

Monday 4th May 2020

L.O. – To solve word problems involving addition and subtraction.

*Parents – Please note that the answers for most problems will be shown on the next slide. Please get your children to answer these prior to moving to next slide.

Problems of the day.

Hit space bar for answers but don't do it until you've tried!

- 1** Use $<$, $>$ or $=$ to make these number sentences correct.

$$9 \times 7 \bigcirc 8 \times 7$$

$$48 \div 2 \bigcirc 48 \div 4$$

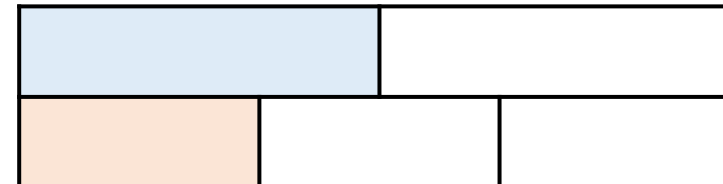
$$300 \times 2 \bigcirc 20 \times 30$$

- 2** There are 1,500 children in a school.
565 of the children are girls.
How many more boys than girls are in the school?

- 3** Mr Patel writes a number on the board.

- Leon finds $\frac{1}{2}$ of the number.
- Sophie finds $\frac{1}{3}$ of the number.
- Leon's number is 7 more than Sophie's.

What is the number Mr Patel started with? This bar model may help you.



Problems of the day.

Hit space bar for answers but don't do it until you've tried!

- 1 Use $<$, $>$ or $=$ to make these number sentences correct.

$$9 \times 7 \bigcirc 8 \times 7$$

$$48 \div 2 \bigcirc 48 \div 4$$

$$300 \times 2 \bigcirc 20 \times 30$$

- 2 There are 1,500 children in a school.
565 of the children are girls.
How many more boys than girls are in the school?
 $1,500 - 565 = 935$
 $935 - 565 = 370$
There are 370 more boys than girls.

- 3 Mr Patel writes a number on the board.

- Leon finds $\frac{1}{2}$ of the number.
- Sophie finds $\frac{1}{3}$ of the number.
- Leon's number is 7 more than Sophie's.

What is the number Mr Patel started with? This bar model may help you.

21			21		
7	7	7	7	7	7

Mr Patel started with 42

Reminder Information

- Complete the calculation below

$$\begin{array}{r} 638 \\ + 445 \\ \hline \\ \hline \end{array}$$

Reminder Information

- The Carried Number - some people place the number at the bottom & some at the top. Which one are you?

Don't forget to
place the 10 in the
correct columns!

$$\begin{array}{r} 638 \\ + 445 \\ \hline 1083 \\ \hline 1 \end{array}$$

Formal Addition

- Here are three formal addition calculations.

Are the answers and method correct? Explain any errors.

$$\begin{array}{r} 682 \\ + 283 \\ \hline 8165 \\ \hline \end{array}$$

$$\begin{array}{r} 729 \\ + 364 \\ \hline 1083 \\ \hline \end{array}$$

1

$$\begin{array}{r} 486 \\ + 347 \\ \hline 833 \\ \hline \end{array}$$

Formal Addition

$$\begin{array}{r} 682 \\ + 283 \\ \hline 8165 \end{array}$$

80 + 80 = 160,
but the hundred
must be carried
to add to the
600 + 200. The
answer is 965.

$$\begin{array}{r} 729 \\ + 364 \\ \hline 1083 \\ \hline 1 \end{array}$$

The carried 10
must be added
to the 8. The
answer is 1093.

$$\begin{array}{r} 486 \\ + 347 \\ \hline 833 \end{array}$$

correct

Formal Subtraction

- Here are three formal subtraction calculations. Are the answers and method correct? Explain any errors.

$$\begin{array}{r} 823 \\ - 417 \\ \hline 414 \\ \hline \end{array}$$

$$\begin{array}{r} \overset{6}{\cancel{7}}\overset{1}{4}5 \\ - 261 \\ \hline 484 \\ \hline \end{array}$$

$$\begin{array}{r} \overset{9}{\cancel{6}}\overset{1}{0}1 \\ - 437 \\ \hline 264 \\ \hline \end{array}$$

Formal Subtraction

$$\begin{array}{r} 823 \\ - 417 \\ \hline 414 \end{array}$$

3 – 7 would be -4 not 4. A ten is “exchanged” from the 20, making it 10, and then 13 – 7 = 6, and 10 – 10 = 0, so the answer is 406.

$$\begin{array}{r} \overset{6}{\cancel{7}}\overset{1}{4}5 \\ - 261 \\ \hline 484 \end{array}$$

correct

$$\begin{array}{r} \overset{9}{\cancel{6}}\overset{1}{0}1 \\ - 437 \\ \hline 264 \end{array}$$

10 has been exchanged, but it can't be exchanged from 0 to leave 9. A hundred is taken from 600, leaving 90 and making 11 – 7. The answer is 164.

Which Operations?

- On Sunday, Jacob spent 86 minutes on his maths homework and 37 minutes reading. On Tuesday, he spent 69 minutes on his project. What is the difference between the time he spent doing his homework on Sunday and Tuesday?



- What calculations did you use to find the answer? How did you decide on the calculations to use?

Which Operations?

- On Sunday, Jacob spent 86 minutes on his maths homework and 37 minutes reading. On Tuesday, he spent 69 minutes on his project. What is the difference between the time he spent doing his homework on Sunday and Tuesday?

$86 + 37 = 123$ minutes on
Sunday

$123 - 69 = 54$ minutes
difference between the
two days

- The question required 2 steps of calculations.
 - First,
- We needed to find the total number of minutes spent doing homework on Sunday.
 - Then we needed to subtract the totals on Sunday and Tuesday .

Which Operations?

- Jacob received £25.90 for his birthday. He spent £8.99 on a book and £7.50 on a computer game. How much money does he have left?
- How many steps of calculation do you think this question needs? Explain why you think so to an adult.
- Work out the answer and check if you are correct on the next slide. Make sure you write out each step of the calculations clearly.



Which Operations? **METHOD 1 ANSWER**

- Jacob **received £25.90** for his birthday. He **spent £8.99** on a book and **£7.50** on a computer game. How much money does he have left?

- Step 1: work out how much money he spent in total.

$$£8.99 + £7.50 = £16.49$$

Step 2: subtract the total in step 1 from the total amount he received at the start.

$$£25.90 - £16.49 = £9.41$$



Which Operations? **METHOD 2 ANSWER**

- Jacob **received £25.90** for his birthday. He **spent £8.99** on a book and **£7.50** on a computer game. How much money does he have left?
- Step 1: identify the total amount received and subtract the 1st amount spent.

$$£25.90 - £8.99 = £16.91$$

Step 2: subtract the second amount spent from the answer to step 1.

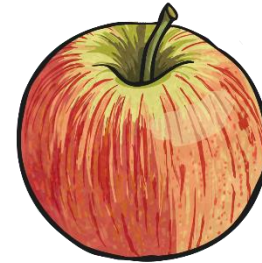
$$£16.91 - £7.50 = £9.41$$

- Both methods give the same answer. Which method do you prefer?



Which Operations?

- At the beginning of the day, a grocer has 239 apples. He receives another 144 from his supplier and sells 307 during the day. How many apples does the grocer have at the end of the day?
- Khalid calculates how many apples the grocer has by the end of the day:
 - Step 1: $307 - 239 = 68$,
 - Step 2: $68 + 144 = 212$ apples left.
- Explain the mistake Khalid has made.



Which Operations

- At the beginning of the day, a grocer has 239 apples. He receives another 144 from his

Khalid began by subtracting the number of apples at the beginning of the day from the number of apples sold. The answer of 68 is then the number of the apples delivered that day that were sold, so the answer would come from $144 - 68 = 76$.

Another way would be to add the number of apples at the beginning of the day to the apples delivered: $239 + 144 = 383$.

Then subtract the number sold from this total: $383 - 307 = 76$

- Explain the mistake Khalid has made.

Tasks

Complete –

- Worksheet.

Please complete the questions in the exercise books you were given. If you cannot print the worksheet then do not worry. Just show all your working out and write the answer under today's date in your books.

If you have any misunderstandings then please head to **Education City** or email the school on –

learning@wembleyprimary.brent.sch.uk

Worksheet

1. In January, there were 34,371 new born dragons. In February, another 61,428 dragons were born. However, in March, 42,985 dragons died. How many dragons are there?
2. The Iron Swords Company employed 62,134 men, but then the industry experienced a decline, and 3,986 men left. However, business began to pick up again, and the Iron Swords Company increased its employment of men by 761 men. How many men work at the Iron Swords Company now?
3. The great dragons of the west burnt 19,426 houses in their first week. They burnt 73,645 houses in their second week and more in their third week. In total, 155,478 houses were burnt. How many did they burn in week 3?
4. The dragon master trained 34,417 dragons, but sadly, 1,259 of those dragons died. The dragon master needs 50,000 dragons. How many more dragons does he need?

