

to have a full knowledge of the possibilities of the district. School walks or rambles should be frequently arranged. A Nature-study survey of the easily accessible parts of the school environment should be made as a piece of team work by teacher and pupils in co-operation, and the Scheme of Work should be based on the knowledge thus gained. The Scheme should provide for progressive treatment of the subject as the pupils advance in their school life, and in the higher classes the pupils should gain some definite ideas of the principle of evolution.

Stories should be used freely in the lower classes to supplement information gained at first hand, but care should be taken that these stories represent the facts. While it is desirable to encourage the idea of kindness to animals, the dangers of over-sentimentality should be avoided.

The treatment of Elementary Science should proceed on much the same lines as prescribed for Nature-study, but the lessons will possibly be more systematically arranged with the twofold object, first of enabling the pupils to gather some simple but definite and accurate knowledge logically arranged of the basic scientific facts related particularly to Elementary Agriculture and Dairy Science, and second of training the pupils to trace the connection of cause and effect in the natural phenomena they are studying and to form habit of seeking for and applying basic scientific principles. This theme will be found elaborated more fully in the Appendix on the subject; for the present what is emphasized is the importance of training the pupil to adopt the right attitude of mind towards the study of science so that he may readily apply scientific methods to the solving of many of the problems that will confront him in after life.

The course of study has been arranged as for grouped classes, but the teacher is required to arrange a progressive course of instruction for each year of school life so that even where classes are grouped there will be no needless repetition from year to year.

PREPARATORY CLASSES.

1. AIMS.—The aims in this division should be—

- (a) To awaken and deepen the child's interest in nature, and to stimulate the curiosity which is characteristic of all children :
- (b) To develop and strengthen the child's powers of observing nature :
- (c) To encourage the child to express his thoughts freely about nature as manifested in his particular environment.

2. COURSE OF STUDY.—The material to be used by the teacher and the pupils should be such as is easily found in the school and home environment, and might include a selection from each of the following sections :—

(a) *Plants*.—Some of the more interesting plants (including shrubs and trees). Observation of leaves and seasonal changes in the colour of leaves, fall of leaf. Observation and comparison of common flowers, without the use of technical terms. The succession of life : seed, plant, flower, fruit. Common fruits and their structure. The growth and care of plants in the school and garden.

(b) *Animals*.—Household pets and animals interesting to children—cat, dog, horse, rabbit, frog, &c.—only where these can be studied at first hand. Studies of life-histories should not be formal, but the children should be led to acquire from personal observation a good deal of knowledge about life-changes. Birds and their ways : the children should learn to recognize the commonest birds in the locality ; the structure of old nests may be examined. The spider, earthworm, snail, and insects such as the house-fly, the bee, the butterfly, the moth—all provide a wealth of material.

(c) *Weather*.—A pictorial calendar of weather changes should be kept as a class record. From time to time there should be informal talks about the recorded changes in the weather.

STANDARDS I AND II.

1. AIMS.—The aims in this division should be similar to those set down in the preparatory classes, but the pupils should be trained to seek for explanations of natural phenomena, and even to try experiments that may lead them to acquire the knowledge they seek.

2. COURSE OF STUDY.—The course should include topics similar to those set down for the preparatory classes, but the treatment should be more systematic. Further, the pupils should be encouraged to bring specimens for general class discussion.

(a) *Plants*.—Seed-dispersal as observable in the locality. Germination. The study of a plant as a whole. The beginnings of plant-growth—*e.g.*, bean and wheat. Bark of trees. Seasonal changes. Study of roots, stems,