## YR6 Knowledge Organiser - Percentages

## Key Concepts

- Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.


## Key Vocabulary

- percentage
- decimal
- fraction
- equivalent
- convert
- amount
- value


## Convert Fractions to Percentages

Percent means 'out of 100'. We can find equivalent fractions with a denominator of 100 to help us convert fractions to percentages.

$$
\frac{7}{25}=\frac{28}{100}=28 \%
$$

$$
\frac{18}{50}=\frac{36}{100}=36 \%
$$

Remember, we need to multiply the numerator and the denominator by the same amount.

## Equivalent FDP

Now, we can use our knowledge of equivalent fractions and decimals to find equivalent percentages.

$$
0.29=\frac{29}{100}=29 \% \quad 0.07=\frac{7}{100}=7 \%
$$

## Order FDP

We can convert between fractions, decimals and percentages to compare and order them.

$$
\begin{aligned}
& \text { "Convert each number to the } \\
& \text { same form so that you can put } \\
& \text { them in order more easily." }
\end{aligned}
$$

Let's order the amounts from smallest to largest: using percentages:

$$
\begin{array}{cc}
\frac{4}{5} & 0.9 \\
\frac{4}{5}=\frac{80}{100}=80 \% & 0.9=90 \%
\end{array}
$$

$65 \%<80 \%<90 \%$ so the correct order is:

$$
\begin{array}{lll}
65 \% & \frac{4}{5} & 0.9
\end{array}
$$

## Percentage of an Amount

We can apply our knowledge of fraction equivalences to find percentages of amounts.
$50 \%$ is equivalent to one half, so to find $50 \%$ of an amount, we divide by 2.
$25 \%$ is equivalent to one quarter, so to find $25 \%$ of an amount, we divide by 4.
$10 \%$ is equivalent to one tenth, so to find $10 \%$ of an amount, we divide by 10.

How would you find $5 \%$ of 240 ?
"To find 5\% of 240, we first find 10\% $(240 \div 10=24)$ then divide by 2 ( $24 \div 12$ ). To find $15 \%$ of an amount, we can add $10 \%$ and $5 \%$ together."


## Find Missing Values

Now, we can find the missing whole when other values are given. Bar models can be used to help.


