

spelling. Indeed, the spelling may be judged rather from the composition and other written work than from special tests. The learning by heart of lists of spellings and meanings cannot be considered as serving any useful purpose, but children may be encouraged to bring to school lists of words and phrases that they have been unable to understand in the books read at home.

Practice in spelling, it may be added, should be given by written work alone and not by oral work.

Any spelling shall be allowed that is recognized by the Oxford English Dictionary, and, *ceteris paribus*, it is recommended generally that where this authority gives a choice the more phonetic form should be preferred; e.g., recognize, rime, gram, kilogram, program, honor, labor, plow, jail, and not recognise, rhyme, gramme, kilogramme, programme, honour, labour, plough, gaol.

WRITING.

Writing should be taught by means of blackboard examples, copybooks, and by transcription. The blackboard should be freely used in class teaching, not only for setting copies, but for exemplifying and correcting mistakes. It follows that blackboard copies should be written with the greatest care. Teachers should pay attention to the correct position of the body, the proper holding of the pen or pencil, and to the exact imitation of the copies by the pupils. Black-lead pencils should at first be used in place of pens, giving place to the latter in the lower standard classes.

Good writing will, however, not be secured merely by formal copybook instruction. Children become good writers only by writing carefully at all times, and every lesson in which the child uses the pen or pencil should contribute to form good handwriting. The copybook will therefore not be regarded as affording the only, or even the best, test of handwriting. The judgment of the writing in a school will be based largely on the dictation and composition exercises, and not on the copybook work alone.

ARITHMETIC.

Ability to apply number to everyday problems is requisite for efficiency in any position of life. It is very important, therefore, that the teaching of arithmetic should be planned to strengthen this ability, and should be associated with matters familiar to the children. To a large extent the teaching should be concerned with elementary notions of form, size, and weight rather than with abstract number; in other words, it is concrete and applied arithmetic which has to be taught. If the practical and utilitarian aspects of arithmetic are constantly kept in view, it will be a much more effective instrument for developing and disciplining the intelligence of the pupils than if it is taught merely in an abstract manner. In the teaching every "rule" should in the first instance be presented in a concrete form; practical exercises in counting, measuring, and weighing should be performed by the children themselves, and the heuristic method or the method of discovery should be largely used. Cardboard coins may be freely used when money sums are first introduced. In the highest classes the practical work should be associated with mensuration, with drawing to scale, and, as far as possible, with handwork; at the same time, where appropriate, the use of graphs and graphical methods should be encouraged.

Although the pupils should know before they leave school that 1 rood = $\frac{1}{4}$ acre, and 1 square pole = $\frac{1}{16}$ rood (as these measures are used in describing the area of land), yet the reduction of square yards to poles, or *vice versa*, need not be taught—the time can be much more usefully employed. The meaning of decimal fractions should be introduced gradually—at first, 0.1, 0.2, 0.3, &c., of a pound sterling, of a meter, of a ton, of a mile, &c., may be known respectively as 1 florin, 2 florins, 3 florins, &c.; as 1 decimeter, 2 decimeters, 3 decimeters, &c.; as 2 cwt., 4 cwt., 6 cwt., &c.; as 8 chains, 16 chains, 34 chains, &c.: then 0.01, 0.02, . . . 0.99 may easily be taught by division of the meter into centimeters, and in like manner suitable concrete examples may be taken for 0.001, &c. The reduction at sight of decimals of a pound to shillings and pence, and *vice versa*, will enable the pupils to appreciate rapidly the meaning of decimals; and one of the chief uses of the metric units will be to afford easy concrete examples of decimal fractions.

The following figures will give sufficiently near approximations for the equivalents in English measures of the metric standards: 1 kilometer = 1,100 yd., 1 meter = 40 in., 1 decimeter = 4 in., 1 centimeter = $\frac{2}{5}$ in. or 0.4 in.; 1 kilogram (kilo) = 2.2 lb., 1 gram = 0.035 oz., or 1 ounce = 28 grams; 1 liter = $1\frac{3}{4}$ pints. In S6 algebraic and graphic methods may be used where the solution is thereby made shorter or easier. (By the suggestion that algebraic methods may be used it is not intended that a course in algebra should be attempted, but that the use of algebraic symbols—e.g.,