# Year 6: Week 3, Day 5 <br> Find percentages of amounts 

Each day covers one maths topic. It should take you about 1 hour or just a little more.

1. Start by reading through the Learning Reminders. They come from our PowerPoint slides.

2. Tackle the questions on the Practice Sheet. There might be a choice of either Mild (easier) or Hot (harder)!
Check the answers.

3. Finding it tricky? That's OK... have a go with a grown-up at A Bit Stuck?

4. Have I mastered the topic? A few questions to Check your understanding.
Fold the page to hide the answers!

## Learning Reminders



## Learning Reminders



## Practice Sheet Mild Find percentages of amounts of money

| Remember that: | 50\% = $\frac{1}{2}$ | $25 \%=\frac{1}{4} \quad 10 \%$ | $1 \%=\frac{1}{100}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| $50 \%$ of $£ 120$ is | 25\% of $£ 120$ is | $75 \%$ of $£ 120$ is | $10 \%$ of $£ 120$ is | $1 \%$ of $£ 120$ is |
| $50 \%$ of $£ 250$ is | 25\% of $£ 250$ is | $75 \%$ of $£ 250$ is | $10 \%$ of $£ 250$ is | $1 \%$ of $£ 250$ is |
| 10\% of $£ 280$ is | 20\% of $£ 280$ is | $5 \%$ of $£ 280$ is | 40\% of $£ 280$ is | 90\% of $£ 280$ is |
| $10 \%$ of $£ 320$ is | $20 \%$ of $£ 320$ is | $5 \%$ of $£ 320$ is | $40 \%$ of $£ 320$ is | 90\% of $£ 320$ is |

## Practice Sheet Hot <br> Find percentages of amounts of money

Find the following percentages of $£ 360$.

50\%

$$
10 \%
$$

25\%
75\%
20\%
60\%
90\%
5\%
1\%
6\%
$11 \%$

Find the following percentages of $£ 248$.

50\%
$10 \%$
25\%
75\%
$30 \%$
60\%
90\%
5\%
$1 \%$
$16 \%$
99\%

## Challenge

Find three different ways to calculate $96 \%$ of $£ 360$.
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## Practice Sheet Answers

Find percentages of amounts of money (mild)

| $50 \%$ of $£ 120$ is $£ 60$ <br> $10 \%$ of $£ 120$ is $£ 12$ | $\begin{aligned} & 25 \% \text { of } £ 120 \text { is } £ 30 \\ & 1 \% \text { of } £ 120 \text { is } £ 1.20 \end{aligned}$ | $75 \%$ of $£ 120$ is $£ 90$ |
| :---: | :---: | :---: |
| 50\% of $£ 250$ is $£ 125$ | 25\% of $£ 250$ is $£ 62.50$ | $75 \%$ of $£ 250$ is $£ 187.50$ |
| 10\% of $£ 250$ is $£ 25$ | $1 \%$ of $£ 250$ is $£ 2.50$ |  |
| 10\% of $£ 280$ is $£ 28$ | 20\% of $£ 280$ is $£ 56$ | $5 \%$ of $£ 280$ is $£ 14$ |
| $40 \%$ of $£ 280$ is $£ 112$ | 90\% of $£ 280$ is $£ 252$ |  |
| $10 \%$ of $£ 320$ is $£ 32$ | 20\% of $£ 320$ is $£ 64$ | $5 \%$ of $£ 320$ is $£ 16$ |
| $40 \%$ of $£ 320$ is $£ 128$ | 90\% of $£ 320$ is $£ 288$ |  |

