

Education begins at home



Maths resources for parents

Key Stage 3 - 11 to 14 year olds



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Introduction

These resources are to be used in conjunction with our online videos which can be found at www.facebook.com/beginsathome. The resources are intended for parents and carers who wish to support their child with maths at home. There are a number of different methods used by teachers across the curriculum, so always check with your child's maths teacher which method is relevant.



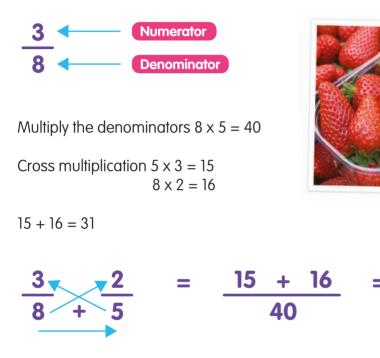
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Key Stage 3 - 11 to 14 year olds Fractions

Lowri took 3/8 (three eighths) of a punnet of strawberries and Sara took 2/5 (two fifths) of the punnet. Between them what fraction of the strawberries do Lowri and Sara have?



Therefore they have 31/40 of the strawberries between them.

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31

40

Key Stage 3 - 11 to 14 year olds Decimals

A rectangular cupboard measures 0.8m by 0.9m. What is the area of the floor of the cupboard?

This is a multiplication of 0.8 and 0.9 to find the area.

0.8 x 0.9

Change this to a sum we know

8 x 9 = 72

We have made both the 0.8 and 0.9 ten times bigger so we now need to move the decimal points back in.

$$0.8 \times 0.9 = 0.72 \text{ m}^2$$





Key Stage 3 - 11 to 14 year olds Percentages

A bike has increased in value by 40%. It's original value was $\pounds 255$. What is the new value?

40% is the same as 10% + 10% + 10% + 10%

10% of £255 is £25.50

40% = £102

The bike has increased in value:

£255 + £102 = £357

So the value of the bike is now £357.



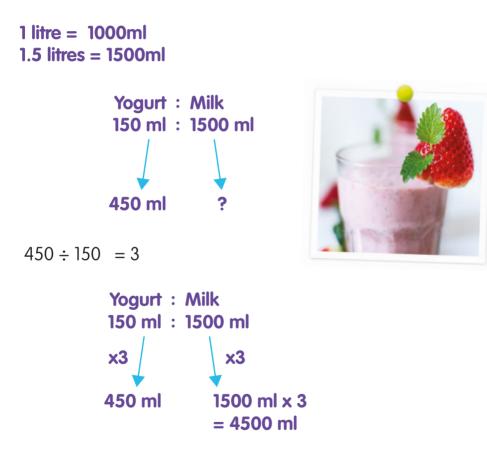
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Key Stage 3 - 11 to 14 year olds Ratios

Marian makes a fruit smoothie made up of fruit and 150 ml of yogurt mixed with 1.5litres of milk. Marian has 450ml of fruit smoothie. How much milk will she need?



So Marian will need 4500ml of milk to make this fruit smoothie. This can also be written as 4.5 litres.



Useful information

Ask your child's teacher about the latest apps, games and websites to help your child with maths, here are some suggested apps and websites.

Apps and Games

MathRef* The MathPage* Tiwtor Mathemateg Ap Sgìl-iau Welsh apps with fun maths activities - www.ginormous.solutions/cym

Websites

Hwb – The learning platform, full of useful resources.

http://hwb.wales.gov.uk

National Numeracy^{*} – The National Numeracy Family Maths Toolkit is full of ideas and free activities to help families enjoy maths together. http://www.nationalnumeracy.org.uk/family-maths-toolkit

Bitesize – The BBC's free online resource to help children in the UK with their school work, search by subject. www.bbc.co.uk/bitesize

Top Marks* – Useful website with maths calculations, search by age and topic. http://www.topmarks.co.uk/maths-games

WJEC – Useful maths resources including past exam papers.

http://www.wjec.co.uk/students/past-papers

Mathemateg – A Welsh site full of resources to help your child with their maths. http://www.mathemateg.com

Mathemateg Sylfaenol – A useful Welsh site with maths resources. http://www.14-19nw.org.uk

*Please note these are only available in English

