## Unit 22 - Percentage (1)

## Percentage



Considering it as one unit, the grid is divided into 100 small squares. Of these squares, exactly one is coloured. That is, $\frac{1}{100}$ of the entire grid is coloured. As a percentage, this is $1 \%$. This is read as "one percent". This indicates a portion of a unit as a percentage.

- \% is known as the percentage sign


## $>$ representing fractions as percentages

Write $\frac{3}{10}$ as a percentage.
As $100 \div 10=10$, let us multiply the denominator and the numerator by 10 .

$$
\frac{3}{10}=\frac{3 \times 10}{10 \times 10}=\frac{30}{100}=30 \%
$$

Write $\frac{5}{4}$ as a percentage.
As $100 \div 4=25$, let us multiply the denominator and the numerator of $\frac{5}{4}$ by 25 .
$\frac{5}{4}=\frac{5 \times 25}{4 \times 25}=\frac{125}{100}=125 \%$

Of the 25 students in a class, 13 are girls. Represent the number of girls, as a percentage of all the students in the class.
The number of girls, as a fraction of all the students in the class is $\frac{13}{25}$.

$$
\frac{13}{25}=\frac{13 \times 4}{25 \times 4}=\frac{52}{100}=52 \%
$$

$\therefore$ the number of girls, as a percentage of all the students in the class is $52 \%$.

## > Representing decimal numbers as percentages

## Activity 1

Copy the table given below in your exercise book and fill in the blanks.

| Decimal number | The number as a fraction | The number as a fraction having 100 as the denominator | The number as a percentage of the original amount |
| :---: | :---: | :---: | :---: |
| 0.5 | $\frac{5}{10}$ | $\frac{5 \times 10}{10 \times 10}=\frac{50}{100}$ | 50\% |
| 2.3 | $\frac{23}{10}$ | $\qquad$ |  |
| 0.25 | $\frac{25}{100}$ | $\ldots$ | 25\% |
| 1.75 | ............. |  | .............. |

## Do all the exercises in your text book 22.1, 22.2 and 22.3