Find percentages of amounts of money (hot)

| $50 \%$ of $£ 360$ is $£ 180$ | $10 \%$ of $£ 360$ is $£ 36$ | $25 \%$ of $£ 360$ is $£ 90$ |
| :--- | :--- | :--- |
| $75 \%$ of $£ 360$ is $£ 270$ | $20 \%$ of $£ 360$ is $£ 72$ | $60 \%$ of $£ 360$ is $£ 216$ |
| $90 \%$ of $£ 360$ is $£ 324$ | $5 \%$ of $£ 360$ is $£ 18$ | $1 \%$ of $£ 360$ is $£ 3.60$ |
| $6 \%$ of $£ 360$ is $£ 21.60$ | $11 \%$ of $£ 360$ is $£ 39.60$ |  |
|  |  |  |
|  |  |  |
| $50 \%$ of $£ 248$ is $£ 124$ | $10 \%$ of $£ 248$ is $£ 24.80$ | $25 \%$ of $£ 248$ is $£ 62$ |
| $75 \%$ of $£ 248$ is $£ 186$ | $30 \%$ of $£ 248$ is $£ 74.40$ | $60 \%$ of $£ 248$ is $£ 148.80$ |
| $90 \%$ of $£ 248$ is $£ 223.20$ | $5 \%$ of $£ 248$ is $£ 12.40$ | $1 \%$ of $£ 248$ is $£ 2.48$ |
| $16 \%$ of $£ 248$ is $£ 39.68$ | $11 \%$ of $£ 248$ is $£ 27.28$ |  |

## A Bit Stuck? Special people

Work in pairs, but write your answers on your own sheet

Things you will need:

- A picture of 300 people


## What to do:

$2 \%$ of people around the world have green eyes. This means 2 out of every 100 people are likely to have green eyes. Ring 2 people out of 100 on the picture.
How many people out of 200 people are likely to have green eyes? $\qquad$
How many people out of 300 people are likely to have green eyes? $\qquad$
So how many people out of 400 people do you think will have green eyes? $\qquad$
How many people out of 500 people do you think will have green eyes? $\qquad$

12\% of people around the world are left-handed.
How many people out of 100 are likely to be left-handed? $\qquad$
How many people out of 200 are likely to be left-handed? $\qquad$
How many people out of 300 are likely to be left-handed? $\qquad$
How many people out of 400 do you think will be left-handed? $\qquad$
How many people out of 500 do you think will be left-handed? $\qquad$
6\% of people in the UK have red hair.
How many people out of 100 are likely to have red hair? $\qquad$
How many people out of 200 are likely to have red hair? $\qquad$
How many people out of 300 are likely to have red hair? $\qquad$
How many people out of 400 do you think will have red hair? $\qquad$
How many people out of 500 do you think will have red hair? $\qquad$

S-t-r-e-t-c-h:
How many people out of 100 people do NOT have green eyes?
How many people out of 100 are right-handed?
How many people out of 100 do not have red hair in the UK?

## Learning outcomes:

- I understand what a percentage is.
- I can find percentages of multiples of 100.
- I am beginning to solve simple percentage problems.




## Check your understanding Questions

True or false?

- $2 / 5$ is the same as $20 \%$
- 0.4 is the same as $4 \%$
- $10 \%$ is the same as 0.1
- $30 \%$ is the same as $1 / 3$

Find $10 \%$ of these prices. Use that to find $20 \%$.
a) $£ 14.20$
b) $£ 1.50$
c) $£ 99$

## Check your understanding

## Answers

## True or false?

- $2 / 5$ is the same as $20 \%$
- 0.4 is the same as $4 \%$
- $10 \%$ is the same as 0.1
- $30 \%$ is the same as $1 / 3$

False, it is equivalent to $40 \%$.
False, it is also equivalent to $40 \%$.
True.
False, $30 \%$ is equivalent to $3 / 10$.
These can be checked on a 0-1 (100\%) number line showing fraction, decimal and percentage equivalents.

Find $10 \%$ of these prices. Use that to find $20 \%$.
a) $£ 14.20 \quad 10 \%$ is $£ 1.42,20 \%$ is $£ 2.84$.
b) $£ 1.50 \quad 10 \%$ is $£ 0.15,20 \%$ is $£ 0.30$ (or 15 p and 30 p).
c) $£ 99 \quad 10 \%$ is $£ 9.90,20 \%$ is $£ 19.80$.

Divide by 10 to find $10 \%$. Double 10\% to find 20\%.

