypatia*.

#### SECOND MONTH.

GREECE. Study geographical conditions in its relation to Egypt and the eastern nations; in its effect on her commerce, industries, political life, aesthetic, religious and social development. Always learn thoroughly the main facts of every topic studied. Then make comparisons and draw conclusions. Compare Sparta and Athens, and account for the difference in people, customs, government etc. Causes, chief events and results of the Persian and Peloponnesian wars. Career of Alexander. *Special topics*: Great statesmen,—Themistocles, Aristides, Pericles. Sculptors,—Phidias and Praxiteles. Writers,—Sophocles, Herodotus. Position of women. Slavery. Architecture. Philosophy. What do we owe to Greece?

READINGS. General histories as above. Myers's *Greece*; Robinson's *Greece*, Botford's *Greece*, *Story of the Nations*, series, Lord's *Beacon Lights*, Grote's *Greece*, Emerson's *Lectures on Plato*, and *Representative Men*, Plutarch's *Lives*.

#### THIRD MONTH.

ROME. Study geography and main facts as above. Origin and classes of people. The monarchy. The republic. Strife between the **Patricians** and **Plebeians**; conquest of Italy; Punic wars. Was it really a republic? Your reasons. The empire. Work of Augustus. Account for despotic character of emperors. Trace territorial growth. Work of Diocletian. Of Constantine. Division of the empire. Causes for decline of the Roman empire. World's debt to Rome. Show that law and government were developed. *Special topics*,—Hannibal, Cato, the two Scipios, the Gracchi. Social life. Persecution of the Christians.



READINGS. See above. *Allen's Rome*, Merivale's *Rome*, Mommsen's *Rome*, Gibbon's *Decline and Fall of the Roman Empire*, Plutarch's *Lives*, Hawthorne's *Marble Faun*.

#### FOURTH MONTH.

From 476 to 1000. Show that the fall of Rome simply prepared the way for better things. Note its effect on Christianity. Show the good results of the Germanic invasion. Why is this period called the "Dark Ages?" Work of Justinian; the Saracens, their conquests and learning; Mohammed. France,—Clovis, Charles Martel, Charlemagne—what did he do for the world? Germany,—Otho the Great; Henry IV, and his quarrel with Pope Gregory. Britain,—under the Romans; the Teutons; introduction and effect of Christianity; Egbert; Alfred the Great—why called one of the three greatest kings of England? See in this period the beginnings of the modern nations. Study the temporal power of the church.

READINGS. General histories, *Lord and Story of the Nations*, as above. Myers's *Mediaeval and Modern History*, Duruy's *Middle Ages*, Bryce's *Holy Roman Empire*, Emerson's *Mediaeval Europe* and *Introduction to the Middle Ages*, Thatcher's *Middle Ages*.

#### FIFTH MONTH.

1000 to 1500. Feudalism. Crusades. Rise of the cities. Rivalry between France and England through the Hundred Years' War. War of the Roses. Chivalry. Rise of the papal power. Fall of Constantinople.

*Special Topics.* Art in the middle ages. Industries. Superstitions. Inventions. Learning. The origin of the house of commons in England and the third estate in France.

READINGS. As above.

#### SIXTH MONTH.

GENERAL INTRODUCTION AND THE REFORMATION. 1500 to 1648. Note the economic revolution caused by the fall of Constantinople, crusades, inventions, discoveries, etc.; the intellect-



ual and political revolutions; religious dissatisfaction; Wycliffe, Huss, Savonarola. Reformation. Avoid all personal feeling. Show that the church was a political institution, and as such subject to criticism and abuse of privileges. We cannot overestimate the value of the church during the middle ages; it was the center of learning, law and order, but times had changed and people cried out for more individual liberty. Trace the progress of the reformation or religious revolution in each country and compare the causes and results. Show how often conduct was based on political rather than religious motives. Study the rise of the Dutch republic. *Special topics*,—The leading men and women of the period.

READINGS. General histories and Lord's *Beacon Lights*, as above. Schwill's *Modern Europe*, Myer's *Mediaeval and Modern History*, Montgomery's *England and France*, Seebohm's *Protestant Reformation*, Creighton's *Age of Elizabeth*, Lodge's *Modern Europe*, Duruy's *Modern Europe*, Fisher's *Reformation*, Hausser's *Reformation*, Gardiner's *Thirty Years' War*, Kitchen's *France*, (3 vols.) Green's *History of England*, Lingard's *History of England*, Motley's *Rise of the Dutch Republic*, Shakespeare's *Henry VIII.*, George Eliot's *Romola*, Reade's *Cloister and the Hearth*, Scott's *Marmion*, *Lay of the Last Minstrel*, Scott's *Monastery*, *Kenilworth*.

#### SEVENTH MONTH.

POLITICAL REVOLUTION. *Peace of Westphalia*, 1648, to the *French Revolution*, 1789. Note the progress in culture and learning during this period, the effort to improve the condition of the common people, the large armies and the despotism of the rulers, the rivalry between the different nations. Under England study the Stuart's Cromwell and the Puritan revolution, revolution of 1688, constitutional monarchy under William III., wars in Europe and America. In France, Richelieu, Louis XIV., Louis XV. Russia, Peter the Great. Rise of Prussia and Frederick the Great. Sweden, Charles XII.

READINGS. As above. Carlyle's *Frederick the Great* and *Cromwell*, Voltaire's *Age of Louis XIV* and *Charles XII of Sweden*, Scott's *Fortunes of Nigel*, *Peveril of the Peak*, Thackeray's *Henry Esmond* and *The Virginians*.



## EIGHTH MONTH.

FROM THE FRENCH REVOLUTION, 1789, TO THE PRESENT.

Study carefully the causes, nature and results of the French revolution. Effect on other countries as seen in revolutions of 1830, 1848. Note how the desire of the people for constitutional freedom and national unity was finally accomplished in the establishment of a republic in France, in the unification of Germany and Italy, and in the political and industrial reforms in England. Take time to show the inter-dependence of all nations today, the general spirit of progress and responsibility as shown in the recent wars.

## NINTH MONTH.

SPECIAL TOPICS. Leading men; extension of suffrage; factory reforms; labor troubles; great inventions. World's history in current papers and magazines.

READINGS. As above.

GENERAL LESSONS. These lessons should include music or drawing. If pupils in this advanced course are deficient in writing, spelling, reading, or any other study in the lower course, they should be expected to make up such deficiency, but no pupil should be permitted to carry more than five full studies.

## SECOND YEAR.

RHETORIC. Completed in the fall term.

## FOURTH MONTH IN RHETORIC.

Imagery, basis of imagery, figures of speech, as simile, metaphor, personification, apostrophe, antithesis, metonymy, synecdoche, hyperbole, interrogation, exclamation, vision, elegance, beauty, sublimity and rhythm. Study of choice extracts and pieces.

## FIFTH MONTH IN RHETORIC.

Nature of debate. Careful study of some great speech, as Webster's Reply to Hayne. Practice in oral and written debate. Kinds of prose, name, purpose, characteristics, examples.



## SIXTH MONTH IN RHETORIC.

Study of poetry, its mission, style, form, including rhythm, meter and rhyme, kinds. Study carefully some classic poem with reference to these laws and principles.

---

AMERICAN CLASSICS. Begin the more systematic study of masterpieces in our literature as soon as the class has completed rhetoric.

## FOURTH MONTH.

Poems, such as Lowell's Vision of Sir Launfal, Whittier's Snowbound, Bryant's Sella. These are suggestive only. Study the author's life and surroundings.

## FIFTH MONTH.

Hawthorne's Great Stone Face, Webster's First Bunker Hill Oration, Emerson's Essay on Behavior.

## SIXTH MONTH.

Ramona, by Helen Hunt Jackson.

## SEVENTH MONTH.

Study the lives of American authors and report on leading magazine literature on current topics.

## EIGHTH MONTH.

The Merchant of Venice or Macbeth.

## NINTH MONTH.

Study lives of English authors and extracts from their works.

---

ALGEBRA. This study is to be pursued during the whole year.

## FIRST MONTH.

Symbols, signs and definitions. Coefficients and exponents. Addition and subtraction. Be sure that this elementary work is thoroughly done. Rapid work should be insisted on.