Alisha has £18.35 in her purse. Her father gives her £5 pocket money. She buys a book for £7.99 and a bag for £13.49. How much will she have left?



- Naomi says Alisha has £1.87 left.
- Jack says Alisha has £3.13 left.
- Who is correct and what mistakes have been made?
- What other errors might be made?

Ken is playing a game. He has 4,289 points.

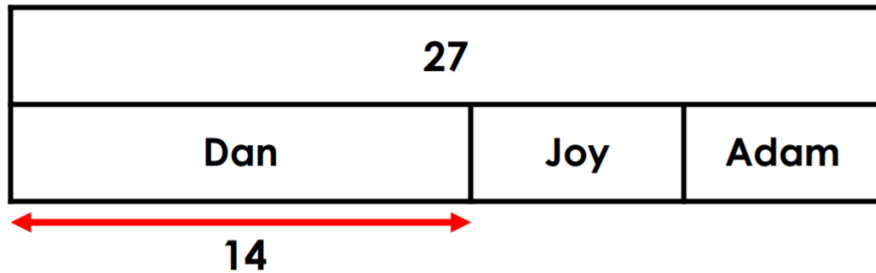
Then he scores another 355 points.

Ken's target is 6,000 points.

How many **more** points does Ken need to reach his target?

Extra Challenge

Dan has **14** stickers. Joy has stickers.
Adam has stickers. They have **27** stickers in total.
Joy has one more sticker than Adam.



There are 8 children at the park.
There are 2 more boys than girls at the park.

Spot the mistake:



Tuesday 5th May 2020

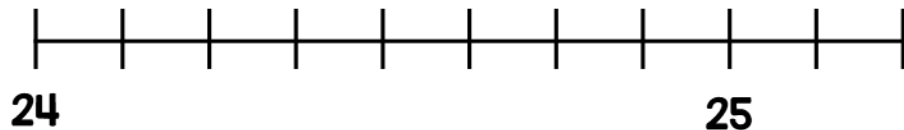
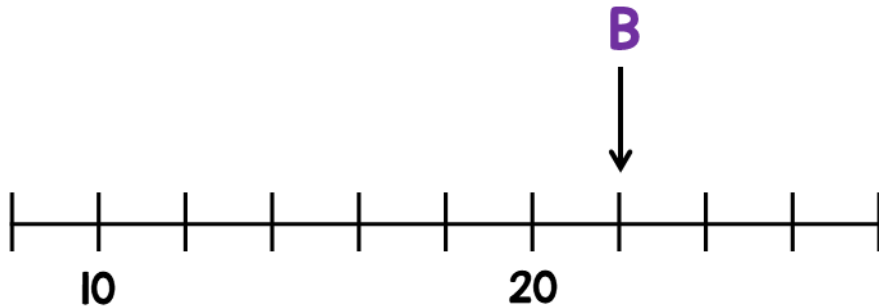
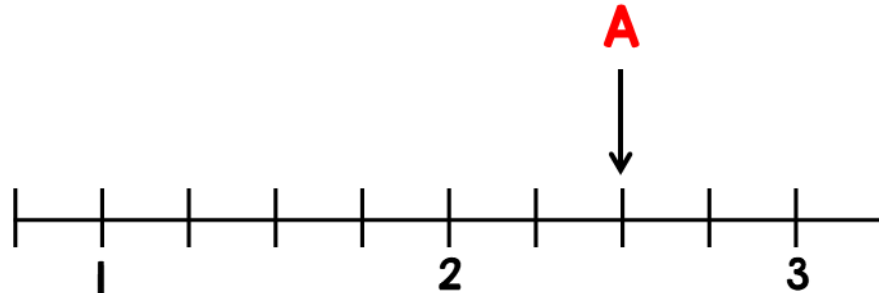
L.O. – To understand equivalents of percentage, decimals and fractions.

Problems of the day.

Hit space bar for answers but don't do it until you've tried!

1 Given that $A + B = C$

Draw an arrow pointing to C



2 George has a box of counters.

- For every 2 red counters there are 5 blue ones.
- George removes 36 blue counters from the box.
- There are now the same amount of red and blue counters.

How many red counters were in the box at the start?

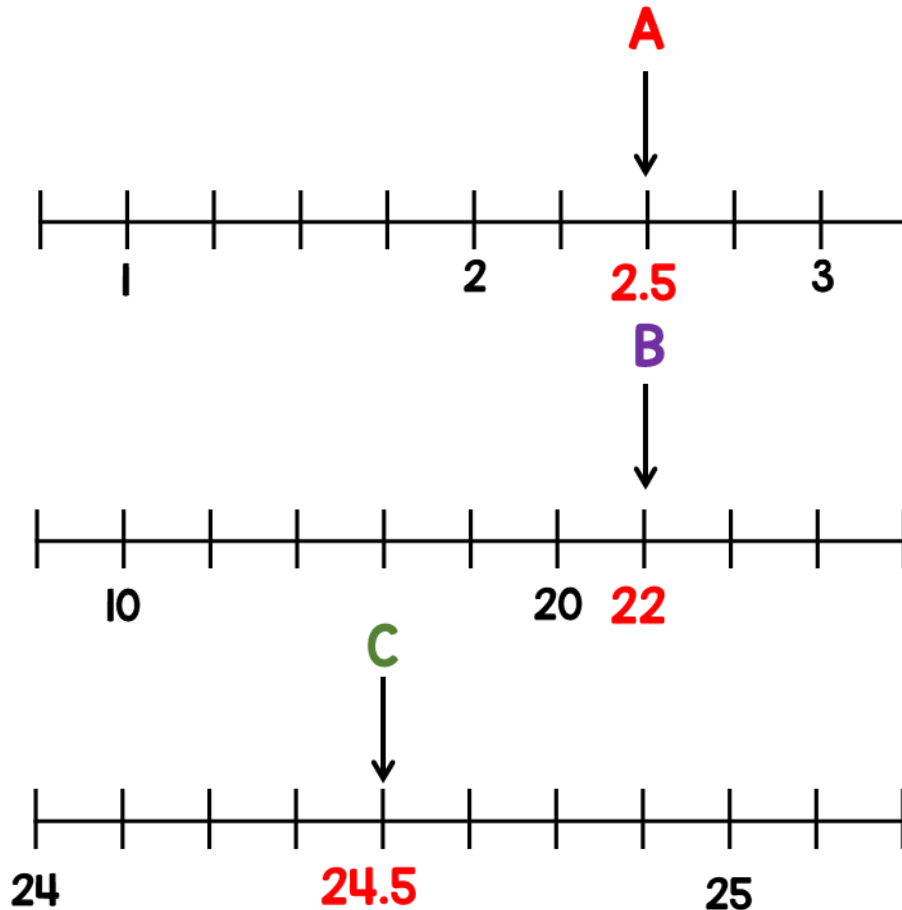
3 Elijah says he divided 32 by a number and got 64
Is this possible?

Problems of the day.

Hit space bar for answers but don't do it until you've tried!

1 Given that $A + B = C$

Draw an arrow pointing to C



2 George has a box of counters.

- For every 2 red counters there are 5 blue ones.
- George removes 36 blue counters from the box.
- There are now the same amount of red and blue counters.

How many red counters were in the box at the start? **24 red counters.**

3 Elijah says he divided 32 by a number and got 64

Is this possible?

Yes, he could divide by 0.5

Equivalences

Complete this table of equivalences:

Fraction	Decimal	Percentage
	0.5	
$\frac{3}{4}$		
$\frac{1}{4}$		
		10%
	0.125	
		1%
$1 \frac{1}{4}$		

Equivalences

Complete this table of equivalences:

Fraction	Decimal	Percentage
$\frac{1}{2}$	0.5	50%
$\frac{3}{4}$	0.75	75%
$\frac{1}{4}$	0.25	25%
$\frac{1}{10}$	0.01	10%
$\frac{1}{8}$	0.125	12.5%
1/100	0.01	1%
$1\frac{1}{4}$	1.25	125%

These are the most common conversions and should be memorised to improve quick mental conversions when solving problems.

How can we convert between fractions, decimals and percentages?

There are some you need to know off by heart. They are in the last slide you worked on.

What do you do if the fractions are different? For instance, $\frac{2}{5}$?

Use your knowledge of equivalence and dividing by 10, 100 and 1000.

Quick recall – what can you do to make the following numbers 10, 100 or 1000?

