

How can I help my child in Maths?



# How can I help my child in Maths?

SATs

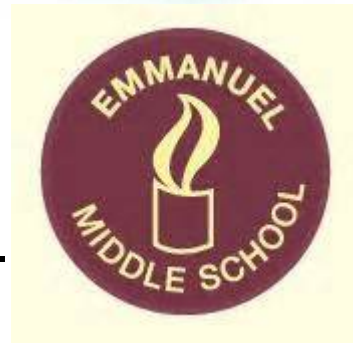


Designed to test the children have good **fluency**, articulate mathematical **reasoning** skills and secure **problem solving** strategies.



How can I help my child in Maths?

Standard assessment tests - SATs - May 2019.



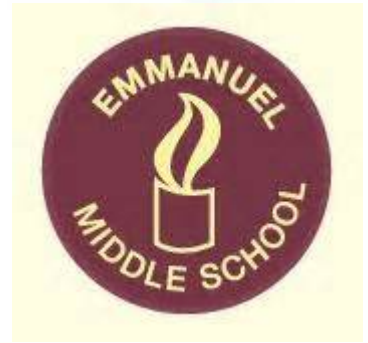
Paper 1 - Arithmetic - 30 minutes - 36 questions (no mental test)

Paper 2 - Reasoning - 40 minutes

Paper 3 - Reasoning - 40 minutes (no calculator test)



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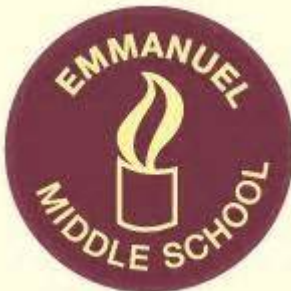


What will these tests be like?





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<b>29</b>					6	7	8										
	x				5	4											
Show your method	<hr/>																

2 marks



# How can I help my child in Maths?



33

$$1\frac{1}{5} - \frac{1}{4} =$$

A large grid of 20 columns and 10 rows, intended for students to show their working out for the subtraction problem. The grid is composed of light blue lines on a white background.A rectangular box with a blue border, located at the bottom right of the grid, intended for the student to write the final answer to the problem.A small, empty square box with a black border, located to the right of the grid, used for marking the question.

1 mark



# How can I help my child in Maths?



34																							
Show your method	3	7	2	3	3	1																	

2 marks



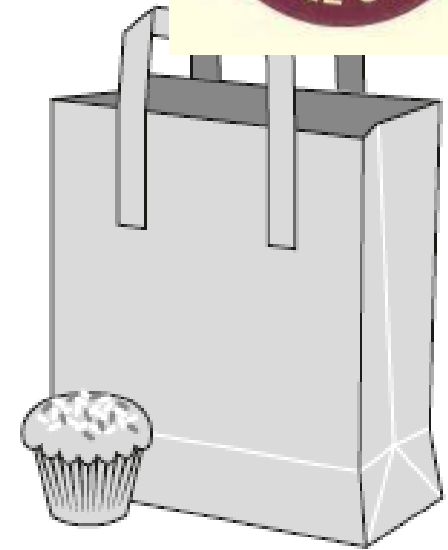


# How can I help my child in Maths?

8

Maria bakes cakes and sells them in bags.

She uses this formula to work out how much to charge for one bag of cakes.



$$\text{Cost} = \text{number of cakes} \times 20\text{p} + 15\text{p for the bag}$$

How much will a bag of 12 cakes cost?

$$12 \times 20\text{p} = 240\text{p} \\ + 15\text{p}$$

£ 2.55

# How can I help my child in Maths?



$$\text{Cost} = \text{number of cakes} \times 20\text{p} + 15\text{p for the bag}$$

Olivia buys a bag of cakes for £5.15

Use the formula to calculate how many cakes are in the bag.

Show  
your  
method

$$25 \cdot 15 - 15\text{p} = \text{£}5$$

$$500\text{p} \div 20\text{p} = 25$$

25 cakes

# How can I help my child in Maths?



$$\text{Cost} = \text{number of cakes} \times 20\text{p} + 15\text{p for the bag}$$

Olivia buys a bag of cakes for £5.15

Number  
Sense

Use the formula to calculate how many cakes are in the bag.