## SECOND MONTH.

Multiplication, signs, rule for signs, definition of terms. Drill pupils in multiplication until they can do rapid and accurate work. Division of monomials, signs, rules. Division of polynomials. Give much practice here. Equations, definitions, known quantities, unknown quantities, axioms, solution of equations, verifying equations.

## THIRD MONTH.

Factoring, binomials, product of the sum of two quantities, the difference of two quantities, the sum and difference of two quantities. Common divisors and highest common divisor. Multiples of two or more numbers, least common multiple.

## FOURTH MONTH.

Fractions, kinds, reduction of one form to others. Addition, subtraction, multiplication and division of fractions.

## FIFTH MONTH.

Equations, literal and numerical, simple and quadratic. Transformation of equations, transposition, clearing of fractions, solution of problems, original problems.

## SIXTH MONTH.

Elimination, by comparison, by substitution. Solution of problems. Powers and roots. Involution. Extraction of square root.

## SEVENTH MONTH.

Cube root. Formation of equations when the roots are given. Solution of problems with two or more unknown quantities.

## EIGHTH MONTH.

Radicals. Ratio and proportion. Give problems in other books than the one in use.



## NINTH MONTH.

Continue work on problems. Review.

---

BOTANY. Complete during fall term.

## FOURTH MONTH IN BOTANY.

Fruits, kinds, structure, uses. Seeds, parts, growth. Cells, cell walls and cellular tissue. Wood, structure, and uses.

## FIFTH MONTH IN BOTANY.

Vegetable biology, principles of growth and reproduction  
Review.

## SIXTH MONTH IN BOTANY.

The work in science for the rest of the year should consist of the study of physiology according to the divisions and suggestions given in the sixth and seventh years. If thought best, physical geography may be substituted for physics, botany or physiology in this course.

---

UNITED STATES HISTORY. The first six months of the year should be given to the study of United States history by the source and library methods. Full suggestions and arrangement of material have been given the seventh and eighth years. The work should be thorough and systematic.

---

CIVIL GOVERNMENT. On the completion of United States history, two or three months should be given to the study of civics. See outlines and suggestions for this study in the last part of the eighth year's work.



*GENERAL TOPICS.*

## I. SCHOOL LIBRARIES AND THEIR USE.

## I.—The school library law.

The Twenty-eighth General Assembly passed "an act to establish libraries for the use of teachers, pupils, and other residents in all school districts." This law is mandatory in school townships and rural independent districts. The treasurers of such townships and districts are required to "withhold annually from the money received from the apportionment—not less than 5 nor more than 15 cents for each person of school age residing in each school corporation, for the purchase of books. These books are to be selected by the president and secretary of the board, with the assistance of the county superintendent, from lists prepared by the state board of educational examiners. It is further provided that during the periods that the school is in session the library shall be placed in the school house. In school townships, these books will be collected and re-distributed semi-annually.

## II.—The place of the school library in the educational system.

It is not enough that good books should be selected and placed within reach of the pupils. These books should become a part of the life of the schoolroom. They should be used to stimulate and direct the intellectual and spiritual development of the children.

Mere passive handing of books to children by the teacher cheats the children of what has come to be their right and their necessity—the knowledge of the use of books. The teacher is also a loser by this passive process. She cuts herself off from the most certain avenues to the understanding of child nature, and at the same time deprives herself of the use of a vast amount of material with which she could weave together the various parts of the school curriculum and thus unify her school work. No one who aids in the training of citizens can afford to ignore any opportunity of increasing the ability of the citizen to help himself.



III.—The use of the school library as a subject for institute work.

Institute instructors should endeavor to help the teachers to a clear knowledge of what a well managed, though small, library may be to a school.

1. The importance of knowing all the books in the school library intimately.
2. Ways of using books of all sorts to bind the work together.

IV. The use of books.

1. To amuse.
2. To instruct.
3. To develop mind and character.

It is the teacher's province to know her books so well that she can bring out all their latent possibilities. Books that are intended merely to amuse are not so useful in the school as in the home, unless they are properly handled by the teacher.

V.—Fiction.

Almost any book of this class may be used as a basis for language work, reading or spelling. Many of them are invaluable in connection with history and geography, and general world knowledge. It is a poor story that cannot be used to instruct as well as to amuse, and a story that has no ethical value is to be avoided in school libraries.

Illustration:

*Toby Tyler, or Ten Weeks with a Circus*, by James Otis.

The boy reads this story to be entertained. Nothing should be allowed to interfere with his perfect enjoyment of it, but the teacher can make it serve to strengthen his school work without destroying his pleasure. Let the pupil be led to describe:

1. How circus people live.
2. How the animals are cared for.
3. Monkey character as exhibited by Mr. Stubbs.
4. Toby's character. Did it pay him to run away?
5. The good to be found in other people.



Now let the teacher lead the boy on from one monkey to many chattering in an Amazon forest, and set him to reading travel and natural history. When this is done, the boy has gained something more than mere entertainment from reading Toby Tyler.

*Matka and Kotik*, by David Starr Jordan, is a story of seal life in Behring sea. It is in the form of fiction, but it is the most reliable book concerning the seal that is available for popular use, because it is the statement of a man who is a recognized authority on the subject. The child may read it for the story, but the teacher should seize the opportunity to use it—

1. As a science lesson in the natural history of the seal.
2. As a geography lesson in our Arctic possessions and life in Arctic regions.
3. As a study in elementary international ethics.
4. To study the author and his right to speak as one who knows.
5. To lead the child on to such books as—  
Mrs. Peary's *My Arctic Journal*.  
Schwatka's *Children of the Cold*.

In the same way almost every work of fiction that will be selected by the state board of educational examiners as suitable for the schoolroom, can be utilized as supplementary to the ordinary class work. The teacher's object should be to show the pupil how to get at the real significance of what he reads.

#### VI.—History, travel, etc.

Books that are designed primarily to convey information may also be used to entertain. To the child truth is, indeed, stranger than fiction.

Illustration:

*Along the Florida Reef*, by C. F. Holder, is a description of the life of some boys at Fort Jefferson, on one of the Florida keys. They assisted the post surgeon in collecting specimens for the Smithsonian institute and other museums.

1. Environment as to geographical location, climate, etc.
2. Natural history of a coral reef.



3. Marine life in tropical waters.
4. Methods and purposes of scientific investigation.
5. Great museums, etc.

From this the pupil can go to Ingersoll's Book of the Ocean.

From life in the ocean to life on it is but a step. There is a world of fact and fancy to lead the pupil through. Commerce, history, poetry, biography cluster around this subject.

#### VII.—Poetry.

Poetry is chief among the forms of literature which develop the spiritual nature and bring inspiration. It develops the imagination—the soul's wings. The child will get more pleasure and understanding from it if he first hears it read well. Narrative poetry is the form best adapted for interesting children in poetry.

1. Read the poem to the children.
2. Get them to describe what they see with the mind's eye.
3. Help them to catch the feeling and spirit.

Illustration:

*The Wreck of the Hesperus.*

This poem is rich in pictures—the wintry sea, the cruel rocks, the skipper, the blue eyed daughter, the rings around the moon, the fog bells, etc.

If the teacher is familiar with the contents of her school library, however small it may be, she can bring up reinforcements in the way of pictures of rock bound coasts, fishing fleets rounding the headland of Cape Ann, or poetry or prose that bring out the cost of man's struggle with the sea. The Wreck of the Hesperus should not be left in isolation in the pupil's mind, but should be given its world significance.

#### VIII.—Drawing Books from the Library.

The pupils should have convenient access to the library for reference work and general reading. A special time should be set aside once or twice each week when books may be drawn out and taken home. No books should be kept out longer than two weeks without renewal and such books as are in much demand should not be kept out by any pupil



longer than one week. See that all books are returned at the close of each term, and always leave the library in good shape for your successor.

#### B. SCHOOL DISCIPLINE.

Attention is called to the following selections and suggestions, trusting that they may be helpful to the teacher.

School discipline is not a system of rewards and punishments; of making pupils speak or be silent; of compelling them to do this, or not to do that. It is the art of leading them to perform, in the most appropriate, easy, and useful way, all the duties of the school room.

Schools do not exist to be governed, but are governed that they may accomplish their purpose. The type of control is that of prevision against disorder, and keeping pupils out of mischief by giving them well adjusted employment. Some schools are over-governed and under-employed; some badly employed and apparently not governed at all.