- 2 \times = 100
- 10 \times = 100
- 20 \times = 100
- 25 \times = 100
- 50 \times = 100
- 250 \times = 1000
- 500 \times = 1000

Answer the questions then check if you are correct on the next page. DO NOT TURN TO THE NEXT PAGE UNTIL YOU HAVE TRIED THESE FIRST.

Quick recall – what can you do to make the following numbers 10, 100 or 1000?

- | | |
|-------|-------------------|
| • 2 | $\times 50 = 100$ |
| • 10 | $\times 10 = 100$ |
| • 20 | $\times 5 = 100$ |
| • 25 | $\times 4 = 100$ |
| • 50 | $\times 2 = 100$ |
| • 250 | $\times 4 = 1000$ |
| • 500 | $\times 2 = 1000$ |

answer the questions then check if you are correct on the next page.

Review – answer the questions then check if you are correct on the next page.

- $23 \times 10 =$
- $45 \times 100 =$
- $3.1 \times 100 =$
- $5.7 \times 1000 =$
- $7.12 \times 10 =$
- $16.5 \times 100 =$
- $9.34 \times 100 =$
- $1.523 \times 1000 =$

DO NOT TURN TO THE NEXT PAGE UNTIL YOU HAVE TRIED THESE FIRST.

ANSWERS

- $23 \times 10 = 230$
- $45 \times 100 = 4500$
- $3.1 \times 100 = 310$
- $5.7 \times 1000 = 5700$
- $7.12 \times 10 = 71.2$
- $16.5 \times 100 = 1650$
- $9.34 \times 100 = 934$
- $1.523 \times 1000 = 1523$

How to convert fractions to decimals to percentages

Method 1 – Equivalent fractions

- **Step 1:** Find a number you can multiply by **the bottom of the fraction** to make it 10, or 100, or 1000, or any 1 followed by 0s.
- **Step 2:** Multiply both top and bottom by that number.
- **Step 3.** Then write down just the top number, putting the decimal point in the correct spot (one space from the right hand side for every zero in the bottom number)

Example: Convert $\frac{3}{4}$ to a Decimal

Step 1: We can multiply 4 by **25** to become 100

Step 2: Multiply top and bottom by 25:

$$\begin{array}{c} \times 25 \\ \text{↻} \\ \frac{3}{4} = \frac{75}{100} \\ \text{↻} \\ \times 25 \end{array}$$

Step 3: Write down 75 with the decimal point 2 spaces from the right (because 100 has 2 zeros);

Answer = 0.75

To convert the decimal to a percentage, x the decimal by 100.

So $0.75 \times 100 = 75\%$

Therefore,

$\frac{3}{4} = 0.75 = 75\%$

Method 1 practice

- Write these fractions as decimals and then as percentages using method 1

$$\frac{3}{25} \quad \frac{4}{5} \quad \frac{9}{10}$$

Method 2 – the division method

What if the denominator is more difficult to write as a 10th, 100th or thousandth? For instance, 5/8.

To convert a fraction to a decimal, divide the numerator by the denominator using long or short division.

Example: here is what long division of $\frac{5}{8}$ looks like:

$$\begin{array}{r} 0.625 \\ 8 \overline{) 5.000} \\ \underline{0} \\ 5.0 \\ \underline{4.8} \\ 20 \\ \underline{16} \\ 40 \\ \underline{40} \\ 0 \end{array}$$

short division method to convert $\frac{1}{3}$ to a decimal:

$$\begin{array}{r} 0.333 \\ 3 \overline{) 1.000} \end{array}$$

In that case we inserted extra zeros and did $\frac{5.000}{8}$ to get **0.625**

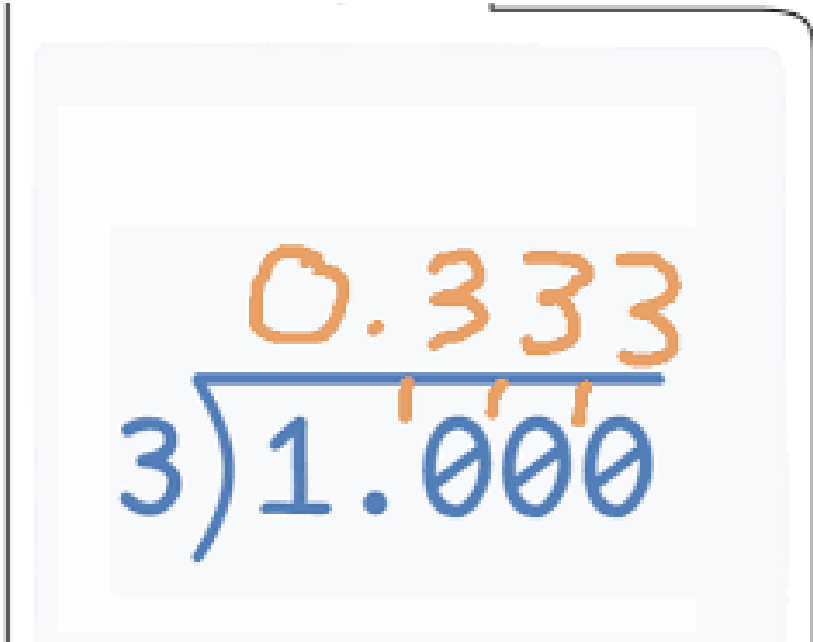
To convert the decimal to a percentage, x the decimal by 100.

So $0.625 \times 100 = 62.5\%$

Therefore,
 $\frac{5}{8} = 0.625 = 62.5\%$

Method 2 – the division method

short division method to convert $\frac{1}{3}$ to a decimal


$$\begin{array}{r} 0.333 \\ 3 \overline{) 1.000} \end{array}$$

To convert the decimal to a percentage, x the decimal by 100.

$$\text{So } 0.333 \times 100 = 33.3\%$$

Therefore,

$$\frac{1}{3} = 0.333 = 33.3\%$$

Note that $\frac{1}{3}$ converts to what is called a RECURRING DECIMAL. This is because if the division is carried on, the 3 will continue to reoccur indefinitely. A recurring decimal is usually written with a dot or bar above the number that repeats. Therefore, it is best to stop at 3 decimal places as shown in the example above.

$$\frac{1}{3} = 0.333... = 0.\dot{3} = 0.\overline{3}$$

Fraction Ways to show recurring decimals

CHALLENGE

Find 3 other fractions that convert to a recurring decimal.

One Decimal Place – DO NOT CHECK THE ANSWERS ON THE NEXT PAGE TILL YOU HAVE HAD A GO AT THIS.

- Match the equivalent fractions, decimals and percentages.

25%

$\frac{3}{10}$

0.3

$\frac{1}{4}$

$\frac{3}{5}$

$\frac{1}{2}$

$\frac{4}{25}$

0.2

60%

0.5

30%

16%

$\frac{1}{5}$

50%

0.25

0.16

20%

0.6

Which method is most efficient for each conversion?

One Decimal Place

- Match the equivalent fractions, decimals and percentages.

25%

$\frac{3}{10}$

0.3

$\frac{1}{4}$

$\frac{3}{5}$

$\frac{1}{2}$

$\frac{4}{25}$

0.2

60%

0.5

30%

16%

$\frac{1}{5}$

50%

0.25

0.16

20%

0.6

Pizza

- Aleena and Haris each have a pizza.
- Aleena eats 60% of her pizza.
- Haris eats $\frac{3}{4}$ of his pizza.
- Who eats more pizza?
- How do you know?



DO NOT TURN TO THE NEXT PAGE UNTIL YOU HAVE TRIED THESE FIRST.

Pizza

Aleena eats 60% of her pizza.
Haris eats $\frac{3}{4}$ of his pizza.

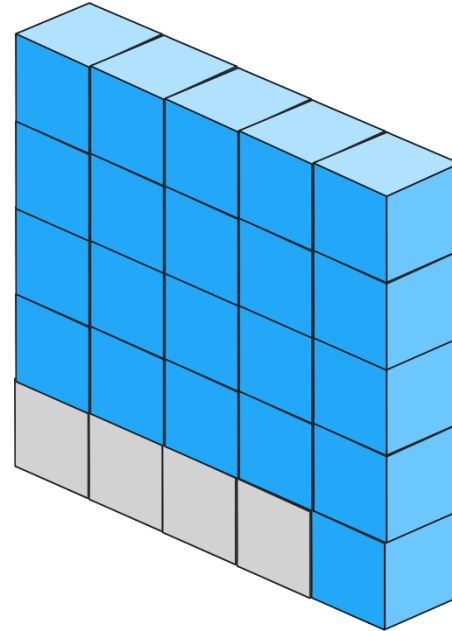
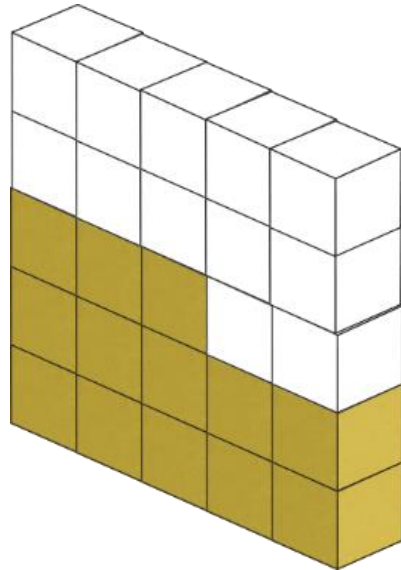


Haris eats $\frac{3}{4} = 75\%$ of his pizza.
 $75\% > 60\%$, so Haris eats more.



