

Geography for First Grades.

GRADE I.

To the Teacher.—Have talks with the children on subjects within their comprehension, preparatory to regular work in geography, as form, size, position, etc., of common objects in or near the school-house. Train pupils to observe and describe the position of objects on the table or in the room, using terms, right, left, front, back, front-right-hand corner, back-left-hand corner, middle, centre.

Draw on the blackboard the outline of the school room, requiring the pupils to tell you where to place the representation of each object.

Teach the location and names of the streets near the school.

Require the pupils to tell through and across what streets they pass while coming to school.

Teach the direction in which the streets extend, that is, teach the cardinal and semi-cardinal points of the compass.

Show pictures, and relate real or imaginary journeys, using such words as forests, fields, hills, mountains, valleys, brooks, springs, rivers, trees, etc. Be sure that the children understand the words used.

Teach the names of the common fruits and grains, how they are planted, how they grow, how they are used or made into foods.

Teach in the same way the different kinds of native trees, and for what the wood is used.

Teach something about the character and uses of the common domestic animals.

Teach other similar topics. Let your work in this direction be limited only by the intellectual capacity of the children.

Give incidental lessons at appropriate times, as about rain on rainy days, about clouds on cloudy days, about the sun on sunny days, about snow on snowy days, etc.

Encourage the little ones to bring into the school-room pretty leaves, pebbles, etc., and use them, when possible, in oral language, drawing, reading and number lessons. Provide for the children's use a large sand-table upon which to play. Let sand and clay modeling form a large part of the busy work for the first year.

Topics in Geography, by D. C. Heath & Co.

Without a central hall large enough to contain the whole of the scholars, the corporate life of a school cannot be properly sustained, and many opportunities are lost of making the scholars conscious of their relations to each other and to the general repute and success of the school.—*J. G. Fitch.*

Use of Pictures in Teaching Primary Reading.

The pictures of the first book put into a child's hands are of great importance, both in the way of making the pages attractive, and of affording substantial aid in their direct application to the lessons.—*Franklin First Reader.*

In teaching the first lessons, constant reference should be made to the pictures. The principle of association comes powerfully into play here. The picture suggests the whole story, and the parts of the picture suggest the words used in telling the story.—*Students' First Reader.*

Begin the lesson, therefore, by calling the attention of the pupils to the picture. Let them tell what they see in it. Ask one of them to name an object in the picture, and show them on the chart, and also on the blackboard, the name by which the object is known. Let the children learn this word so thoroughly as to be able to find it wherever it occurs and to pronounce it properly. Teach words that cannot be represented by pictures along with those that can.—*Butler's Chart Primer.*

QUESTION DEPARTMENT.

S. B. A. (1.) A level reach in a canal, 14 miles 6 furlongs long, and 48 ft. broad, is kept up by a lock 80 ft. long, 12 ft. broad and having a fall of 8 ft. 6 in.; how many barges might pass through the lock before the water in the upper canal was lowered one inch?

The question is how often will the lock be filled by a level reach of water 14 $\frac{1}{2}$ mi. \times 48 ft. \times 1 in.

Find the cubic feet of each and divide.

$$\frac{\text{The level reach, } (14\frac{1}{2} \times 5280 \times 48 \times \frac{1}{12})}{\text{The lock, } (80 \times 12 \times 8\frac{1}{2})} = 38$$

If the lock can be filled 38 times, then that supply of water will enable 38 barges to pass.

(2) Could you give me the name, and where sold, of a good practical Mental Arithmetic suitable for pupils from the V Grade to the VIII inclusive?

Ans. Teachers not sufficiently posted will find McLellan's Mental Arithmetic, Parts I and II the best. But of course a good teacher will only use such books to obtain hints as to the best methods.

G. D.—An endless screw which is turned by a wheel 10 ft. in circumference, acts upon a wheel having 81 teeth; this wheel has an axle 18 in. in circumference; the power is 75 lbs; what weight can be supported from the axle?

For one turn of the axle the wheel has to take 81 turns; that is, a point on the wheel moves through a space represented by $10 \times 12 \times 81 = 9720$ in. while a point on the axle moves only 18 in.; hence the power is increased $9720 \div 18 = 540$ times.

$$75 \text{ lbs.} \times 540 = 40500 \text{ lbs.} \quad \text{Ans.}$$

I find the REVIEW an excellent help, being full of live thought and many good hints. O. E. C.

Kings County, N. B.