Pupils should be led, not driven. The teacher should be controlled by the reason of the case and not by the caprice of the moment.

There should be constant distinction between accidental lapses from good conduct, and studied, habitual disobedience, idleness, and interference with right order. Children have a strong sense of unreasoned justice. If the facts are against one of their number they readily acquiesce, but ill-judged or unjust condemnation is resented and excites unfriendly feeling. If violations of good order occur, unless one is quite sure, it is better to wait for developments. Not the swiftness but the certainty of judgment is the power which restrains evil doers.

Wise control, with little punishment, is commendable. The good-natured indifference which lets everything slide along, must be censured. Success lies in following the golden mean that hurries into nothing, but yet allows nothing to pass unnoticed and unregulated.



The young are influenced by living examples much more than by precept and argument. They are inclined to imitate those they love, and under favorable conditions will grow to be like them. It is necessary, therefore, that teachers of youth should be models of good behavior; that they should themselves practice all those forms of expression implied in good manners and politeness, conscientiously avoiding all things that exhibit a want of good taste and of intelligent refinement.

The secret of Thomas Arnold's success in molding the character of his pupils is found in his deep love for them. He entered heartily into their amusements as well as into their mental occupations. He brought his own cultivated mind near to their minds, and awakened in them a love for the truth and good conduct; and the boys who graduated from his school went away into life bearing with them something of the spirit of their great teacher.

Below we call attention to a list of qualifications necessary to a good disciplinarian; also to a list of opposite qualities. It is well for the individual teacher to take his own measurement in the light of these two columns, and honestly determine in his own case what virtues need to be especially cultivated, what faults corrected.

#### TO BE CULTIVATED

Intelligence	Firmness
Politeness	Dignity
Candor	Self-control
Truthfulness	Tractability
Kindness	Honesty
Modesty	Cheerfulness
Energy	Enthusiasm
Promptness	

#### TO BE AVOIDED

Ignorance	Fickleness
Rudeness	Littleness
Hypocrisy	Passion
Deceit	Stubbornness



Cruelty  
Egotism  
Laziness  
Tardiness

Dishonesty  
Despondency  
Indifference

### 3. MORAL TRAINING.

Religion, morality, and knowledge being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged.—*Ordinance of 1787.*

The moral government of the school must be largely persuasive in its nature. When children can be moved to do right *because it is right*, and to avoid doing wrong *because it is wrong*, a foundation has been laid which will not fail them when in later years they build their character upon it. A reward for good conduct is a better means of moral training than a punishment for bad conduct. The best way to crowd bad thoughts out of a youthful mind is to fill it with good ones. Do not place temptations in the way of a child. Study his home life in connection with his conduct at school. Be courteous to every pupil, no matter how rude he is toward others.

#### VIRTUES

Truthfulness  
Diligence  
Politeness  
Regularity  
Obedience  
Purity  
Respect

Self-control  
Reverence  
Order  
Modesty  
Justice  
Patriotism

#### VICES

Falsehood  
Idleness  
Rudeness  
Irregularity  
Disobedience

Lawlessness  
Profanity  
Disorder  
Impudence  
Injustice



Obscenity  
Disrespect

Disloyalty

Correct a tendency to falsehood by placing right motives before the child; a tendency to idleness by giving him plenty of work and inspiring him with a wish to excel; a tendency to rudeness by example of gentleness; a tendency to irregularity by showing him the advantage of promptness, and by the public opinion of the school; a tendency to disobedience by kindness and firmness combined; a tendency to obscenity by watching his habits and by exalting in his presence everything that is pure; a tendency to disrespect by teaching him to honor his superiors; a tendency to lawlessness by teaching him due respect for the rights of others; a tendency to profanity by precept and example; a tendency to disorder by cultivating good taste, appealing to self-respect, and providing plenty of work; a tendency to impudence by showing proper regard for the presence and opinions of others; a tendency to injustice by inculcating a desire to render to others that which is due, to practice the golden rule; a tendency to disloyalty and anarchy by nourishing respect for all law, whether of home, school, state or nation.

Shield the virtuous from the influence of the vicious as far as possible. Have a care of the externals about the school; the fences and out-buildings should bear no mark which will bring a blush of shame to the face of any child. Vile suggestions are sometimes the beginnings of terrible evils. Courtesy and politeness may be encouraged, and in many ways, not connected with text-book instruction, pupils may be fitted for the active duties of life. Aim to produce from the pupils found in the school, progressive, capable, trustworthy, and virtuous men and women.

Some of the most efficient means of giving moral instruction are.—1. THE EXAMPLE OF THE TEACHER. All children are great imitators, and are very quick to take on the color of their surroundings.

2. THE DISCIPLINE OF THE SCHOOL. A well-ordered school is one of the most effective agents in the formation of the child's habits and character. Children are taught cooperation, helpfulness, justice, and are constantly trained in the social and industrial virtues.



3. BY PRECEPT. Teachers should give constant and positive instruction in morals and manners. This instruction may be given incidentally in all studies. The opening exercises should be of such a character as to influence the pupils for good.

4. BY CONSULTATION WITH PARENTS. The teacher should try to get into close touch with the people and the parents in the community where she teaches. There must be mutual understanding and sympathy between teachers and parents. The home and the school should work together in harmony for the welfare of the child.

5. BY PROPER USE OF THE LIBRARY. The teacher may do much good by reading the right class of books aloud to her school, and by guiding pupils in their selection and reading of books from the library. The reading of a good book has been the turning point in many a life.

4. THE SCHOOLROOM. An imminent writer on School Sanitation states that most of the petty schoolroom squabbles and misunderstanding between teacher and pupils have their origin in the impure air of the school room, caused by lack of ventilation. The necessity of good ventilation should be fully understood by the teacher. The same is true as to the lighting and seating of the schoolroom. The teacher should also use every effort to keep the schoolroom neat and clean. The walls should be swept free of dust, the window panes polished, the erasers well cleaned, the floors kept free from litter, and pupils should be required to keep their desks in order and their books clean. The child quickly puts himself in harmony with his surroundings. "There is scarcely a sounder principle in pedagogy than that care begets care; order encourages order; clean surroundings suggest cleanliness, and beauty invites beauty. If children are daily surrounded by those influences that elevate them, that make them clean and well-ordered, that make them love flowers, and pictures and proper decorations, they at last reach that degree of culture where nothing else will please them. When they grow up and have homes of their own, they will have them clean, neat, bright with pictures, and fringed with shade trees and flowers, for they have been brought up to be



happy in no other environment. The true test of our civilization and culture is the kind of home we are content to live in, and the influences of our schools should help to form a disposition for those things that make home life happy and healthy. If the farmer's boy can be taught to love books when he is at school, he will have a library in his home when he becomes a man; if the farmer's girl can be taught decoration at school, she will want pictures and flowers and beautiful things when she becomes a woman."



## RURAL SCHOOL IMPROVEMENTS.

EXCERPTS FROM REPORT OF COMMITTEE OF  
TWELVE.*Enrichment of Rural School Courses.*

We take it for granted that the work of every school, rural or otherwise, should embrace subjects drawn from its environment and from the life of its pupils. We assume that it should do this—

Because children should be taught to gather culture, knowledge, and inspiration from everything with which they come in contact.

Because children should acquire the habit of bringing to bear their knowledge and their mental powers upon every subject of thought that falls within their experience.

Because the study of the environment is especially effective in discipline and inspiration, since it is tangible, vivid, and impressive, and awakens strong and clear concepts, and produces deep and lasting educational effects.

Because mental acquisitions thus associated with the environment will be constantly revived by recurrent contact with it, and will thus be refreshed and kept alive and effective.

Because the basis for a successful study of the unseen and the intangible is best laid in clear and strong impressions of things seen and realized.

Because the school work is thereby made directly servicable to the work of life, the value of immediate and practical utility being added to superior disciplinary and inspirational values.



Because it puts life and soul into the work.

Because it serves as a bond of sympathy between the out-of-school life and the in-school life.

Because, in time (perhaps not at once, while inherited prejudices last,) it will become a bond of sympathy between the patrons of the school and the work of the school.