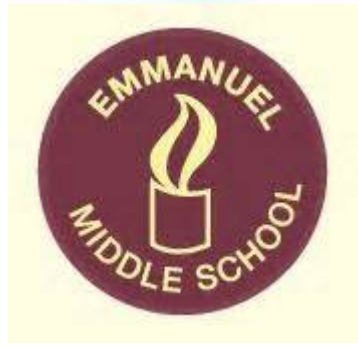
$$25 \cdot 15 - 15\text{p} = \text{£}5$$

$$500\text{p} \div 20\text{p} = 25$$

Show  
your  
method

25 cakes

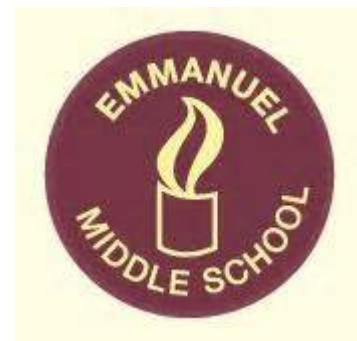
How can I help my child in Maths?



How can I help my child in Maths?

Adding 1 digit numbers (needed in a wide range of Mathematical areas but also for column addition and multiplication).

Once these are known with instant recall, move onto adding a 1 digit number to any 2 or 3 digit number. E.g. if  $6 + 8 = 14$  then  $86 + 8 = 94$



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**Subtracting a 1 digit number from a number between 1-19** (regularly needed in problem solving but also for column subtraction):

e.g.

$$8 - 3 =$$

$$13 - 7 =$$

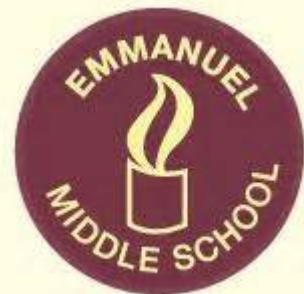
$$15 - 8 =$$



How can I help my child in Maths?

**Know all your times tables and related division facts up to 12 x 12.**

**It** is a government expectation that all children know all their times tables and related division facts up to 12 x 12 by the end of Year 4. This means being able to quickly know that  $7 \times 8 = 56$  and also that  $96 \div 12 = 8$ .



# How can I help my child in Maths?

**Know all your times tables and related division facts up to 12 x 12.**

*What if the times table facts just won't stick?!*

If you don't know what  $6 \times 8$  is, do you know what  $3 \times 8$  is? If so, double  $3 \times 8$  to get  $6 \times 8$ . There are many ways to quickly calculate unknown tables if you use the knowledge you already have.





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12

$50 \times 70 =$

A large grid of 10 columns and 8 rows, outlined in red, intended for a child to show their working out for the multiplication problem.

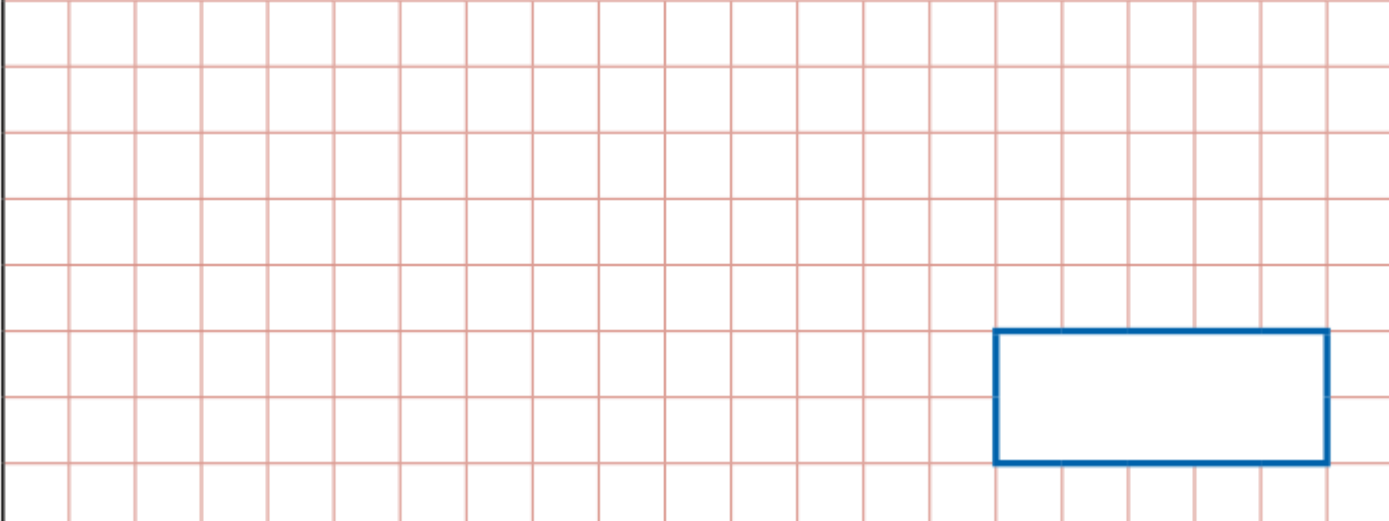
A blue rectangular box located at the bottom right of the grid, intended for the child to write the final answer to the multiplication problem.

