# Shawhead Primary School 

## PARENT PROMPT PERCENTAGES GUIDE

Per cent means 'out of 100'
The sign \% stands for 'per cent' which means 'out of 100'. So:

- $60 \%$ means 60 out of 100
- $13 \%$ means 13 out of 100


## Finding Percentages

| 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- |
| 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 |
| 16 | 17 | 18 | 19 | 20 |

To work out the percentage of this shape that is shaded, you must first work out what each part represents.

There are 20 equal parts, so each part represents $5 \%$. How do we know this? There are two ways we can work it out:

1. The shape is divided into 20 pieces and we divide $100 \%$ (the whole shape) by 20 and get the answer of 5 . So each shaded part is $5 \%$ of the whole shape. In numbers: $100 \%$ (the whole) $\div$ $20=5 \%$

OR

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2. Each shaded part is $1 / 20$ of the whole shape. $1 / 20$ ( 1 divid by 20 ) is 0.05 as a decimal. We then multiply this by 100 to make it a percentage. $0.05 \times 100=5 \%$

In the diagram above, 8 of the parts are shaded, so $40 \%$ of the total shape is shaded: $8 \times 5 \%=40 \%$

## Converting between percentages and decimals

To change a percentage to a decimal, divide by 100.
Change $48 \%$ to a decimal: $48 \div 100=0.48$
To change a decimal to a percentage, multiply by 100.
Change 0.67 to a percentage: $0.67 \times 100=67 \%$

## Percentage of a number

To find $20 \%$ of 30 , use one of the following methods.

1. Convert the $20 \%$ to a decimal and then multiply by 30 .
$20 \%=0.2$
$0.2 \times 30=6$
2. First find $10 \%$ of 30 and then multiply that number by 2 . $10 \%$ of 30 is $30 \div 10=3$
$2 \times 3=6$
3. Recognise that $20 \%$ is equivalent to one fifth, and so just divide 30 by 5 .
$30 \div 5=6$
You might choose different methods depending on the numbers in the problem you are solving.

## LEARN THESE:

$$
\begin{aligned}
& \frac{1}{2}=50 \% \\
& \frac{1}{4}=25 \%
\end{aligned}
$$

$$
\frac{1}{10}=10 \%
$$

$$
\frac{3}{4}=75 \%
$$

$$
\frac{1}{5}=20 \%
$$