We assume that a rural school, to be true *rural* school, must take tone and color from rural surroundings, and must contribute directly to the enrichment and inspiration of rural life. We believe that this will aid in giving meaning and attractiveness to life in the country.

The following suggestions are offered in the hope that they may be helpful to teachers in making use of rural surroundings to enrich the work of country schools and to give vividness to the various formal studies. Our space being severely limited, it has seemed best to develop a few topics with some little fullness and let these suggest the treatment which others may receive. Those which we have been forced to neglect are quite as important and as rich in good material as the ones more favored. All are treated too scantily. What is really needed is a series of primers or a manual carefully worked out, embracing information as well as suggestions. But perfected tools come only with a perfected trade. The pioneer work must be done with poor implements. The progress of the work will bring better facilities.

We shall certainly be met with the criticism that the suggested work is impracticable, that the teachers cannot carry it out. This is far too true, but not wholly true. A success here and there will be a center of education, and from such beginnings, even though they may be small and scattered, the good work may grow. It must start somewhere and somehow, or must have many little starts in many places and in many forms. This little appendix does not hope to be anything but a passing contribution to an evolution that must be long and doubtless slow. The gravest difficulty lies in the defective education of our teachers. To remove this we would urge every normal school to give



elaborate courses in the lines here suggested, and to recognize in other ways that the rural school furnishes a distinct problem that must be solved in its own way. It may be that the establishment of rural normal schools is the mode of solution. We would urge agricultural colleges to give short courses on rural science for the special benefit of country teachers, and to educate the people, through their institutes and by other means, to appreciate and to require the adaptation of the rural schools to rural needs. We would urge upon the agricultural colleges the adaptation and publication of matter on rural science and rural economy suitable for educational uses.

We begin our suggestions with the surface features, partly because a study of them is a natural foundation for that of the remaining environment, and partly because it is directly tributary to one of the leading formal studies.

#### I. STUDIES UPON THE SURROUNDING LANDSCAPE.

These should be found helpful (1) as a foundation for geography; (2) as a basis for imagining the aspects of other regions which must be studied through maps, descriptions, etc; (3) as good material for oral and written descriptions, and hence as a basis for language work; (4) as a means for the culture of the sense of the beautiful, thus furnishing a rational basis for modeling, painting, and drawing; (5) as a mode of teaching the significance of things usually regarded as meaningless; (6) as an unconscious introduction to geological processes, and (7) as an aid to understanding many matters of agricultural interest.

1. *Surface Features, their Nature, Origin, and Meaning.*—Let there be a general study of the landscape of the neighborhood and a series of talks upon it for the purpose of gaining a true conception of what a landscape really is, and of laying the ground-work for comparisons with other parts of the fact of the earth. The children should gain a vivid and definite idea of the nature of their own landscape as a type; if it be plain, whether it be very plain or but partially so; if undulatory, whether it be gently or strongly undulatory; if hilly, whether gently or roughly hilly; if mountainous, whether of the rounded, the rugged, or the grand type.



From the general survey of the landscape, descend to its larger elements.

Note and plot\*the hills and valleys of the neighborhood, first taking up those near and then reaching out farther and farther, so that there shall be a gradual passage from those that are familiar to those that are only occasionally or distantly seen. From these it will be a relatively easy step to those which must be wholly imagined. Thus the child is lead out easily and naturally from his own environment to the general geography of the earth. In carrying this out, walks and occasionally more considerable excursions will introduce the idea of travel and of the methods by which geography is made, and, if verbal and written descriptions, sketches and maps are required, the children are started right in their geographical work by being made young geographers themselves in a limited sense. Seeing and learning thus just what geography is, experiencing for themselves just how geography is constructed, they can use their text-books intelligently and appreciatively.

From the general features descend to particulars. Note the way hills and valleys are related to each other. Are the valleys put in among the hills in any regular order or not?\*\* As early

---

\*It will be understood throughout that the work indicated should be done as largely as practicable and advisable by the children themselves, but the teacher will do well at times to lead them by example as well as instruction. The special mode of carrying out these suggestions must be left to the discretion and resources of the teacher. Our effort is only to point out certain main lines which, of course, need not be followed closely. The teacher will often find a different way preferable for himself, and will always find much to be filled in and perhaps more or less to be left out as not adapted to the particular school or to its surroundings.

\*\*In the region of the glacial drift there is often no regular relation between the hills and valleys, but in other regions the hills are generally (not always) simply that part of the surface that has not been carried away in the wearing out of the valleys, and this idea that the valleys are worn out by the wash of the land is the one to be implanted in the children's minds, as it is the germ idea of the formation of most rolling surfaces. In some plain regions the valleys have not been worn out enough to form hills, and we have only a plain with trenches cut into it. In such cases it will be very easy to show the children how the valleys have been formed by the streams and by the land wash. In the glacial regions the hills and valleys may be quite irregular, and it may not always be easy to explain them, unless the teacher is exceptionally well informed on the subject.



as it may seem prudent raise the question of the origin of the hills and valleys, but do not be too hasty about answering it. Let the children gradually work it out. Were the hills build up, or were the valleys cut out? Let them ponder upon this question and see if they do not find the answer to it in the hills and valleys themselves. In leading up to this question, direct the children's observation to what is actually taking place. Are the valleys built up, or are they being cut down? What is happening in the valleys? What is happening on the roadside? Suggest to them to observe the gullies and to contrast the new gullies with the old gullies. How do the new gullies pass into the old gullies? What is the difference in form between the new and the old? Which are most like the valleys? Lead them on thus to see how a trench may be gradually widened and rounded into a valley. Lead them to observe how tributary gullies arise along the sides of the principal ones, and how they grow by widening themselves and by eating back on either side. Lead them to see that, if such creeping backwards and such rounding of the slopes were extended long enough, they would result in little valleys separated by ridges. Lead them onto note how the tributary valleys by eating back may at length cut through the top of the ridge and divide it into hills, and by deepening, separate the hills more and more; and so on, step by step, until the children acquire a tangible conception of how valleys with intervening ridges, and, at length, intervening hills, are formed. From this miniature mode of forming a landscape it is in an easy step to the comprehension of the way in which the larger valleys and larger hills, that make up the landscape around them, were produced. When this conception is fully acquired, a firm basis has been reached for understanding the formation of landscapes generally. And not only this, but the landscape comes to have a meaning where before it was quite meaningless, and it is the significance of the things by which we are surrounded that gives soul to intellectual life.

### *References.*

- American Geographical Series.
- The Report of the Committee of Ten.



Davis on "Geography in the University," *Journal of Geology*.

*The Journal of School Geography*.

See also, list of books for rural schools and communities.

2. *The Study of Streams*.—Lead the children to observe just how streams flow, how the current plunges into one bank and then is turned about and plunges into the other bank; how it cuts back the bank where it strikes; how it digs down into the bottom in certain places; how it heaps up material in other places, etc. As they observe, lead them to reason upon what they see and apply it to the study of maps. They will readily come to understand how the bends are made longer and why a stream meanders. They will thus be led to see the meaning of the tortuous courses of streams. Induce the children also to note the work of temporary streams (*e. g.*, after showers) along the roadsides, in the valleys, and on the slopes of the fields. Have them notice the wash from the surface of the land, and thus lead on to the work of water transportation. Lead them to note that this matter lodges elsewhere, and thus approach to the work of deposit. By seeing when and how this wash lodges they will understand the modes of deposition; the formation of deltas, and the building of bars and spits in the streams, the formation of "bottoms," etc.

To approach the origin and maintenance of streams, direct the children to observe what takes place after a rain; if light or slow, that all water goes into the ground; if heavy and rapid, that some goes into the ground but much runs away. The latter makes surface streams, but they don't last. Follow the water that goes into the ground. Direct attention to underground water as shown by wells, and connect this with the rain that soaks into the ground. Have the children bring together the depths of the wells at their different homes. Raise the question whether the wells go down as low as the nearest streams. (It will be found almost invariably that the water in the wells is higher than in adjacent streams, except in occasional flood stages.) Then draw out the general principle that the underground water is higher than the streams, being only the rain



water on its slow way through the ground to the streams, and that it is this water which works out to the surface in the low valleys and keeps up the supply of the living streams. The dry valleys lie above this underground water, and hence they are not constantly filled. Water only runs in the after showers. The wet valleys lie below the surface of the underground water, and hence it seeps out or comes forth in springs. The children will easily understand how the seeping out makes bottom lands wet and marshy.\* The principles here brought out will be helpful later in setting questions of water supply, drainage, etc.