A small white square box with a black border, located in the bottom right corner of the page, used for marking the question.

1 mark



# How can I help my child in Maths?

<b>22</b>	$1,320 \div 12 =$  <input type="text"/>	<input type="checkbox"/> 1 mark
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# How can I help my child in Maths?



< Log Out

Tables

Stats

About

Squeebles

Bubble-Ball

Hello, Jack!

Which game would you like to play?




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< Bubble-Ball Home

## 2. Choose Your Squeeble

Bubble-Ball Squeeble Flipfish



Name: Baz


Speed: 79 Spin: 82 CF: Pink

Choose and Continue >

Trade in Stars

1. Change Bubble-Ball
2. Change Squeeble
3. Change Flipfish

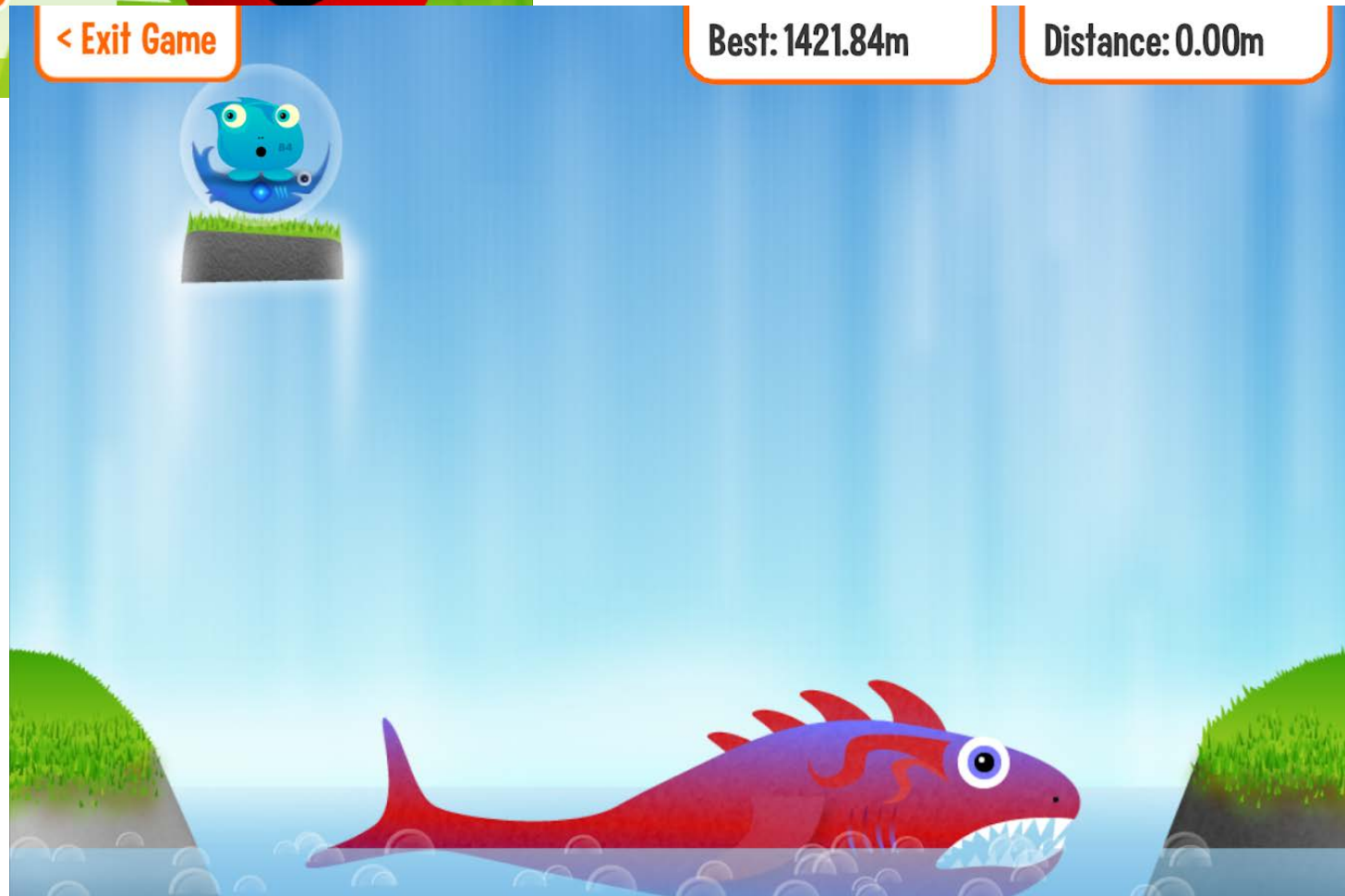
PLAY >



< Exit Game

Best: 1421.84m

Distance: 0.00m



