

\$240 for  $2\frac{1}{2}$  yards at 5 %; or what is the worth of a stick of timber 15 feet long,  $2\frac{1}{2}$  feet wide and 10 inches thick at \$1.60 per 100 feet; or, a pile of wood 28 feet long, 4 feet wide and 6 feet high is worth how much at \$4 a cord, the mentally trained boy will have the correct solution in a few seconds, while the other one will wear a puzzled look and be wishing for his slate to set the question down.

3. Exercises in mental arithmetic should be given in all the grades as complementary to the written work. In the primary grades when a child has learned a number and the operations that can be performed on it by separations and combinations of its parts, through the medium of objects, simple practical questions involving other objects than those through which the number was learned, and similar operations, will help to fix the number and operations in his mind and at the same time lead him to do some independent thinking for himself. By the time he has mastered the multiplication and addition tables and the four fundamental operations, he should be able to do mentally simple questions in addition, subtraction, multiplication and division quickly and correctly. Besides the power of abstract thinking which is developed, the pupil will be able to perform his slate exercises more readily than he otherwise would. He should also be able to apply his knowledge in working out practical problems. In the intermediate and advanced grades when a new rule is to be learned, by the use of oral questions the pupil is led to formulate the rule for himself. When the principle is mastered he can apply it mentally to more difficult problems than those used while developing it.

4. The subject under consideration should be taught regularly and systematically the same as any other subject on the course of instruction and to this end should have a definite place on the time-table. Classes may often be profitably grouped for exercises in mental arithmetic. Each class or group of classes should have a few minutes of purely mental work each day, and we will find that our pupils will thereby become brighter and more intelligent and they will carry their habits of accurate thinking thus gained into their other work.

"We commit our educational machinery to the unfit and inexperienced. We need able men and women of mature ability, but we do not pay the price that attracts such service."—*Prof. John Davidson.*

This is an excellent method to use with young children: After the reading lesson, write on the board a series of questions about the lessons, the answers to which will form a connected story. Let the children write the answers and supply a title themselves.

## PRIMARY GRADES.

### Talks About Gardens and Seeds.

Arbor Day, with its thought of trees and shrubs, has passed, leaving beauty behind it in various places; but there are yet in our country many barren school-yards—yards they are, verily, and deserving of no better name,—where no attempt has been made to develop good taste and a love of nature in the minds of the children by beautifying the grounds. Teachers are busy; work is pressing; parents are indifferent; so it goes on, year after year, the rough element leaving its impress silently but surely on the personality of the scholars. For we are influenced in childhood by our surroundings even more than in later years. "I am a part of all that I have met," is a truth of our whole life from the earliest influence of environment.

Therefore a strong plea should be made for beauty in our schoolrooms, and on the grounds, by teachers and others who feel its importance. It is surprising that parents take so little interest in the matter, even those from refined and beautiful homes seldom entering the school or enquiring about its needs. If they came oftener to visit, they could easily be awakened up to help. But taking the case as it stands, the teacher must at least begin the good work, if anything is to be done. And it is a work that pays, not only in its outward effects, but in its influence on the workers.

Attempt small beginnings. Just a little flower-bed with a few pansy seeds, if nothing more. Make a border along the fence, where it will not interfere with free play, and where those children—and they are not few—who have no gardens of their very own at home may sow a few seeds and enjoy watching the development of plant life. It is not wise to try to have much variety; sweet peas, nasturtiums, pansies and asters are perhaps the best to start with, as they give much satisfaction for very little labor.

In the heart of a seed  
Buried deep, so deep,  
A dear little plant  
Lay fast asleep.  
"Wake," said the sunshine,  
"And creep to the light;"  
"Wake," said the voice  
Of the raindrops bright.  
The little plant heard,  
And it rose to see  
What the wonderful  
Outside world might be.

—Selected.

### Seeds.

How many different kinds of seeds have the children seen? Let individuals name the ones they know, including all sorts, those of vegetables, flowers, weeds, or trees. Have a variety of seeds at hand to be named