Visual Representation

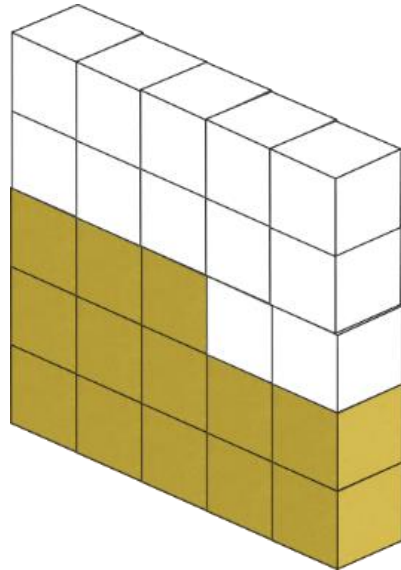
- Write the fraction, decimal and percentage represented by these shapes:



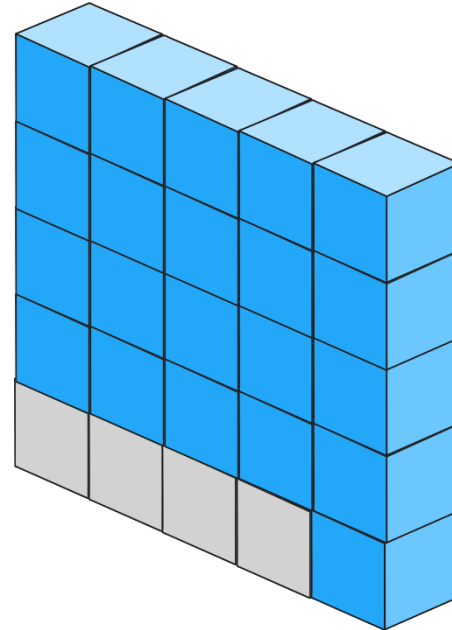
DO NOT TURN TO THE NEXT PAGE UNTIL YOU HAVE TRIED THESE FIRST.

Visual Representation

- Write the fraction, decimal and percentage represented by these shapes:



$$\frac{13}{25} = 0.52 = 52\%$$



$$\frac{21}{25} = 0.84 = 84\%$$

Draw or make using cubes some of your own representations for a partner to interpret.

Tasks

Complete –

- Worksheet.

Please complete the questions in the exercise books you were given. If you cannot print the worksheet then do not worry. Just show all your working out and write the answer under today's date in your books.

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learning@wembleyprimary.brent.sch.uk

Worksheet

Tick the **two** numbers that are equivalent to $\frac{1}{4}$

Fill the missing field in the table so that each row contains equivalent values:

Fractions	Decimals	Percentages
	0.8	
		24%
$\frac{7}{8}$		
		45%
	0.14	
		5%
$\frac{2}{5}$		
	0.02	
		60%
$\frac{3}{4}$		
	0.94	

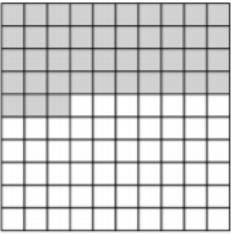
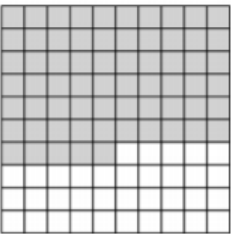

Write the fractions in the lowest term.

Which one is smaller?

- a) **40%** or $\frac{1}{4}$?
- b) **0.4** or $\frac{5}{8}$?
- c) **0.5** or **5%**?

Tick **two**.

- 0.25 ☐
- 0.75 ☐
- $\frac{25}{100}$ ☐
- 0.5 ☐
- $\frac{2}{5}$ ☐

	Fraction	Decimal	Percent
	$\frac{43}{100}$	0.43	43%
			
			

Here are three symbols.

< > =

Write one symbol in each box to make the statements correct.

$\frac{7}{10}$ 0.07

$\frac{23}{1000}$ 0.23

Extra Challenge

Is $\frac{3}{4}$ greater than 0.34? Convince me.

Wednesday 6th May 2020

L.O. – To solve problems involving percentages of amounts.

Problems of the day.

Hit space bar for answers but don't do it until you've tried!

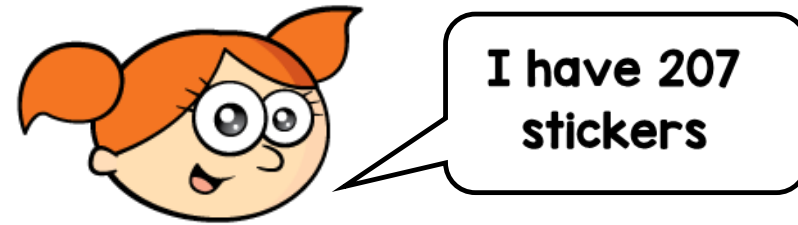
- 1** Sam has £29
He gets £28 more for his birthday.
He buys this cap and jumper with his money.



How much money does he have left?

- 2** One fifth of a number is 12
What is a half of the number?

3



Mo gives Alex some stickers.
Alex now has twice as many as Mo.
How many stickers did Mo give Alex?

Problems of the day.

Hit space bar for answers but don't do it until you've tried!

1 Sam has £29

He gets £28 more for his birthday.
He buys this cap and jumper with his money.



How much money does he have left?

Sam has £16.51 left.

2 One fifth of a number is 12

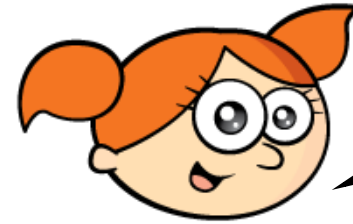
What is a half of the number?

$$12 \times 5 = 60$$

$$60 \div 2 = 30$$

Half of the number is 30

3



I have 207
stickers

I have 150
stickers



Mo gives Alex some stickers.

Alex now has twice as many as Mo.

How many stickers did Mo give
Alex?

$$207 + 150 = 357$$

$$357 \div 3 = 119$$

Mo gives Alex 119 stickers.

Quick recall

Complete the table below.

Percentage	Fraction equivalent	Divide by
1%		÷ By
10%		÷ By
25%		÷ By
50%		÷ By
75%		÷ By X by
100%	1/1	÷

CHECK THE ANSWERS ON THE NEXT PAGE ONLY AFTER YOU HAVE COMPLETED THE TASK FIRST!

Quick facts ANSWERS

Percentage	Fraction equivalent	Divide by
1%	$\frac{1}{100}$	\div By 100
10%	$\frac{1}{10}$	\div By 10
25%	$\frac{1}{4}$	\div By 4
50%	$\frac{1}{2}$	\div By 2
75%	$\frac{3}{4}$	\div By 4 X by 3
100%	1	\div 1

Memorise this information as they will help you find percentages of amounts quicker.

How can we use the information in the previous slide to help us calculate percentages of amounts?

- Calculate 50% of 60

$$50\% = \frac{1}{2}$$

$$\begin{aligned}\frac{1}{2} \text{ of } 60 &= 60 \div 2 \\ &= 30\end{aligned}$$

- Calculate 25% of 60

$$25\% = \frac{1}{4}$$

$$\begin{aligned}\frac{1}{4} \text{ of } 60 &= 60 \div 4 \\ &= 15\end{aligned}$$

- Calculate 10% of 60

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

$$\frac{1}{10} \text{ of } 60 = 60 \div 10 \\ = 6$$

- Calculate 30% of 60

- First calculate 10%

$$10\% = 60 \div 10 \\ = 6$$

- If 10% = 6, then 30% = 6 x 3 = 18

Now try these questions using the 10% method where necessary.

- a) 50% of 48
- b) 25% of 56
- c) 10% of 170
- d) 75% of 200
- e) 40% of 150
- f) 90% of 120

Answers on the next slide.

DO NOT TURN TO THE NEXT PAGE UNTIL YOU HAVE TRIED THESE FIRST.

