

## **ACTIVITY -10**

### **TOPIC: COMPARING QUANTITIES**

### **TITLE: REPRESENT A PER CENT**

1. **What we have to do?**

To depict a per cent on a  $10 \times 10$  grid.

2. **What is required?**

Squared papers or graph sheets, a pair of scissors and geometry box.

3. **How much time is required?**

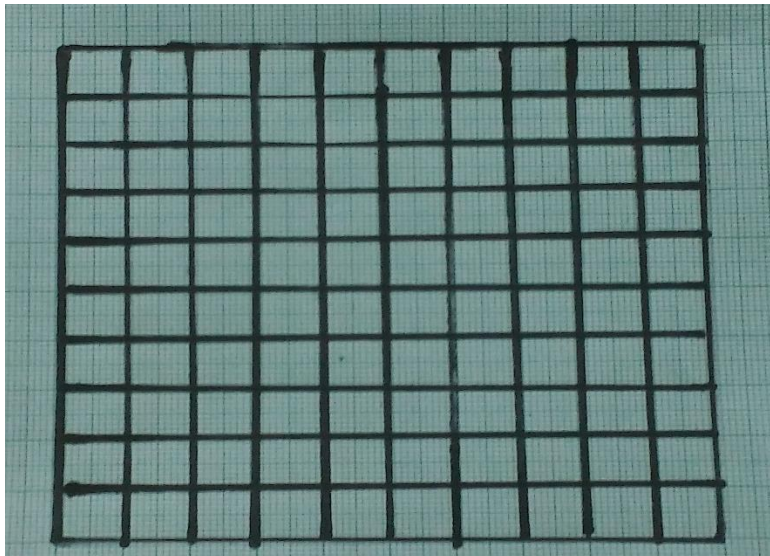
30 minutes

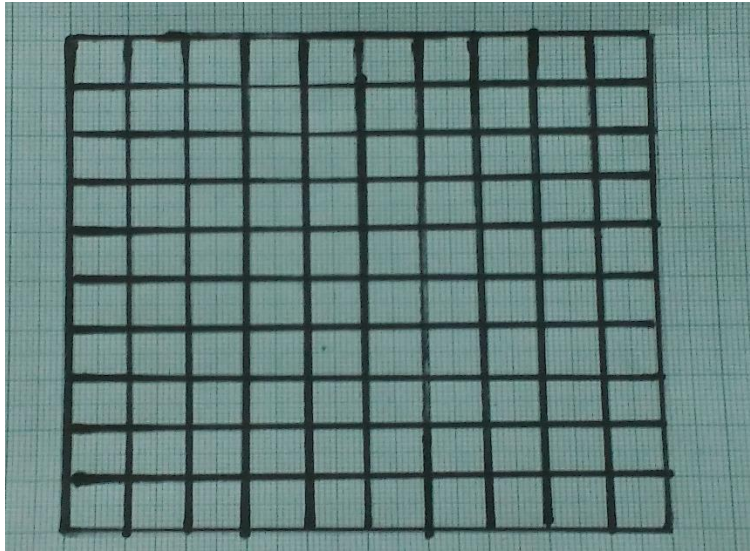
4. **What do you need to know?**

Knowledge about Ratio, fractions and decimals.

5. **How will you proceed?**

- a. Draw two  $10 \times 10$  grids on a graph sheet.





- b. We presume that one whole  $10 \times 10$  squared grid represents 100 per cent and one small square of that grid represents 1 per cent.
- c. Now, shade both  $10 \times 10$  grids with different colours, one to represent any per cent less than 1 (as shown in Fig.1) and another to represent any per cent from 1 to 100 (as shown in Fig.2)

