

SCHOOL ARITHMETIC

Intermediate Course

INTRODUCTION

1. A *quantity* is anything that can be counted or measured, increased or decreased.

EXAMPLES.—The number of pupils in a class, the height of a steeple, the surface of a field, the volume of a load of brick, the weight of a bag of flour.

2. A *unit* is a single thing or a certain quantity used to measure other quantities of the same kind.

EXAMPLES.—When I count the trees of an orchard, the unit is *one tree*; when I measure cloth, the unit may be *one yard*; when I find the capacity of a barrel, the unit may be *one gallon*, etc.

3. A *number* expresses how many *units* there are in a *quantity*.

EXAMPLE.—Let us measure the length of a fence with a yardstick, and suppose we lay down our stick ninety-nine times, ninety-nine is the *number*, the yardstick is the *unit*, and the length of the fence is the *quantity*.

4. There are three classes of numbers: an integer, a fraction, and a mixed number.

5. An *integer* is a number that contains one or several whole units.

EXAMPLE.—The length of the fence measures ninety-nine yards exactly. *Ninety-nine* is an integer.