Answers

a) $50\% \text{ of } 48 = 24$

b) $25\% \text{ of } 56 = 14$

c) $10\% \text{ of } 170 = 17$

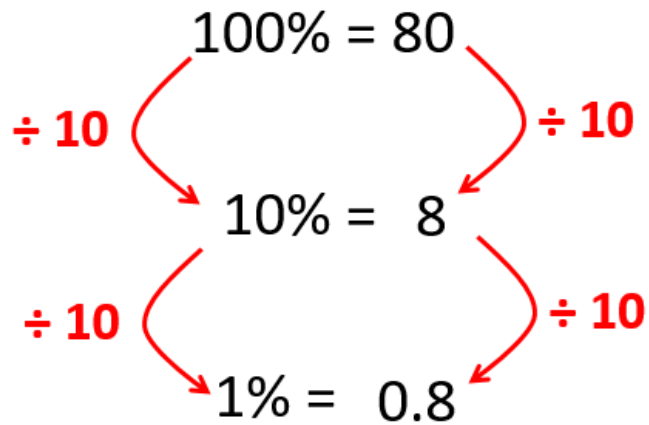
d) $75\% \text{ of } 200 = 150$

e) $40\% \text{ of } 150 = 60$

f) $90\% \text{ of } 120 = 108$

- If you can find 10% of a number, you can find 1% and 5%.

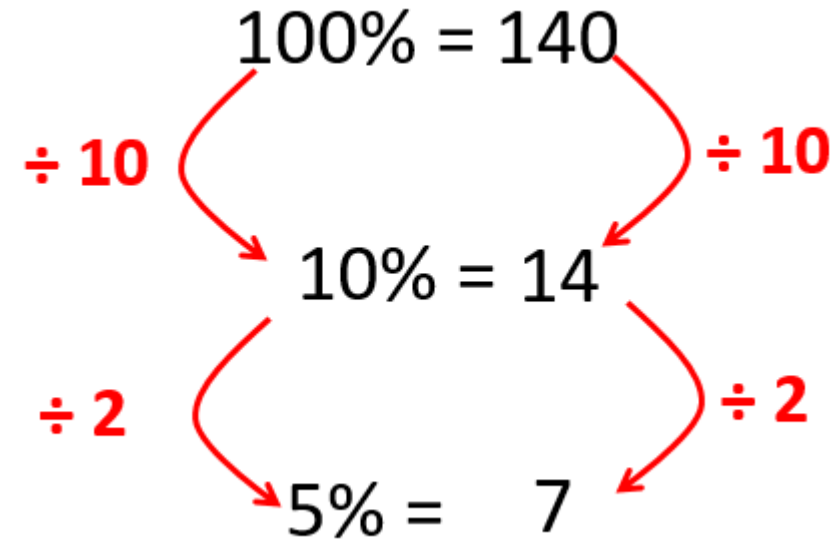
- How?



REMEMBER:

To find 1%, divide the number by 100.

This is the same as dividing by 10 and then dividing by 10 again as shown above.



To find 5%,
First work out 10% of the number.
Then divide the answer by 2.

- We can use these results to calculate any percentage by adding 10%, 5% and 1% together.