# How can I help my child in Maths?

**Quick recall of number bonds up to 100 and 1000** (used in many problem solving contexts – especially where subtraction is required).

*Dave bought a pen for 67p and paid with a £1 coin, how much change did he get?*

*Brian weighs 60 kg. Simon weighs 53 kg and 230 grams. How much more does Brian weigh?*



How can I help my child in Maths?



An introduction / myth busting...

*(+ more to help you help with homework...)*





# How can I help my child in Maths?

Key philosophies:

being able to use multiple methods

use diagrams or explanations to *show* understanding

bar modelling to support calculating or problem solving



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e.g.  $300 - 124 =$

$$\begin{array}{r} 300 \\ - 124 \\ \hline \end{array}$$



How can I help my child in Maths?

$$300 - 124 =$$

+76

+100

---

124

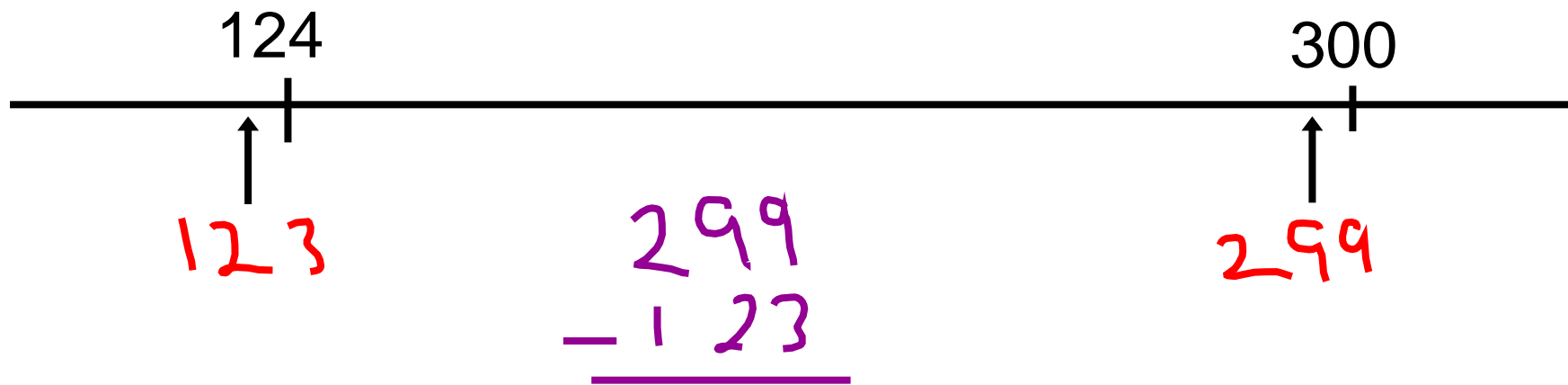
200

300



How can I help my child in Maths?

$$300 - 124 =$$



How can I help my child in Maths?