3. *The Study of Soils.*—Incite the children to carefully examine the soil to see how it is made up. Have them wash some of it so as to separate the fine material from the coarse. Direct attention to the natural assorting done by water in the gullies, on the slopes, and in the valleys, and how, on the other hand, fine mud is laid down in the “bottoms” and elsewhere, and thus lead them to see how soils become coarser or finer according to conditions. In most places it will be easy to find pieces or beds of rock partly decayed, and to show that this rotted rock is much the same as soil. From this they may be led on to understand that soil is usually but decayed rock. This will be easily accomplished in regions where the rock lies but little below the soil and the latter graduates down into decaying rock, showing the stages of the process. Induce them to note how the leaves, grass, etc., decay and turn black, and thus lead them on to see that the dark part of the soil comes chiefly from the decay of vegetation. Induce the children to observe the different qualities of soils in different situations; the soils in the valleys, on the slopes, and on the hilltops, and lead them to see how the wash of the surface affects the soil; also how the vegetation affects the soil; and how the soil affects the vegetation. Teach them to notice the difference between wet soils and dry soils; the swelling and softness when wet, the shrinking and hardness when dry; also the swelling when frozen and the softness on thawing; the effects of the ants, worms, and burrowing animals

---

\*Much marshy land is, however, due to the catching of the surface waters in basins that have no sufficient outlet.



in bringing bottom soil to the top, letting in air, etc.; likewise the effects of the roots of plants in opening up little tubules, which are often left open when the roots decay, and so lead on to the idea of porosity and of the penetration of the soil by the air. With the older students the fact that the air goes into the ground when the barometric pressure is great, and comes out when the barometric pressure is light, the "breathing of the soil," may be taught, and its importance urged. Teach the children to observe the difference in the dryness of cultivated and uncultivated soil, of hard soil and mellow soil; and so lead on to the utility of the culture in permitting air and moisture to go in, etc.

Starting again with decay of rocks, lead the children to see that some parts of the rocks do not decay readily, and hence bits are left, and that these are washed about and form grains of sand, of pebbles. Let them observe these and see that some are well rounded and some are angular, according to the amount of wear, and thus the origin and meaning of sand or pebbles will become evident. The rolling action of brooks and rivers and of lakes and seashores will be manifest. With a thermometer interesting experiments on the temperature of soils when wet and dry, when hard and when mellow, when stirred and unstirred, etc., can be made.

### *References.*

The Soil, by F. H. King. The Macmillan Co.

Rock-Weathering and Soils, by George Merrill. The Macmillan Co.

The Formation of Vegetable Mold, by Charles Darwin.

See also list of books for rural schools and communities.

## II. APPLICATIONS OF LANDSCAPE STUDIES.

The study of the features of the landscape may be followed by a study of their influence on human affairs, and on the distribution of plants and animals. The following are some of the lines along which this may be carried out:

1. *The Location of Homes.*—Relative merits of different situations, such as summits, slopes, valleys, etc., of different



exposures, as southerly, northerly, etc., of different relations to woods, openings, outlooks, etc., of relation to springs, streams, and other bodies of water; of access to highways or to the several parts of the farm, and the bearing of the surface features on such communications. Do the sites of the later dwellings differ from the earlier? Are there discernible reasons for change? What determined the selection of the material of the first generation of houses? Does the material change with successive generations, and, if so why?

2. *The Location of Roads.*—How far are they influenced by surface features? How far by other considerations? Distinguish wise and unwise locations. What is the effect of wash, drainage, etc? What changes of location or of method of maintenance may be recommended?

3. *The Location of Adjacent Towns and Villages.*—Study the reasons for their particular situations. What bearing had natural means of transportation, roadway crossings, rivers, fords or bridges, special agricultural or mineral resources, mill sites and like features upon their location? Do the dates of their founding, the rates of their growth and other features of their history show wisdom or unwisdom in their location? Note the bearings of their locations on the interests of the surrounding country.

4. *Development of the Region as Affected by its Environment.*—Study the nature of adjacent manufactories and the reason for their location. What class was first developed, what later, what changes have taken place? Has there been increase or decline, and what is its meaning? What is their importance and the value of their products? How do they affect the rural interests? What sources of power are used and what remain still unused. Note the favorable and unfavorable features in the physical conformation; the presence of mines, quarries, the facilities for transportation by roadways, streams, canals, railways, etc., and their bearing upon the development of the region.

5. *Social and Civil Life of the People as Affected by Surrounding Physical Features.*—Are the physical surroundings favorable to social gatherings and social life? Do the surface



features lead to sparseness of dwellings, roundabout the difficult roads, or the opposite? Do they make the earning of a living easy and give time for social intercourse, for education, etc? How do they affect the character of the people, etc?

6. *The Distribution of Vegetation as Influenced by Surface Features.*—Sketch the timbered, prairie, marsh, and "bottom" areas. Note the effects of slopes, drainage, soils, etc., upon these. How do the physical conditions affect the roots, stems, leaves, and general forms of plants? Note the adaptation of different areas to different crops; also the adaptation of the region to different kinds of industry, *e. g.*, grazing, grain raising, etc. Note the changes in vegetation and compare the original with the present vegetation. Discuss the removal of forests. Where was timber first removed, and what timber? Where is it now reserved and why? Note the earlier and the later uses of timber supply, and the variation of prices and uses of timber.

### III. THE STUDY OF ATMOSPHERIC PHENOMENA.

In a manner analogous to the foregoing all the features of the air and sky *within the observation of the children* may be treated with interest and profit; the air itself, the winds, the clouds, rain, snow, hail, thunder, lightning, heat, cold, dew, exaporation, etc. The keynote should be observation, followed by inquiry, reading, reasoning, forecast, etc. The systematic prediction of tomorrow's weather at the close of each day will greatly stimulate acute observation of delicate features of cloud, wind, etc., and will build up that judgment of weather which is so important to the farmer.

It is urged that teachers secure from the nearest weather bureau station copies of the daily weather maps, and copies of the monthly summaries of the weather and crop conditions of the United States. A careful study of these maps and summaries, *supplementing the pupil's own daily observations*, will form a good basis for other geographic study. The data furnished by the Weather Bureau are particularly valuable for several reasons: (1) They are collected by trained observers; (2) the stations are so distributed as to fairly represent the whole coun-



try; (3) observations are uniformly and regularly made every day at all stations; (4) the various meteorological conditions are automatically recorded by instruments of precision, insuring great accuracy of detail; (5) the various data are appropriately represented daily upon one map which, thus, day by day presents a clear picture of the climatic and crop conditions of the whole country.

By these means the pupils will be much interested in working out the relative amounts of rainfall, cloudiness, and sunshine; also the average and the extremes of temperature found in the areas and belts devoted to the great crops, as wheat, corn, oats, tobacco, cotton, and sugar cane. The relative amounts of rain, cloudiness, and sunshine for the seasons may be readily determined. The incidents of the season in the localities where the pupils live frequently afford excellent opportunity for forming a picture of other localities far removed from their own. Thus a study of the character of the rain and the clouds in winter gives a basis for picturing arctic regions, and the same study in summer an equally sound basis for picturing tropical regions. For example, in June, 1892, there was a fall of nearly eleven inches of rain at Chicago; with the summer temperature, an almost tropical verdure was the result. In September and October in Chicago, 1891, the rainfall was about two-thirds of an inch; this closely approximated the average precipitation in Arizona, and, when considered in connection with the unusually high temperature of the year, it became an easy matter for the pupils to picture desert conditions and modes of desert formation. By similar means the study is capable of almost indefinite expansion.

#### IV. THE STUDY OF PLANT LIFE.

In like manner, the plants of the region may be treated. The purpose here, as before, is not so much to learn *about* plants as to come into *actual intellectual contact* with them by observation, interest, sympathy, and appreciation. Not only should the plants be observed in all their parts and functions, but their history, mode of propagation, preferences for soil, topographic situations, exposures, etc., should be studied. The association of



plants with one another—"plant societies"—are especially interesting and profitable for study. The cultivated as well as the native plants should be included, and the reasons for cultivating some plants and neglecting or warring against others afford large possibilities of interest. As farming is essentially plant culture, the vital relations of such studies are evident, if carried out on the right lines. The old-fashioned botany, the grinding out of the Latin names by an "Analytical Key," is not at all the thing here urged, but direct inquiry into the nature, life, habits, functions, associations, and services of plants.

