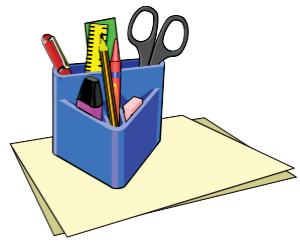
Activity 10



Objective

To do multiplication of numbers using concrete objects

Material Required

Broomsticks, paper, pencil/pen, cardboard, glue

Demonstration

1. Take a cardboard of a convenient size and paste a white paper on it.
2. To perform multiplication of a number 5 with a number, take 5 broomsticks and paste them on the cardboard. (Fig.1)

Fig. 1

3. To multiply a number 5 and 1, put one stick horizontally on the 5 vertical sticks on the cardboard as shown in Fig. 2.

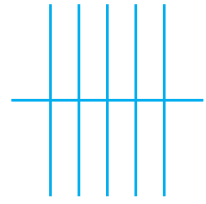


Fig.2

4. Count the number of points of intersection as shown in Fig. 3 which is 5.

   5 × 1 = 5

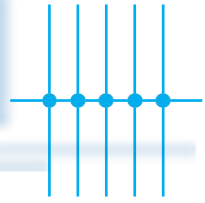


Fig.3

5. Now, place 2 sticks horizontally on the 5 vertical sticks as in Fig. 4. Count the points

of intersection. Number of points of intersection is 10.

Thus, 5 × 2 = 10

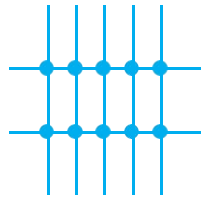


Fig. 4

6. Similarly, place 3 sticks horizontally on the 5 vertical sticks and count the points of intersection, which is 15.

So, 5 × 3 = 15

In this way, find the product of 5 with any number.

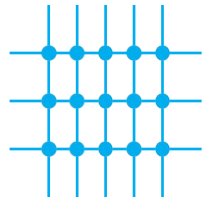


Fig. 5

OBSERVATION

1. Number of vertical sticks = _____.

   Number of horizontal sticks = 1.

   Number of points of intersection = _____ = _____ × 1.

2. The number of horizontal sticks = 2

   Number of points of intersection = _____ = _____ × 2.

3. Number of horizontal sticks = 3

   Number of points of intersection = _____ × _____.

   5 × 1 = _____, 5 × 2 = _____, 5 × 3 = _____,

   5 × 4 = _____, 5 × 5 = _____, 5 × 6 = _____,

   5 × 7 = _____, 5 × 8 = _____, 5 × 9 = _____,

   5 × 1 =

APPLICATION

This activity can be used in finding product of any two numbers.