Use diagrams or explanations to *show* understanding.

*"I know the answer already so I don't need to write an explanation or draw a diagram."*



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Steve has a  $\frac{1}{4}$  of a cake and shares it between 3 of his friends. How much of the original cake does each friend get?



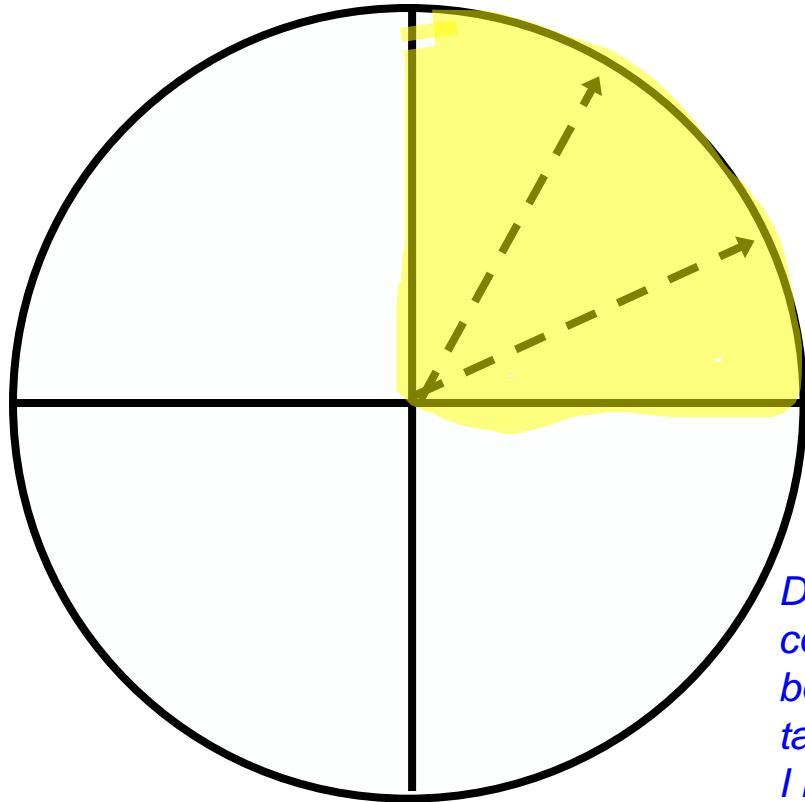
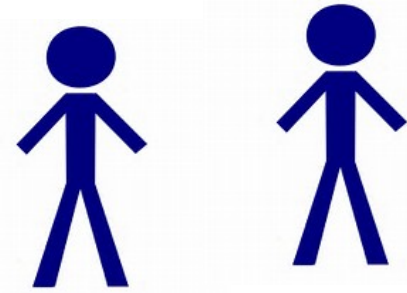
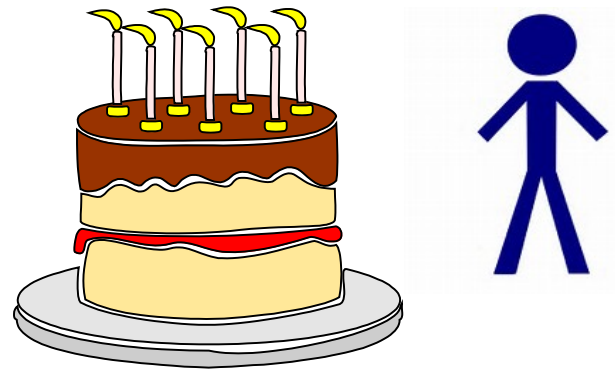
# How can I help my child in Maths?

$$\frac{1}{4} \div 3 =$$

Mmmm, which of the fractions rules do I use here?  
How will I be able to check if my answer makes sense?



Steve has a  $\frac{1}{4}$  of a cake and shares it between 3 of his friends. How much of the original cake does each friend get?