To give a more concrete idea of what we have in mind, the following is offered as an illustration. It is not set up as a model. There are many ways of reaching like results.

1. *Growth from the Seed.*—With several seeds (beans, for example) in the hands of each pupil, invite a careful inspection of their surfaces, as a first step. Write upon the board a list of things observed, *e. g.*, (1) stem scar (hilum), (2) small dot on one side of hilum where pollen tube entered to fertilize the seed (micropyle), (3) ridge on side of hilum opposite from micropyle (radicle), (4) one end of bean has different slope from the other (5) a light line or ridge extending longitudinally around the seed, etc. Request pupils to bring other varieties of beans, and see how many of the observed points are common to them all. As a training in the *exact* use of words in oral expression require the pupils to describe precisely what has been observed. As a training in written language require the pupils to write out what has been seen. This will react to *intensify* the seeing.

To introduce the quantitative element, let a pint cup, or a straight-sided bottle, or a glass be exactly half-filled with beans and mark the surface of the beans with a string or rubber band. Now fill the vessel with water and put in a warm place for twenty-four hours. Set some pupil to watch the first stages of change, and charge him to be able to state the next day just what they were. On the next day measure the amount of change in volume. What has caused this change? If the water put in was first accurately measured or weighed (and every country school should have means of measuring and weighing,) pour out what



remains and measure it. Compute the difference. Compare the loss of the water with the increase of the beans. What has become of the water? By what means have the beans grown? Here are the first steps of growth.

Distribute the swollen beans among the pupils, and let them again look for the points observed in the dry bean. Have any disappeared? Have others appeared? Have any changed in character? Let the skin be removed. What features previously noted are removed with it? Do you now see an explanation of any features noted on the outside? Carefully note the two seed leaves (cotyledons), the radicle, and the now very evident first two leaves. Study the pea, pumpkin seed, and corn in the same manner.

As a next step, fit two layers of thick cloth to the inside of a round pie tin. Wet these pieces of cloth and place between them some of the seeds which have been studied, and turn the two pie tins together to prevent evaporation (which introduced a slight error in the experiment above.) Place these in a warm place to germinate, noting the temperature. Encourage some pupils to repeat the experiment in a place where the temperature is between 32 degrees and 45 degrees recording the temperature from time to time. Urge another to try the experiment, using cloths wrung out very dry. Compare the results to find out the effects of heat and moisture. Try different seeds to see what differences of conditions they require. These are capital experiments which fix the foundation principles of moisture and temperature in plant growth.

When these tests have been sufficiently advanced, urge the boys and girls to request permission to test the germinatory power of the seeds which their parents expect to plant in the spring (This seed study is best done from February to April.) Place 100 seeds of a given kind under the conditions described, and note how many sprout in three, four, five, etc., days. All seeds should be tested before planting, and this is practical work which, if rightly done, will be appreciated by parents as being immediately useful as well as instructive and disciplinary.

2. *Growth from Buds.*—When vegetation begins to start in



the spring, make an excursion at noon or after school to gather specimens of large buds. Clip sprigs of the Balm of Gilead, cottonwood or hickory, set them in water and study in the same manner of the bean, and so reach the fundamental idea that the bud and the seed are in nature much the same. Pick off the scales one by one until the leaves are reached, inquiring what the scales are for; what the cotton; what the varnish. Count the number of true leaves, and then go a little later to the trees again and see how many leaves the shoots from similar buds then have. Are they the same in number as in the buds? Or have new ones formed? When were these buds formed? Why were they formed the year before? Let the children ponder over these questions.

Study the arrangement of buds and of leaves on the stems. Lead the children to discover the law that buds and leaves are placed as far apart on the stem as possible, and in a symmetrical order. Lead them to discover that this order places the leaves where there is the least shading, where the movements of the sap up and down feed all leaves and branches quite equally; so that the stem will be equally loaded on all sides. Let them learn to distinguish fruit buds from leaf buds. Have them explore the gardens and orchards to see if there is an abundance of fruit buds. Teach them to distinguish between live and dead buds, particularly in regard to fruit trees. All this should be done with a definite educational purpose, in which the utility of the knowledge has also a clear recognition.

### *References.*

- Principles of Plant Culture, Professor C. S. Goff. Published by the author, Madison, Wis.
- Flowers in Relation to Insects. The Macmillan Co.
- Gray's Botany.
- Bessey's Botany.
- See also list of books for rural schools and communities.

### V. THE STUDY OF ANIMAL LIFE.

Along essentially the same lines the animal life may be treated.



Here a new and important factor enters, conscious life, and this affords a most fruitful field for educating the sympathies and moral sentiments of the children. Nothing so contributes to a real and vital (not merely sentimental) sympathy with living things other than ourselves as a careful study of their lives and habits. The child comes to see the world as they see it, and to appreciate and sympathize with them in their efforts to work out the purposes of their lives. And even if these purposes strike across human interests, the sympathy will not be entirely absent, and cruelty will grow more and more rare as sympathetic education progresses. The education of the sympathies finds little space in the formal school program and hence the special value of utilizing the opportunity here afforded.

There are several other topics which may be treated in like manner, as mensuration in its application to land measurements, etc., various phases of economics as applied to rural affairs, the social and civic aspect of country life, etc.

We respectfully submit the foregoing suggestions fully conscious of their limitations, in the hope that some little helpfulness may be found in them."

T. C. CHAMBERLAIN,  
W. S. JACKMAN,  
F. H. KING,

*Committee.*

A course of study for country school children should be framed with direct reference to the actual conditions that prevail in country life, and, in large measure, determine it. Among the most important points to be kept in mind are the following:

### THE FARM AS THE CENTER OF INTEREST.

"Nowhere on earth has a child such advantages for elementary education as upon a good farm, where he is trained to love work and to put his brains into work. The best taught school in a densely populated city can never equal in educative value the life upon a good farm intelligently managed.

"The child on the farm is made responsible for something, for some work, for some care-taking, and out of this responsibil-



ity grow trustworthiness, habits of work, and a feeling of personal power in all the essential elements of character, with the exception of those much needed phases that spring from personal contact with society outside of home.

"The surroundings of the child upon the farm in contrast with the complexity of city surroundings are comparatively simple; the same forms, colors, sounds are repeated in endless succession, presenting innumerable variations and at the same time complete harmony and unity. The trees, the shrubs, the foliage, the flowers, the fields, the hills, valleys, plains and brooks create distinct, everlasting images in the child's mind; images, impressed, concentrated and expanded by countless sensations, by countless contrasts, that stream in through every avenue of the soul.

"Then, too, everything appeals to the child as useful or non-useful. Farm work means the necessity of life, the comforts of home, the possibilities of an education. The reaction of the child upon his environments is the main thing, however; his power to conquer nature with his own hands and mind, together with continual lessons which bring home to him the inevitable action of, and his dependance upon, the laws of nature, as they assist, or as they baffle, his efforts.

"The child enters school with senses keen, character in full tide of formation, and the impulse to act fully organized. He has, besides, acquired a comprehensive knowledge of his environment. The instinctive, spontaneous growth should go on and have full opportunities for complete development."

#### MANUAL TRAINING—ART.

"One central and invaluable thing gained on the farm is the necessity for and habit of work. All work on the farm should be honored in the schoolroom by expanding and concentrating it. The school should send back the children to the farm filled with the dignity of labor.

"The work of the farm, in a broad sense, is manual training, but most farm boys get a coarse way of doing manual training. They do not learn to use their hands expertly as they should.



On all farms there should be workshops for the mending of tools, construction of materials and apparatus for farm work, and in the country school there should also be a small manual training department in which pupils may be trained to use their hands skillfully in making things needed for the farm and the home."

