

PERCENTAGES

CONTENT DOMAIN REFERENCES:
F11, F12, R2

KS2 SATS

PRACTICE QUESTIONS BY TOPIC

1 20% of 1,500 =

[2016S]

Handwritten solution on grid paper:

10% OF 1500 = 150

So 20% IS 150

$$\begin{array}{r} 150 \\ \times 2 \\ \hline 300 \end{array}$$

300

[1 mark]

2 20% of 1,800 =

[2016]

Handwritten solution on grid paper:

10% OF 1800 = 180

So 20% IS 180

$$\begin{array}{r} 180 \\ \times 2 \\ \hline 360 \end{array}$$

360

[1 mark]

3 60% of 765 =

[2000]

Handwritten solution on grid paper:

10% OF 765 = 76.5

So 60% IS 76.5

$$\begin{array}{r} 76.5 \\ \times 6 \\ \hline 459 \end{array}$$

459

[1 mark]

4 5% of £3600 =

[2004]

10% OF £3600 = 360
SO 5% IS $360 \div 2$
= 180 £180

[1 mark]

5 15% of 460 =

[2001]

10% OF 460 = 46
SO 5% OF 460 = 23
SO 15% IS $46 + 23 \rightarrow$ 69

[1 mark]

6 200 children went on holiday.

[2014]

10% of the children went to Wales.

25% of the children went to Scotland.

How many **more** children went to Scotland than went to Wales?

WALES, 10% IS 20
SCOTLAND, 25% IS 50
DIFFERENCE IS $50 - 20 \rightarrow$ 30

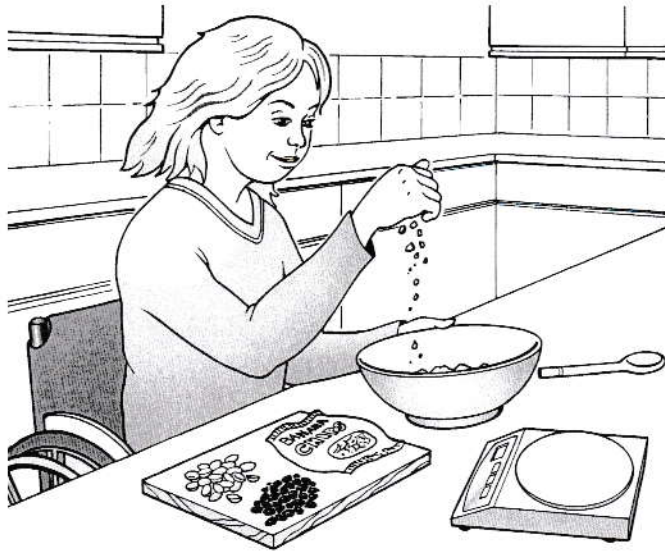
Show your method

4!

[2 marks]

7

[2008]



Emily makes 250 grams of a snack mixture.

15% of the weight is raisins, 25% is banana chips and the rest is peanuts. → 40%

How many grams of **peanuts** does she use?

Show your method

PEANUTS IS 60%

10% OF 250 = 25

SO 60% IS $25 \times 6 \rightarrow$ 150 g

[2 marks]

8

55% of 640 =

[2015]

50% OF 640 = 320

SO 5% OF 640 = 32

55% IS $320 + 32 \rightarrow$ 352

[1 mark]

9

45% of 460 =

[2017]

$$\begin{aligned}
 &50\% \text{ OF } 460 = 230 \\
 &\text{SO } 5\% \text{ OF } 460 = 23 \\
 &\text{AND } 45\% \text{ IS } 230 - 23 \rightarrow \boxed{207}
 \end{aligned}$$

[1 mark]

10

[2003]



250 000 people visited a theme park in one year.

15% of the people visited in April and

40% of the people visited in August.

} 55%

How many people visited the park in the rest of the year?

Show your method

$$\begin{aligned}
 &\underline{45\% \text{ FOR THE REST OF THE YEAR}} \\
 &50\% \text{ OF } 250,000 = 125,000 \\
 &5\% \text{ IS } 12,500 \\
 &\text{SO } 45\% \text{ IS } 125,000 \\
 &\quad - 12,500 \\
 &\quad \hline
 &\quad 112,500
 \end{aligned}$$

$\boxed{112,500}$

[2 marks]

11

15% of 440 =

[2016]

Handwritten solution on grid paper:

10% of 440 is 44
 so 5% of 440 is 22
 so, 15% is $44 + 22 \rightarrow$ 66

[1 mark]

12

95% of 240 =

[2016S]

Handwritten solution on grid paper:

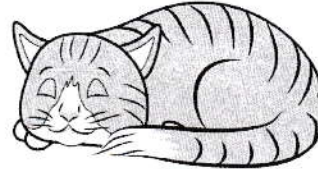
10% of 240 is 24
 so 5% of 240 is 12
 so 95% is $\begin{array}{r} 240 \\ - 12 \\ \hline 228 \end{array}$ 228

[1 mark]

13A cat sleeps for **12 hours** each day.

[2017]

50% of its life is spent asleep.



Write the missing percentage.

A koala sleeps for **18 hours** each day.
75 %

of its life is spent asleep.



$$\frac{18}{24} = \frac{3}{4} \rightarrow 75\%$$

[1 mark]

14 7% of 500 =

[2017]

1% of 500 = 5
So 7% is $7 \times 5 = \underline{35}$

35

[1 mark]

15 $15\% \times 1,000 =$

[2017]

1% of 1000 = 10
So 15% is $15 \times 10 = \underline{150}$

150

[1 mark]

16 If you know 40% of a number, explain how you could work out the original number.

[2010]

DIVIDE BY 4 TO GET 10%
THEN MULTIPLY BY 10 TO GET 100%
E.G. IF 40% WAS 112,
THEN 10% IS 28
SO 100% IS 280

[1 mark]

17

Liam did a survey of 55 people to see how many were left-handed.

[2014]

Liam says,

'The results show that exactly 10% of the people in the survey are left-handed.'

Explain why Liam cannot be correct.

BECAUSE 10% OF 55 IS 5.5
AND YOU CANNOT HAVE 0.5 OF
A PERSON!

[1 mark]

18

20% of Megan's number is 64

[2013]

What is 50% of Megan's number?

Show your method

IF 20% IS 64
THEN 10% IS 32

SO 50% IS 32×5

160

[2 marks]

19

Write in the missing numbers.

[2005]

30% of 60 is

18

[0.3×60]

30% of

200

is 60

[30% is 60
10% is 20
100% is 200!]

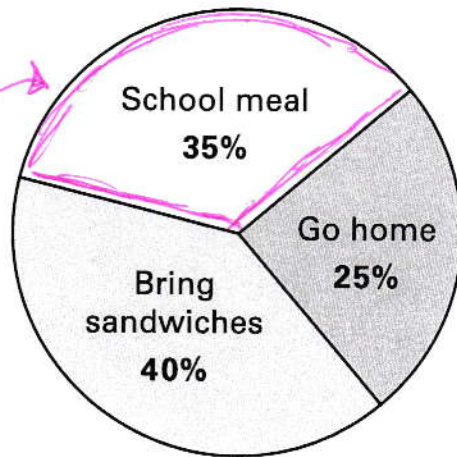
[2 marks]

20

[2000]



This pie chart shows the lunch choices of year 6 children at a school.



28 children in year 6 have a school meal.

How many **go home** for lunch?

Show your method

35% is 28

So,

5% is 4

So

25% is 20

20

[2 marks]