

## CHAPTER I.

### PERCENTAGE AND ITS APPLICATIONS.

#### Section I.—Introductory.

##### EXAMPLES.—1.

1. A boy spends 1 cent of every 5 cents he has : how many does he spend of 20 cents ?

*Sol.*—He spends 1 of every 5 ; there are 4 times 5 in 20  $\therefore$  he spends 4 times 1, or 4 ( $=20 \times 1 \div 5$ , or  $=20 \times \frac{1}{5}$ ).

2. A boy spends 2 cents of every 6 he has : how many does he spend of 30 ?

*Sol.*—He spends 2 out of every 6 ; there are 5 sixes in 30  $\therefore$  he spends 5 times 2 or 10 ( $30 \times 2 \div 6 = 30 \times \frac{2}{6}$ ).

3. If he spends 4 out of every 10, how many does he spend of 60 ?

*Sol.*—He spends 4 of every 10 ; there are 6 tens in 60  $\therefore$  he spends 6 times 4, or 24 ( $=60 \times 4 \div 10 = \text{also } 60 \times \frac{4}{10} = 60 \times .4$ ).

4. A boy gave away 6 marbles of every 20 he had : how many did he give away of 40 ? of 60 ? of 100 ?

5. A man expended in groceries \$6 of every \$10 he had : how much did he spend of \$45 ?

*Sol.*—He spent \$6 of every \$10 ; there are  $4\frac{1}{2}$  tens in 45  $\therefore$  he spent  $4\frac{1}{2}$  times \$6 = \$27 ( $=45 \times 6 \div 10$ , also  $=45 \times \frac{6}{10}$ ).