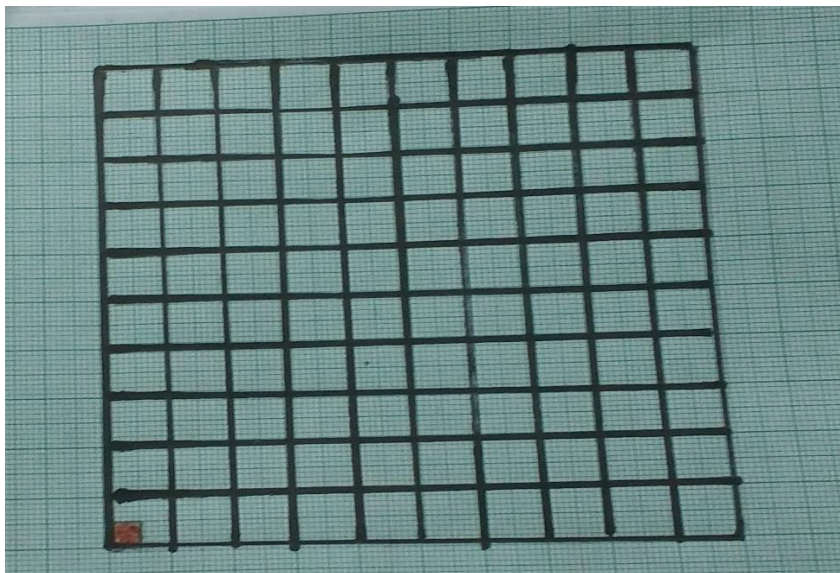


Fig. 1

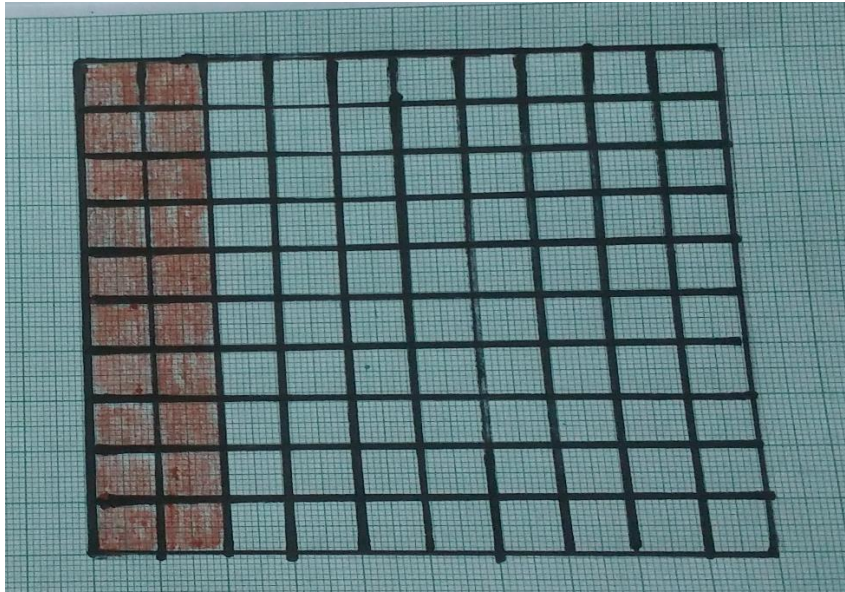


Fig.2

- d. Thus, shaded part in Fig.1 will represent  $\frac{1}{4}$ th of  $\frac{1}{100} = \frac{1}{400} = \frac{1}{4} \% = 0.25 \%$   
 and shaded part in Fig. 2 will represent  $\frac{20}{100}$  or 20 %.

6. **What have you observed?**

- Based on the above activity, complete the table given below:

| PERCENTAGE | FRACTION         | DECIMAL |
|------------|------------------|---------|
| 3%         |                  |         |
|            | $\frac{93}{100}$ |         |
|            |                  | 0.19    |
| 12%        |                  |         |
|            |                  | 0.76    |

7. **What have you learnt?**

### **8. Extended Activity**

- a) If the  $10 \times 10$  squared grid represents 600 students, then each square of a grid will represent how many students?
- b) Colour the part of the grid that represents 60 students.
- c) How many students will be represented by one-sixth of the grid?

### **Real life Applications:**

The above concept is used in our day-to-day life incidents viz. comparing rates of pay or values, planning a budget, in kitchen, in banking operations, games etc....