

to money sums; multipliers and divisors in money sums not to exceed 99; multipliers if over 12 to be reducible to factors not over 12.

S4: The simple and compound rules applied to easy concrete examples relating to money and to the following weights and measures: Avoirdupois weight, long measure (excluding poles or perches), square measure (excluding square poles or perches), capacity (pint, quart, gallon, bushel, quarter), time. The methods of practice may be used as a quick substitute for multiplication, but complicated examples thereon should not be set. Mensuration—to find the area of a square and of a rectangle from given dimensions expressed in one denomination only (as in inches, or feet, or yards, but not in feet and inches, &c.). The meaning of proper fractions, with denominator not greater than 20, and of 0.1, 0.2, 0.3, and so on up to 0.9, to be known and applied to oral concrete examples in a simple manner. Easy tradesmen's bills. Mental arithmetic and problems adapted to this stage of progress. Pupils should be able to make an oral statement of processes employed in mental and written arithmetic.

*Senior Division.*—S5: Very simple cases of vulgar fractions (excluding complex fractions). The meaning of 0.01, 0.02, &c., of 0.11, 0.12 . . . . 0.99 to be known and applied to oral concrete examples in a simple manner. Mensuration of walls and floors and other simple rectangular areas, as far as possible from actual measurements, but intricate or unpractical problems on papering and carpeting are to be excluded. The rood, the square, and the square pole to be known as fractional parts of the acre. The relative values of the cubic foot and cubic inch, and of the cubic yard and cubic foot, to be demonstrated by models. The solving of easy practical problems by the unitary rule, by practice, and by other methods based on first principles. Bills of accounts, and discount thereon. Mental arithmetic is to be made an important part of the class-work.

S6: Vulgar and decimal fractions (excluding complicated expressions and sums in recurring decimals); percentages applied to simple examples, including easy direct cases of interest, profit and loss, commission and tradesmen's discount (banker's discount, true discount, and inverse questions in percentages are excluded). Very simple accounts, square root; easy mensuration of plane surfaces, and of solids bounded by planes, and of the cylinder. Suitable mental arithmetic; shorter methods of working sums than those used in lower classes.

For further details and suggestions see Appendix J.

#### MAN AND NATURE.

21. The course of instruction shall in general be as follows, but any similar programme of work for all divisions may be approved by the Inspector:—

#### K. NATURE-STUDY.

*Junior Division.*—The observation talks of the Preparatory Division should now be extended by covering more fully some of the same topics as were dealt with in the lower division, and, although formalism should be avoided, the instruction should become more systematic. The lessons might include the more definite study of certain birds, animals, insects, and plants, together with the discussion of observed seasonal changes and of such phenomena as rain, frost, wind, clouds, and their relation to plant, animal, and human life. Incidentally, reference may be made to conditions in other countries so as to familiarize children with the wider world around them. Topics previously dealt with in the lower classes should be again dealt with on what is known as the "spiral" principle, so as to carry investigations to the more complete stage warranted by the increased experience of the children. Topics such as wheat, wool, the sky, the air, land-surface, water-plants, and the habitation of animals could be extended to form part of the instruction in geography. Simple discussions on the relation to human life, the home, pleasures, festivals, &c., of the phenomena, occurrences, and changes characteristic of the four seasons would serve to humanize nature-study.

*Middle Division.*—A more complete study of the life-history of particular birds, plants, insects, and animals, of their distribution, habitat, and means of protection. Pupils should begin to look for reasons and explanations of observed phenomena, and to suggest and carry out simple investigations, tests, and experiments. Nature-study should be connected with geography so as to show the relation of the above forms of life, and of phenomena connected with the weather, climate, and the seasons, to human life and human interests.

*Senior Division.*—Although a suitable extension of the kind of work prescribed for the Middle Division should be provided for in the Senior