- Example: Calculate 12% of 180

$$10\% = 18$$

$$1\% = 1.8$$

$$12\% = 10\% + 1\% + 1\%$$

$$12\% = 18 + 1.8 + 1.8$$

$$12\% \text{ of } 180 = 21.6$$

- Calculate 56% of 240

$$50\% = 120$$

$$10\% = 24$$

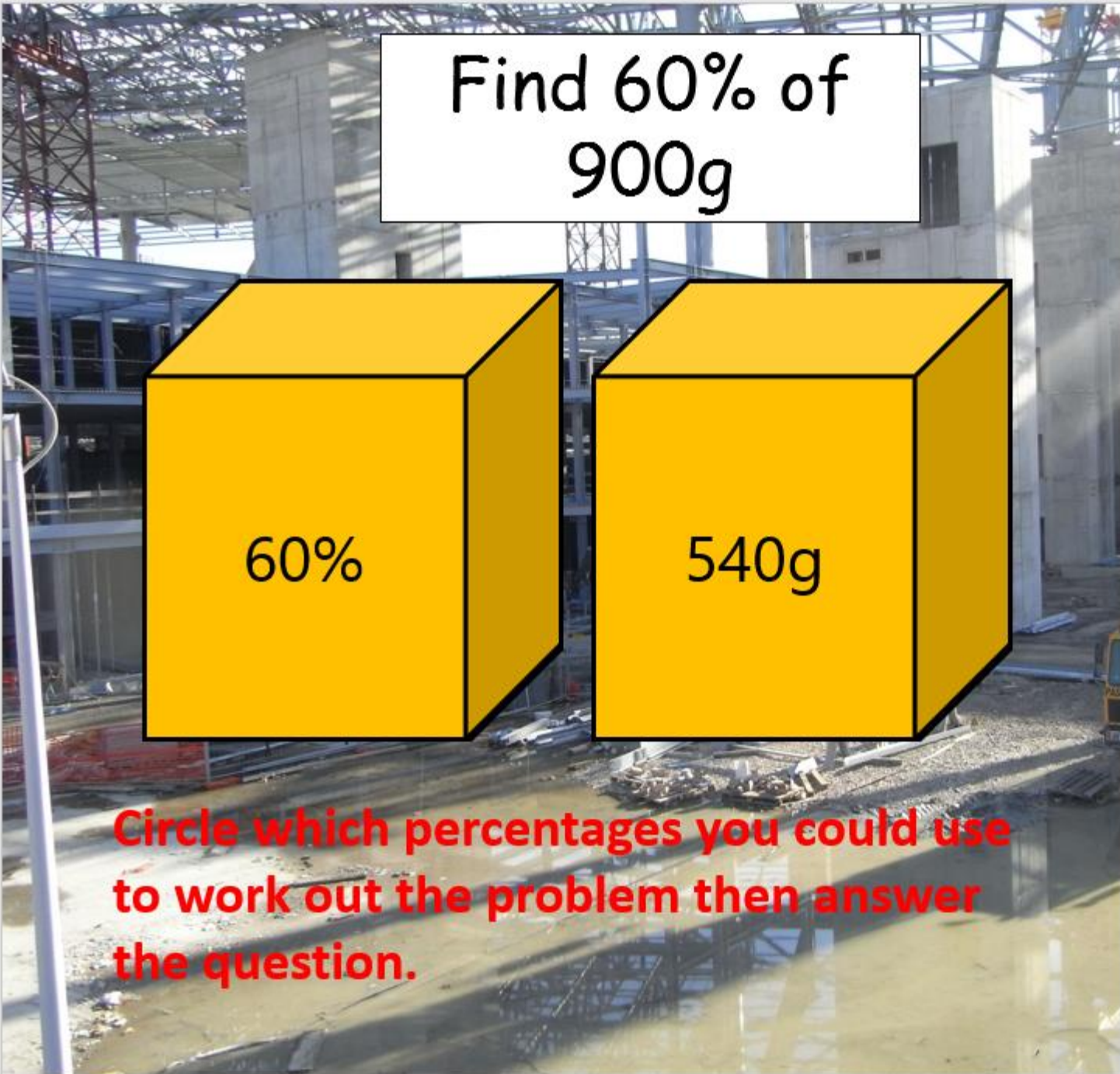
$$5\% = 12$$

$$1\% = 2.4$$

$$56\% = 50\% + 5\% + 1\%$$

$$56\% = 120 + 12 + 2.4$$

$$56\% = 134.4$$



Find 60% of
900g

60%

540g

**Circle which percentages you could use
to work out the problem then answer
the question.**

Tool kit:
We can
easily find-

1%

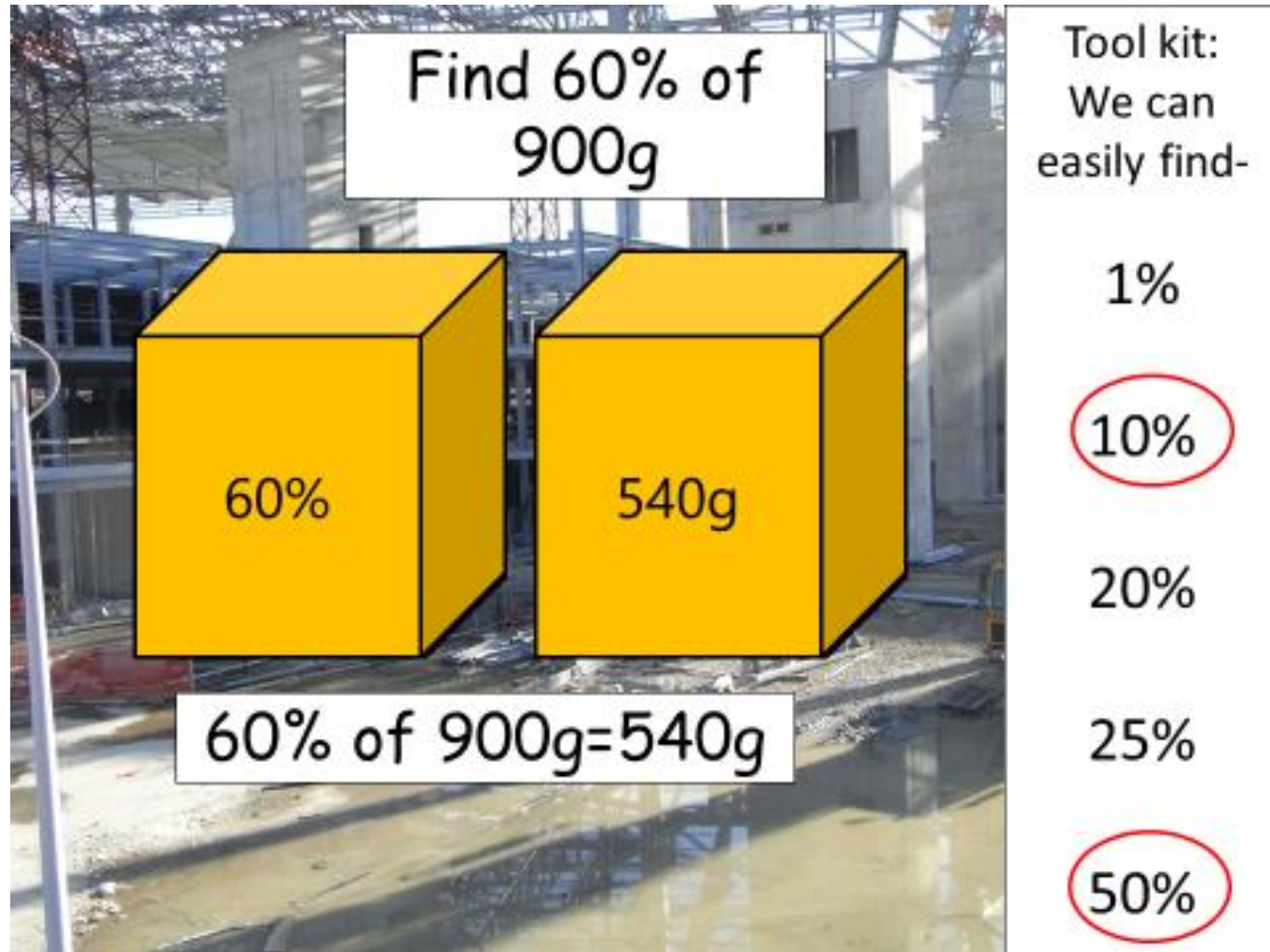
10%


20%

25%

50%

Answer





Find 72% of
500

72%

360

Tool kit:
We can
easily find-

1%

10%

20%

25%

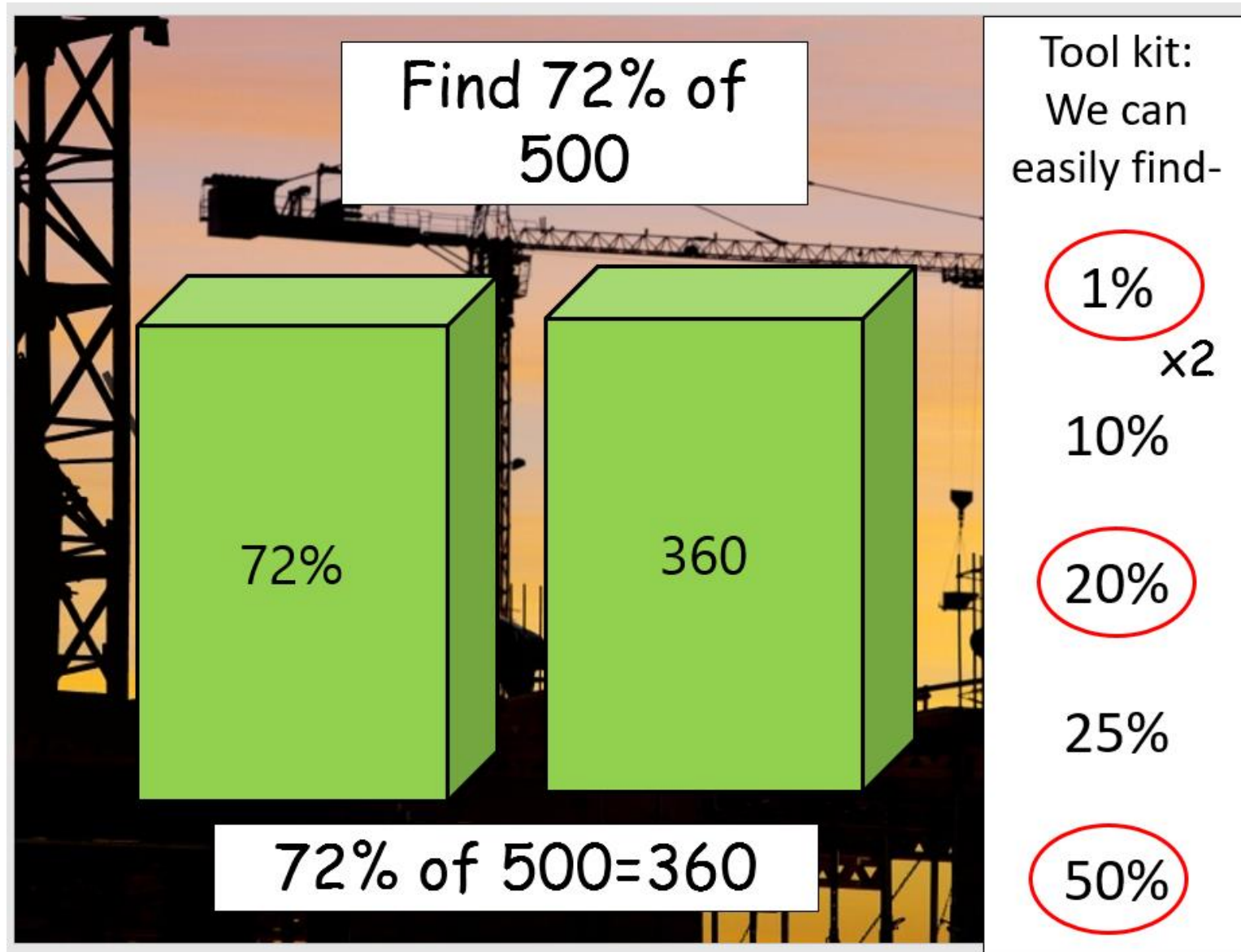
50%

Circle the fewest number of
percentages you could work
out to solve the problem.
Then work out the answer.

NB

You might need to use some
more than once.

Answer



Tasks

Complete –

- Worksheet.

Please complete the questions in the exercise books you were given. If you cannot print the worksheet then do not worry. Just show all your working out and write the answer under today's date in your books.

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learning@wembleyprimary.brent.sch.uk

Worksheet

• Find:

- a) 35% of £400
- b) 80% of 360kg
- c) 75% of 500cm
- d) 11% of £820
- e) 26% of 700p
- f) 51% of 600m

Fill in the boxes using < > or =

50% of 48

25% of 100

10% of 300

20% of 150

40% of 50

80% of 20

Find 25% of 80.

Find $\frac{1}{4}$ of 80

What is the same?

What is different?

Explain your answer.

Kevin says:

“To find 10% you divide by 10. To find 50% you divide by 50.”

Comment on Kevin's statement.

200 children went on holiday.

10% of the children went to Wales.

25% of the children went to Scotland.

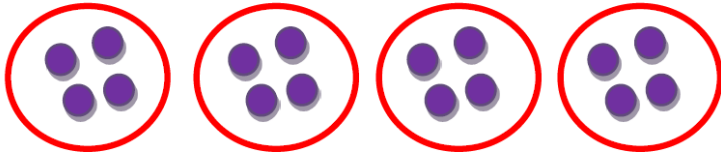
How many **more** children went to Scotland than went to Wales?

Extra Challenge

Look at Sam's counters.

His answer is 4.

Complete the number sentence to show what percentage of an amount he has worked out.



of = 4

Harry has $\frac{3}{5}$ of £80. Jasmine has 50% of £72. Who has the most money?

Thursday 7th May 2020

L.O. – To solve problems involving unequal sharing.

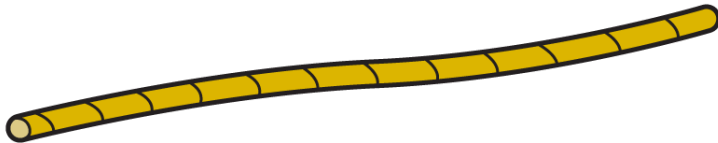
Problems of the day.