### CONCLUSION.

"The tremendous advantage of a rational course of work in country schools is that it would make a strong, binding union of the home and the school, the farm methods and the school methods. It would bring the farm into the school, and project the school into the farm. It would give parent and teacher one motive, in the carrying out of which both could heartily join. The parent would appreciate and judge fairly the work of the school, the teacher would honor, dignify, and elevate the work of the farm. Farmer and housewife would be ready to discuss the methods of the farm and housekeeping in the school. Children, parents, and teachers could meet at stated periods and hold discussions in the direction of their highest interests.

*"The farmers would become deeply interested in having libraries in the schools, carefully selected. Long winter evenings could be spent around the fireside in mutual study; parents helping children, and the children, in turn, arousing and stimulating parents."*

"A large majority of boys and girls upon the farm entertain mistaken notions of life in cities, and early form a desire to enter into the seemingly greater advantages to be found in such centers. This leads to the congestion of cities, and disturbs the social balance. School education alone can cope with this disease of the body politic, and this by fostering an interest in farm life and farm work.

"Boys must be led to see something more in farm life than patient, continuous work of planting, sowing, care-taking, and reaping. Many a young man leaves the farm to become a mere counter-jumper in the city, who, if he had the right education, would make himself an influential and successful farmer.



"My plea, then, is that the country school should make farm labor and all labor honorable; should dignify it; should show that the environment of the country furnishes inexhaustible resources for intellectual life; should see to it that the æsthetic side of child nature be assiduously cultivated; that the child bring a loving heart to nature, have an appreciative eye for beautiful things; that he be led to see the possibilities in the landscape of the farm—the necessity of making excellent roads, well lined with shade trees; that the so-called practical things of life, hard and severe labor, should have their highest outcome in the cultivation of the love of the beautiful in life—that love which leads the soul to profound reverence for all things of earth, because they are loving gifts of an infinite God."







## SCHOOL LAW OUTLINE.

**EXPLANATORY**—To aid the student, we have included, in the following outline of school law, citations bearing on each topic. In a few cases reference is made to notes, but this has been done only where no section of the law bore directly upon the subject under discussion. When reference is made to any section it is expected the student will examine the notes to that section. No student should be satisfied with reading the law only. The notes answer many questions concerning the application of the law.

All references are to the 1902 edition of the school laws. Care should be taken to read the amendments enacted by the Thirtieth and Thirty-first General Assemblies in connection with this edition of this school law.

### I.—The School Corporation.

1. Its corporate rights and privileges.—2743.
2. Its organization for business.—2757.
3. Its electors and elections.—2746 to 2756.
4. Varieties of such corporations.—2744.
5. Territorial limits.—2790 to 2793, Chapt. 89, 27th G. A. (\*2793-a)
6. Meetings of the corporation.—2746, 2749, 2750.
7. Notice of Meetings.—2746, 2750, 2751, 2755, 2763.
8. Authority of said meetings.—2749, 2750, 2751.
9. Sub-districts and the authority of the same.—2751, 2752, 2753.
10. Support of the schools.—2838, 2749, 2750, 2806 to 2813.
11. School bonds.—2812, 2813.
12. Schoolhouse sites.—2773, 2814, 2817, Chapt. 88, 27th G. A. (\*2745-a, 2745-b)
13. Indebtedness, Limit of.—Sec. 3, Art. 11, Constitution of Iowa, Chapt. 41, 28th G. A. (\*1306-b) Chapt. 114 30th G. A.

### II.—The School Board.

1. Membership.—2752, 2754.
2. General authority.—2745.
3. Authority in session and otherwise. Notes 10 and 11, Sec. 2757.
4. Variety of directors as to different school districts.—2745 2751, 2752, 2754.

\*Supplement to the Code.



5. Qualifications of director.—2748, 2758, 1266.
6. Meetings of directors.—2757 as amended by section 3, Substitute for Senate file 27, 31st. G. A.
7. Officers of the board.—2757, 2754, Sec. 5, Chapt. 128, 29th G. A. (\*2823-e) and Senate File 40, 30th G. A.
8. Bonds of officers.—2760.
9. Duties of officers.—2761 to 2770.
10. School warrants.—2762.
11. Certifying tax.—2767.
12. Varieties of taxes.—2749, 2806, 2813.
13. Limit of taxation.—2749, 2806, 2813.
14. Rules and regulations of school.—2772, 2782.

### III.—The School Board.

15. Course of study.—2772, 2749.
16. Teaching physiology.—2775, 2737.
17. Vocal music.—Chapt. 109, 28th G. A. (\*2823-s, 2823-t)
18. Departments and kinds of schools.—2773, 2776, 2777.
19. Contracts,—how made?—2778.
20. Election of teachers.—2778.
21. Dismissal of teachers.—2782.
22. Trials.—2782, 2818 to 2821.
23. Paying claims.—2780.
24. Visiting schools.—2782.
25. Maintaining discipline of schools.—2772, 2782.
26. Text-books.—2783, 2824 to 2830 and 2834 to 2837.
27. Shade trees.—2787.
28. The Bible.—2805.
29. Securing school sites.—2814, 2815.
30. Erecting school buildings.—2779.
31. Vacancies.—1266, 2758, 2771..

### IV.—The School Teacher.

1. How given legal authority? Chapt. 115, 29th G. A.—(\*2634-d) 2629 to 2632, 2736, 2737; Senate file 30, 31st G. A.
2. Character of examination by law.—2629, 2736, 2737, Senate file 30, 31st G. A.
3. Value of a license to teacher.—2788.
4. Revocation of the same. 2737, Sec. 21, Senate file 30, 31st G. A.

\*Supplement to the Code.



5. Normal institute.—2738, Sec. 16 and 22 Senate file 30, 31st G. A.
6. What constitutes a teacher's contract?—2778.
7. Rules and regulations.—2772-2782.
8. Kindergarten teacher.—2777.
9. The teacher's rights.—Note 20 Sec. 2737, 2782, 2818.
10. Holidays and vacations.—Notes 37, 38, 39 Sec. 2773.
11. Certificates.—2629 to 2632 Senate file 30, 31st G. A. Chapt. 115, 29th G. A. (\*2634-b to 2634-e)
12. How withdraw properly and legally from a contract?
13. Diseases in the school.—Notes 40, 41 and 53 to 56, Sec. 2782.
14. Suspension of pupils from school.—2782.
15. Penalty for not having a teacher's certificate.—2788.
16. Reports and records.—2789.
17. Institutes and teachers' meetings.—2738.
18. Devotional exercises.—2805.
19. Appeals to higher authority.—2818 to 2821.
20. Course of study and physiology.—2772, 2775, 2737.
21. Good moral character of teachers—what is implied?—Notes 1 to 6, Sec. 2737.

#### VI.—The School Patrons.

1. Residence rights.—2773.
2. Elective franchise.—2747, 2749, 2750, 2751, 2753, 2754, 2755, 2812.
3. Annual school meeting.—2746, 2749, 2751.
4. Schoolhouses.—2779, 2749, 2750, 2812.
5. Changing text-books.—2749, 2824, 2829.
6. Course of study.—2772, 2749.
7. Selling property.—2749.
8. Wards.—2755.
9. Schoolhouse fund surplus.—2749.
10. Schoolhouse tax.—2749, 2750, 2796, 2806, 2811, 2813.
11. Special meetings of the people.—2750, 2753.
12. Conduct of a school election.—2746, 2751, 2755, 2756.
13. Registration of voters.—2755.
14. Appeals from action of board.—2818 to 2821.
15. Rights as to the course of study.—2749.



16. Children on the way to and from school, Notes 18 and 63, Sec. 2782.
17. Rights of patrons regarding suspension and expulsion of children.—Notes 53 to 78, Sec. 2782.
18. Non-resident children and their parents.—2803, 2804.
19. Religious instruction.—2805.
20. Condemnation of school sites.—2815.