=  $\frac{1}{4}$  of the cake

*Divide the quarter into 3 parts - each friend has one of those parts. If you continued this with the other 3 quarters of the cake the whole cake would be cut into 12 pieces. Each friend takes 1 of those 12 pieces so they take  $\frac{1}{12}$  each.*

*It looks like the denominator of the answer is the original denominator x the divisor*

$$\frac{1}{4} \div 3 = \frac{1}{12}$$



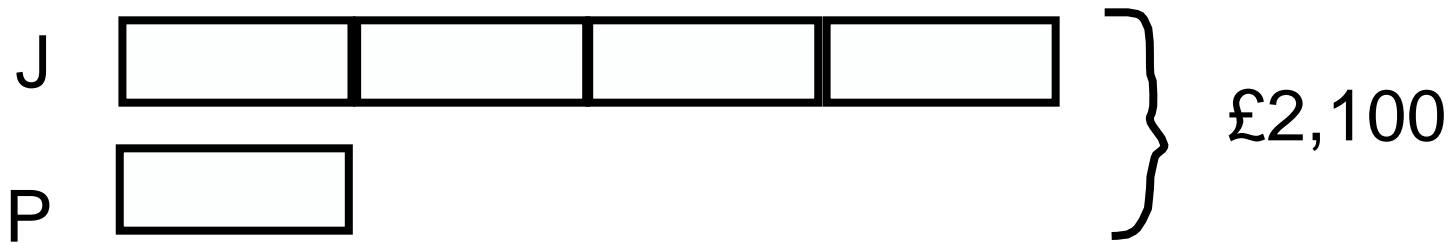
How can I help my child in Maths?

Jane and Peter have £2100 between them in savings. Jane has 4 times more money saved than Peter. How much more has Jane saved than Peter?



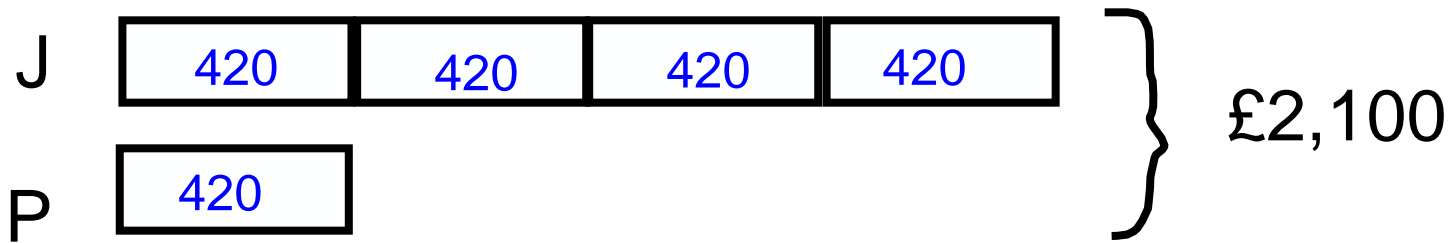
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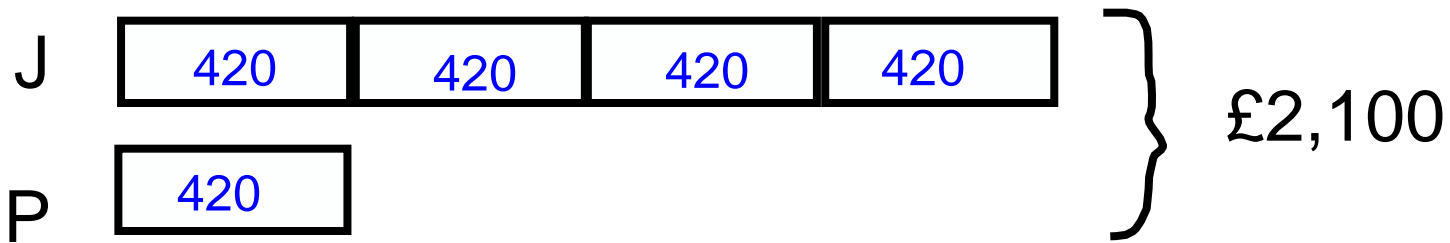
$$J = £420 \times 4 = £1,680$$

$$P = £420$$



# How can I help my child in Maths?

Jane and Peter have £2100 between them in savings. Jane has 4 times more money saved than Peter. How much more has Jane saved than Peter?



$$J = £420 \times 4 = £1,680$$

$$P = £420$$

$$£1,680 - £420 = £1,260$$

*Jane has saved £1,260 more than Peter.*