Hit space bar for answers but don't do it until you've tried!

- 1 Circle all the numbers equivalent to 0.25

0.4 $\frac{50}{100}$ $\frac{25}{100}$ $\frac{1}{4}$

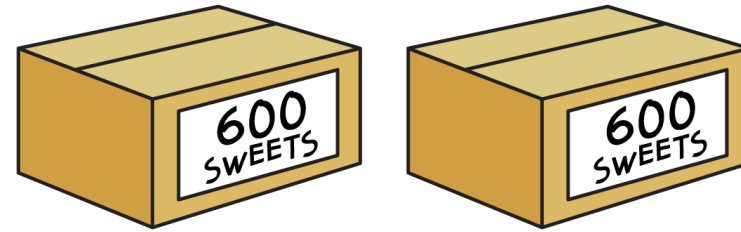
- 2 A rope measures 2.8 metres.



The rope is cut into 10 equal sized pieces.

What is the total length of 5 of these pieces?

- 3 Sweets come in boxes of 600
Danny has two boxes of sweets.



He packs the sweets into smaller bags.

There are 21 in each bag.



How many bags can Danny fill using all the sweets?

Problems of the day.

Hit space bar for answers but don't do it until you've tried!

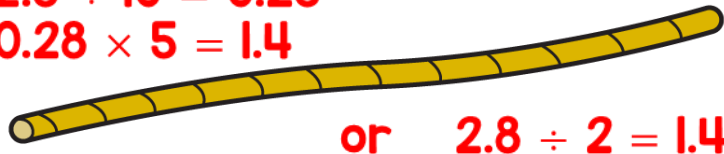
- 1 Circle all the numbers equivalent to 0.25

0.4 $\frac{50}{100}$ $\frac{25}{100}$ $\frac{1}{4}$

- 2 A rope measures 2.8 metres.

$$2.8 \div 10 = 0.28$$

$$0.28 \times 5 = 1.4$$

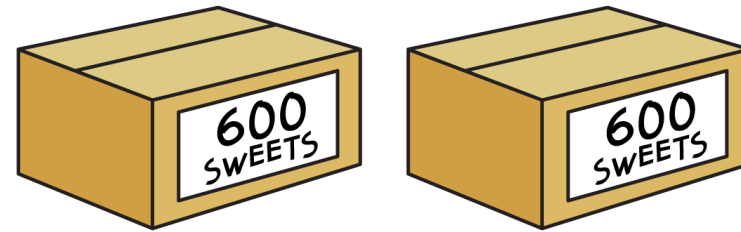


The rope is cut into 10 equal sized pieces.

What is the total length of 5 of these pieces?

The total length is 1.4 metres.

- 3 Sweets come in boxes of 600
Danny has two boxes of sweets.



$$600 \times 2 = 1,200$$

He packs the sweets into smaller bags.

There are 21 in each bag.



How many bags can Danny fill using all the sweets?

$$1,200 \div 21 = 57 \text{ r } 3$$

Danny can fill 57 bags.

Make 1 (Fractions)

- Write the fraction that can be added to each fraction to make 1 whole:

$\frac{2}{5}$		$\frac{2}{3}$		$\frac{1}{4}$	
$\frac{7}{10}$		$\frac{4}{5}$		$\frac{5}{6}$	
$\frac{1}{10}$		$\frac{3}{7}$		$\frac{11}{2}$	
$\frac{5}{12}$		$\frac{3}{8}$		$\frac{4}{15}$	
$\frac{7}{8}$		$\frac{11}{12}$		$\frac{2}{9}$	

DO NOT TURN TO THE NEXT PAGE UNTIL YOU HAVE TRIED THESE FIRST.

Make 1 (Fractions)

- Write the fraction that can be added to each fraction to make 1:

$\frac{2}{5}$	$\frac{3}{5}$	$\frac{2}{3}$	$\frac{1}{3}$	$\frac{1}{4}$	$\frac{3}{4}$
$\frac{7}{10}$	$\frac{3}{10}$	$\frac{4}{5}$	$\frac{1}{5}$	$\frac{5}{6}$	$\frac{1}{6}$
$\frac{1}{10}$	$\frac{9}{10}$	$\frac{3}{7}$	$\frac{4}{7}$	$\frac{11}{2}$	$\frac{9}{20}$
$\frac{5}{12}$	$\frac{7}{12}$	$\frac{3}{8}$	$\frac{5}{8}$	$\frac{4}{15}$	$\frac{11}{15}$
$\frac{7}{8}$	$\frac{1}{8}$	$\frac{11}{12}$	$\frac{1}{12}$	$\frac{2}{9}$	$\frac{7}{9}$

Make 1 (Decimals)

- Write the decimal that can be added to each decimal to make 1:

0.8		0.5		0.7	
0.29		0.82		0.54	
0.76		0.37		0.09	
0.782		0.012		0.287	
0.501		0.481		0.755	

DO NOT TURN TO THE NEXT PAGE UNTIL YOU HAVE TRIED THESE FIRST.

Make 1 (Decimals)

- Write the decimal that can be added to each decimal to make 1:

0.8	0.2	0.5	0.5	0.7	0.3
0.29	0.71	0.82	0.18	0.54	0.46
0.76	0.24	0.37	0.63	0.09	0.91
0.782	0.218	0.012	0.988	0.287	0.713
0.501	0.499	0.481	0.519	0.755	0.245

Make 100%

- Write the percentage that can be added to each percentage to make 100%.

30%		60%		10%	
25%		95%		55%	
91%		17%		29%	
46%		2%		69%	
88%		33%		11%	

DO NOT TURN TO THE NEXT PAGE UNTIL YOU HAVE TRIED THESE FIRST.

Make 100%

- Write the percentage that can be added to each percentage to make 100%.

30%	70%	60%	40%	10%	90%
25%	75%	95%	5%	55%	45%
91%	9%	17%	83%	29%	71%
46%	54%	2%	98%	69%	31%
88%	12%	33%	67%	11%	89%

Books

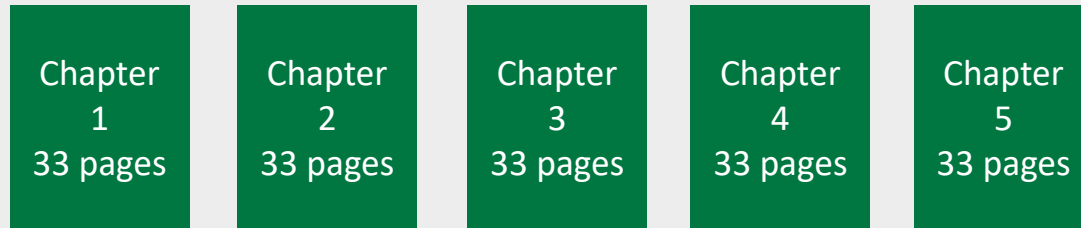
- A book has 5 chapters of equal length. The whole book has 165 pages.
- Use a drawing to show how many pages in each chapter.

How many pages in $\frac{2}{5}$ or $\frac{4}{5}$ of the book?

Isla has read 75 pages of a book. She has $\frac{2}{5}$ of the book left to read.
How many pages are left to read?

Books

- A book has 5 chapters of equal length. The whole book has 165 pages.
- Use a drawing to show how many pages in each chapter.



How many pages in $\frac{2}{5}$ or $\frac{4}{5}$ of the book?

$\frac{2}{5} = 66$ pages, $\frac{4}{5} = 132$ pages

Isla has read 75 pages of a book. She has $\frac{2}{5}$ of the book left to read.
How many pages are left to read?

50 pages left to read.

Write some of your own word problems about books for a partner to work out.

Boxes

Juice cartons are sold in boxes of 8.
The manufacturer decides to start selling the juice cartons in boxes of 5.
How many boxes of 5 juice cartons can be made from 10 boxes of 8 cartons?



Box of 8



Box of 5

Boxes

Juice cartons are sold in boxes of 8.

The manufacturer decides to start selling the juice cartons in boxes of 5.
How many boxes of 5 juice cartons can be made from 10 boxes of 8 cartons?

16 boxes of 5 cartons



80 fruit juice in 10 boxes of 8.



To find how many boxes of 5 will hold 80 fruit juice, work out

80 divided by 5 = 16 boxes of 5

Chocolate is one of the tastiest treats that people enjoy all over the world. If a particular chocolate bar costs £0.82 for 100g, how much would 150g of the same chocolate cost? Give your answer in both pounds and in pence.

We need to work out 100g + 50g of the chocolate. Since we already know what 100g is, we need to find $\frac{1}{2}$ of the original amount to find 50g and then add the two amounts together.

£0.82 for 100g
£0.41 for 50g

£1.23
and
123p

Now try this,

Butter costs 44p for 100g. How much does 150g of Butter cost?