#### VII.—The Pupil.

1. Legal age.—2773.
2. Rights of attending school.—2773, 2803, 2804
3. What has he a right to study?—2772, 2749.
4. Who says where he must begin each term?—2772.
5. When attend school in another district.—2803, 2804, 2774.
6. Physiology and hygiene.—2775.
7. Obey rules and regulations.—2782 and notes 18, 58 and 63.
8. Transportation of.—2774, 2806.
9. Indigent pupils and school books.—2783.
10. Reading Bible.—2805.
11. Free text-books.—2783, 2836, 2837
12. Purchase text-books.—2825, 2826, 2836, 2837.
13. Punishment for offenses.—2782.
14. Suspension, etc.—2782.
15. Tardiness.—Note 61, Sec. 2782.
16. Attendance bad.—Notes 16, 62, Sec. 2782.
17. When is corporal punishment not legal?—2782, notes 72, 75, 76, 77.
18. Over age, how attend school?—2804, note 3.
19. Rights on the streets and highways.
20. For what responsible to the teacher regarding matters outside of school hours?—2782, note 63.
21. Vocal music.—Chapt. 109, 28th G. A. (\*2823-s, 2823-t)

#### VIII.—The School Superintendent.

- I. Varieties of supervision allowed by law.
  - a. State.—2622.
  - b. County.—Senate file 30, 31st G. A. and Sec. 2740.
  - c. City.—2776.
  - d. School board.—2745, 2772, 2782.

\*Supplement to the Code.



2. Authority for city superintendent's selection.—2776.
3. Who can be a city superintendent?—2776.
4. Duties of city superintendent.—2776.
5. Province of said officer.—2776.
6. Power to dictate.—2776.
7. Power to govern.—2776.
8. General duties—how determined?—2772, 2776, 2782.
9. Why employed only in independent districts?
10. Visiting schools.—2776.
11. Holding teachers' meetings, etc.—2776.

#### IX.—The County Superintendent.

1. Other official positions.—Sec. 2. Senate file 30, 31st, G. A.
2. Qualifications.—Sec. 2 Senate file 30, 31st G. A.
3. Selection, how made?—1072, Sec. 2, Senate file 30, 31st G. A.
4. Under whom and to what extent?—2622, Sec. 2 Senate file 30, 31st. G. A.
5. Visitation of schools.—Sec. 2, Senate file 30, 31st G. A.
6. Examination.—Senate file 30, 31st G. A.
7. Revoking certificates.—Sec. 21, Senate file 30, 31st, G. A.
8. Normal institutes.—2738, Sec. 16 and 22, Senate file 30, 31st G. A.
9. Report to whom and about what?—2738, 2739, Sec. 13, 16, 21, 22, Senate file 30, 31st G. A.
10. Salary, Expenses.—2742, Sec. 2, Senate file 30, 31st G. A.
11. Schoolhouse plans.—2779.
12. School Sites-Acquisition.—2814, 2815.
13. Reversion of Site.—2816.
14. School trials.—2818-2821.
15. County board of education.—2826 to 2834.
16. Authority when visiting schools.—Sec. 2, Senate file 30, 31st G. A.
17. Educational meetings.—2742.
18. Responsibility for success of schools.
19. Limits of his services that are reasonable.
20. Magnitude of his work.



## 21. Qualifications essential.

## X.—General Matters.

1. State superintendent.—2621 to 2627.
2. State board of educational examiners.—2628 to 2634 Chapt. 110, 28th G. A. (\*2823-p, 2823-r) Chapt. 115, 29th G. A. (\*2634-b to 2634-e) and Senate file 30, 31st G. A.
3. The state schools and their educational province.—2635 to 2641; 2645 to 2673; 2675 to 2682; and p. p. 112-114 School Laws 1902.
4. Deficient sight and hearing, etc. of pupils, and right in such cases.—2695, 2715, 2724.
5. Women voting at school elections.—2747.
6. County high school.—2728 to 2733.
7. Library in schools.—Chapt. 110, 28th G. A. (\*2823-n to 2823-r), 2749, 2783.
8. Apparatus for schools.—2783.
9. Oath of school officers.—2758.
10. School month.—2778.
11. School taxes—limits.—2749, 2806, 2813.
12. School orders.—2762.
13. Consolidation.—Senate file 214, 31st G. A. Sec. 2793 as amended by section 10., substitute for Senate file 27, 31st G. A.
14. Compulsory attendance.—Chapt. 128, 29th G. A. (\*2823-a to 2823-i).
15. Inspection of Schools for Training of Teachers.—Chapt. 115, 29th G. A. (\*2634-b to 2634-e)
16. Objectionable advertisements.—Chapt. 137, 30th G. A.

---

\*Supplement to the Code.



# INDEX.

---

<b>Advanced Course of Study—</b> .....	186
<b>American Classics</b> .....	195
<b>Arithmetic —</b>	
Third year .....	54
Fourth year.....	72
Fifth year.....	87
Sixth year.....	103
Seventh year.....	117
Eighth year.....	136
Advanced course.....	187
<b>Algebra</b> .....	195
<b>Books and Materials—First year</b> .....	16
Second year.....	37
Third year.....	54
Fourth year.....	72
Fifth year.....	87
Sixth year.....	103
Seventh year.....	117
Eighth year.....	136
<b>Bookkeeping—</b> .....	187
<b>Botany—Advanced course</b> .....	189
<b>Civil Government—Eighth year</b> .....	136
Advanced course.....	197
<b>Course of Study</b> .....	16
Primary division.....	16
First year .....	16
Second year.....	37
Intermediate division.....	54
Third year.....	54
Fourth year.....	72
Fifth year.....	87
Sixth year.....	103
Advanced division.....	117
Seventh year.....	117
Eighth year .....	136
Advanced course.....	186
Diploma—Common school,....	152
<b>Discipline</b> .....	202



<b>Divisions—Primary</b> .....	16
First Intermediate.....	54
Second Intermediate.....	87
Advanced.....	117
High School.....	186
<b>Danger Points and Suggestions—</b>	
Primary grades.....	50
Third year.....	70
Fourth year.....	84
<b>Farm as Center of Interest</b> .....	222
<b>Geography—Fourth year</b> .....	72
Fifth year.....	87
Sixth year.....	103
Seventh year.....	117
Eighth year.....	136
<b>Grammar—</b>	
Seventh year.....	117
Eighth year.....	136
Advanced course.....	187
<b>General Lessons—Advanced course</b> .....	194
<b>General Topics</b> .....	198
<b>Handwork and Drawing—First year</b> .....	16
Second year.....	38
Third year.....	54
Fourth year.....	72
Fifth year.....	87
Seventh year.....	117
Eighth year.....	136
<b>Helpful Books for Teachers—First year</b> .....	36
Second year.....	53
Third year.....	71
Fourth year.....	86
Fifth year.....	102
Sixth year.....	116
Seventh year.....	135
Eighth year.....	155
<b>History—</b>	
United States—Seventh year.....	117
Eighth year.....	136
Advanced course.....	197
General History—Advanced course.....	190
<b>Introduction</b> .....	5
Aims.....	5
Classification of pupils.....	9
Sub-division and classes.....	9
Daily Program.....	11
Examination and Graduation.....	12
Higher course.....	5
Records.....	5
How to use this course of study.....	5, 12



School libraries.....	6
Supervision.....	6
<b>Language—First year</b> .....	16
Second year.....	31
Third year.....	54
Fourth year.....	72
Fifth year.....	87
Sixth year.....	103
<b>Literature—Fourth year</b> .....	72
Fifth year.....	87
Seventh year.....	117
Eighth year.....	136
<b>Manual Training</b> .....	223
<b>Moral Training</b> .....	204
<b>Music—First year</b> .....	16
Second year.....	38
Third year.....	54
Fourth year.....	72
Fifth year.....	87
Sixth year.....	103
Seventh year.....	117
<b>Nature Study and General Lessons—First year</b> .....	16
Second year.....	38
Third year.....	54-57-62-67
Fourth year.....	72
Fifth year.....	87
<b>Numbers—First year</b> .....	21
Second year.....	38
Third year.....	54
<b>Orthography—Seventh year</b> .....	117
Eighth year.....	136
<b>Outline of the Course</b> .....	8
<b>Outline for Each Month—First year</b> .....	20
Second year.....	37
Third year.....	55
Fourth year.....	73
Fifth year.....	88
Sixth year.....	104
Seventh year.....	118
Eighth year.....	137
<b>Outlines—Geography</b> .....	109, 122
Special subjects.....	156
Nature Study and Hygiene.....	156
Language and Handwork.....	163
Drawing.....	173
Music.....	179
<b>Physiology—Seventh year</b> .....	117
Eighth year.....	136
<b>Physics—Advanced course</b> .....	189
<b>Preface</b> .....	4
<b>Programs</b> .....	14, 15



STATE LIBRARY OF IOWA



3 1723 02092 4825