

## Chapter- 10

## Factors and multiples

## WORKSHEET

## A. FILL IN THE BLANKS.

1. one is a factor of everyone.
2. two is the first even prime number.
3. The smallest multiple of a number is the Number itself
4. Zero (0) is a multiple of every number.
5. Prime numbers are having two numbers of factors.

## B. CHOOSE THE CORRECT ANSWER.

6. Every number is a multiple of 1.  
 a. 0      b.  1      c. 33      d. None
7. Composite numbers are the numbers having more than two factors i.e other than 1 and the number itself.  
 a. 0      b.  1      c. 33      d. None
8. Every Prime number can be expressed as a product of all its prime factors.  
 a. Prime      b. Composite      c. HCF      d. None
9. Composite numbers are having more than two factors.  
 a. 2      b. 1      c. 3      d. None

10. When a particular number is a multiple of 2 or more numbers, it is called a

Common multiple.

a. LCM

b. HCF

Common multiple

d. None

C. ANSWER THE FOLLOWING QUESTIONS.

11. Write the first five multiples of 18.

$$18 = 18, 36, 54, 72, 90, 108$$

12. Find the HCF of 40, 50 and 60 by prime factorization method.

$$\begin{array}{r} 2 \overline{) 40} \\ \underline{20} \\ 20 \\ 2 \overline{) 20} \\ \underline{10} \\ 10 \\ 2 \overline{) 10} \\ \underline{5} \\ 5 \end{array}$$

$$\begin{array}{r} 2 \overline{) 50} \\ \underline{25} \\ 25 \\ 2 \overline{) 25} \\ \underline{5} \\ 5 \end{array}$$

$$\begin{array}{r} 2 \overline{) 60} \\ \underline{30} \\ 30 \\ 2 \overline{) 30} \\ \underline{15} \\ 15 \\ 2 \overline{) 15} \\ \underline{3} \\ 3 \end{array}$$

$$40 = 2 \times 2 \times 2 \times 5$$

$$50 = 2 \times 5 \times 5$$

$$60 = 2 \times 2 \times 3 \times 5$$

$$\text{HCF} = 2 \times 5 = 10$$

13. Find the LCM of 36 and 52 by listing method.

$$36 = 36, 72, 108, 144, 180, 216, 252, 288, 324, 360$$

$$52 = 52, 104, 156, 208, 260, 312, 364, 416, 468, 520, 572, 624$$

14. Find the LCM of 15 and 90 by common division method.

$$\begin{array}{r} 5 \overline{) 15, 90} \\ \underline{3, 18} \\ 3 \overline{) 3, 18} \\ \underline{1, 6} \\ 3 \overline{) 1, 6} \\ \underline{1, 2} \\ 1, 2 \end{array}$$

$$\text{LCM} = 5 \times 3 \times 3 \times 1 \times 2 = 90$$