Chocolate is one of the tastiest treats that people enjoy all over the world. If a particular chocolate bar costs £0.82 for 100g, how much would 150g of the same chocolate cost? Give your answer in both pounds and in pence.

We need to work out 100g + 50g of the chocolate. Since we already know what 100g is, we need to find $\frac{1}{2}$ of the original amount to find 50g and then add the two amounts together.

£0.82 for 100g
£0.41 for 50g

£1.23
and
123p

Now try this,

Butter costs 44p for 100g. How much does 150g of Butter cost?

66p

Example 2

Four ice-creams cost £2.20, how much would three ice-creams cost in both pounds and pence?

Step 1: calculate the cost of one ice cream.

$$£2.20 \div 4 = £0.55$$

Step 2: multiply the cost of 1 by how many have been bought

$$£0.55 \times 3 = £1.65$$

Answer = £1.65 or 165p

Tasks

Complete –

- Worksheet.

Please complete the questions in the exercise books you were given. If you cannot print the worksheet then do not worry. Just show all your working out and write the answer under today's date in your books.

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learning@wembleyprimary.brent.sch.uk

Worksheet

1. Butter costs 90p for 100g. How much does 150g of Butter cost?
2. At a running race 4 in every 12 competitors receives a medal. If there are 96 competitors how many medals will the organisers require.
3. Three quarters of the 180 pupils passed their Maths test. How many pupils failed their test?
4. For every seven girls in a school there are two boys. There are 42 girls in the school. How many boys are there?
5. Jack has 18 toy cars. For every three cars he has, he gives one away. How many cars will he have left?

6. The Prices in a cheese shop are as shown below

Cheddar Cheese 84p for 100g

Edam Cheese 60p 100g

Cottage Cheese 48p 100g

Eleanor buys 25g of Cheddar, 10g of Edam and 275g of Cottage cheese. Calculate Eleanor's total bill.

7. A school has 1500 pupils of which $\frac{7}{15}$ are girls. Calculate the following.

- a) The fraction that are boys.
- b) The number of boys at the school.

Friday 8th May 2020

L.O. – To solve investigations from the week.

This is the opportunity to use the knowledge that you have learnt throughout the week to use in an investigation.

This is a great chance for you to challenge yourself and ask yourself questions to push your understanding further.

Problems of the day.

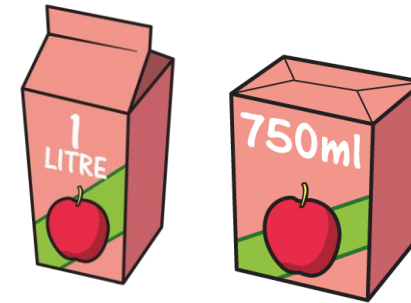
Hit space bar for answers but don't do it until you've tried!

1 On a bookcase

- $\frac{5}{8}$ of the books are fiction books.
- The rest are non-fiction.
- There are 72 non-fiction books.

How many books are fiction?

2 Amir has two cartons of apple juice.



He shares all the juice equally between these glasses.



How much apple juice does he pour into each glass?

Problems of the day.

Hit space bar for answers but don't do it until you've tried!

1 On a bookcase

- $\frac{5}{8}$ of the books are fiction books.
- The rest are non-fiction.
- There are 72 non-fiction books.

How many books are fiction?

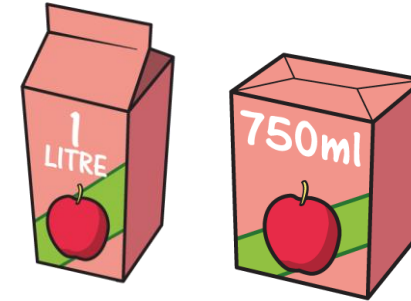
$$\text{Non-fiction} = \frac{3}{8}$$

$$72 \div 3 = 24$$

$$24 \times 5 = 120$$

120 books are fiction.

2 Amir has two cartons of apple juice.



He shares all the juice equally
between these glasses.

$$1,750 \div 5 = 350$$



How much apple juice does he pour
into each glass?

He pours 350 ml into each glass.

Tasks

Complete –

- Worksheet.

Please complete the questions in the exercise books you were given. If you cannot print the worksheet then do not worry. Just show all your working out and write the answer under today's date in your books.

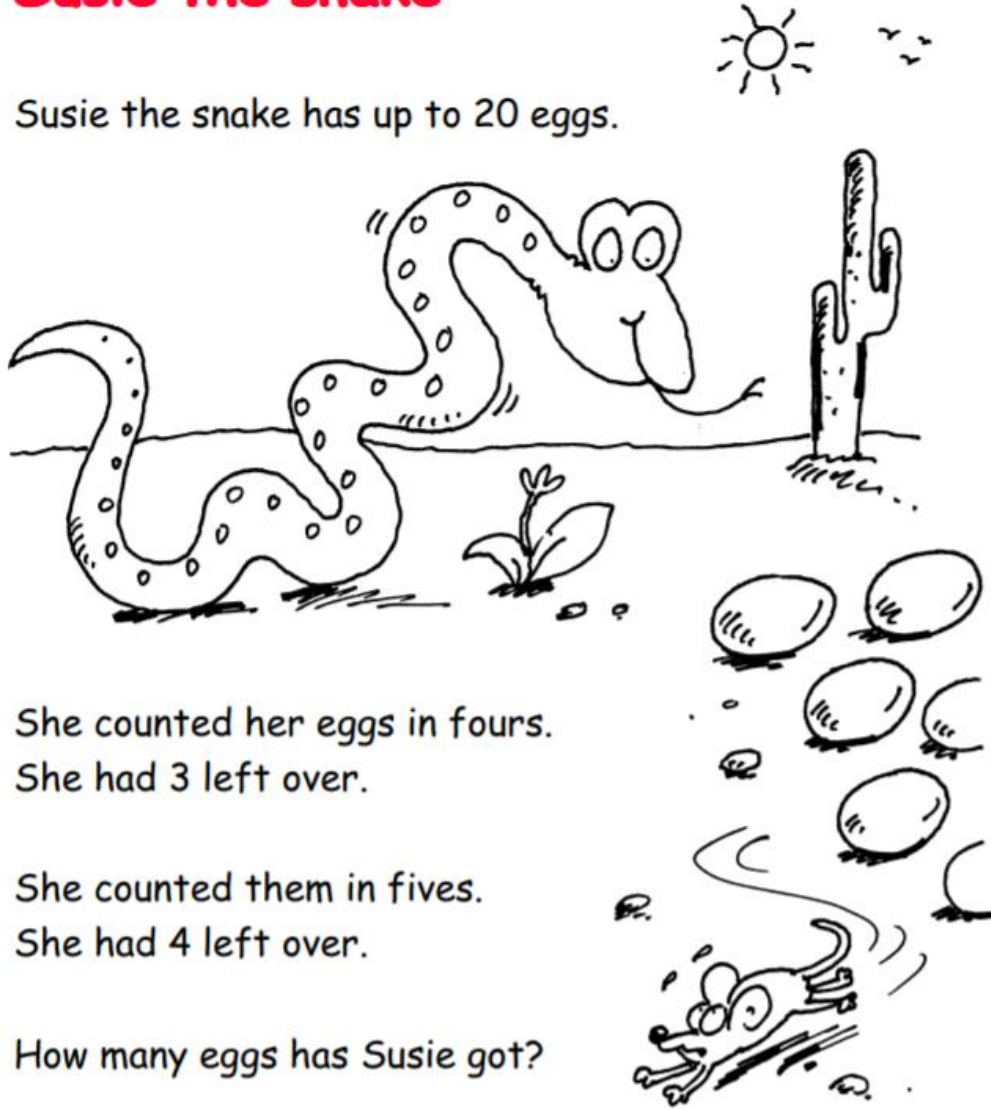
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Worksheet

Susie the snake

Susie the snake has up to 20 eggs.



She counted her eggs in fours.
She had 3 left over.

She counted them in fives.
She had 4 left over.

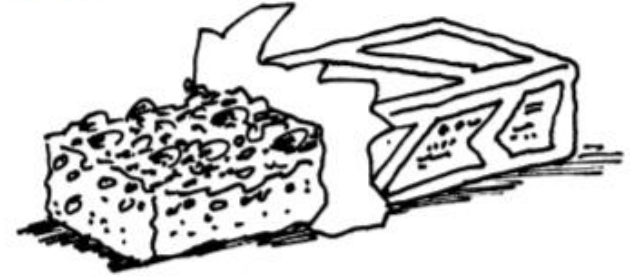
How many eggs has Susie got?

Spendthrift

Choc bars cost 26p each.



Fruit bars cost 18p each.



Anil spent exactly £5 on a mixture of choc bars and fruit bars.

How many of each did he buy?