

Maths Takeaway



This month's special

DIY



Did you know ...

- Money spent on DIY and garden products nearly doubled in the ten years from 1993 to 2003 from £8.7 billion to £16 billion.

www.bized.co.uk/current/leisure/2003_4/290304.htm

- In 1999 – the last time nationally updated statistics were made available – there were 200,000 DIY injuries in the UK and 70 deaths. There were 2,506 accidents with power drills, 1,920 with circular saws and 622 with chainsaws.

www.uknetguide.co.uk/Homes_and_Gardens/Article/DIY_Advice.html

- Nearly half of women say that they do not do DIY repair work, compared with 16% of men. However, roles are much more equal in both decorating and gardening.

www.statistics.gov.uk/cci/nugget.asp?id=288



Starters

Can you ...

- use millimetres to work out if your new washing machine will fit into a space in the kitchen?
- work out how much undercoat you will need to paint the bedroom door?
- calculate the area of your living room in order to buy a new carpet?
- decide how much gravel you will need to cover an area in your garden?
- work out the ratio of sand and mortar you need to make cement?
- buy the right size washer to repair your kitchen tap?

You can check out your maths skills further by doing the mini-test at:

www.move-on.org.uk/testyourskills.asp

You can join a free group to improve your maths and gain a national qualification. Ask at the library, your local college or learning centre, ring 0800 100 900 or look on the Move On web site to find a local test centre.

Main course

What unit?

We still use a mix of metric and imperial units for DIY and sometimes prices or sizes are given for both measurements. It's important to know which units you have used to measure with and to check the units used in the store.

Look at these different items – at home or in the DIY store – and tick which ones use metric units, which ones are in imperial units and which give both.

Tape measures

Metric	Imperial	Both
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Floor covering

Metric	Imperial	Both
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Screw sizes

Metric	Imperial	Both
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Kitchen units

Metric	Imperial	Both
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Check out metric and imperial units for length and play the measuring game at www.bbc.co.uk/skillswise/e3/numbers/measureshapespace/length.

Specials

How much paint?

- Measure the height of the walls.
- Measure the distance around the edge of the room (the perimeter) or the width of each wall.
- Measure the height and width of the door(s) and window(s).
- Find the surface area of the walls to be painted.
- Take away the surface area of any doors and windows.
- Look up how much surface area one tin of paint will cover.
- Divide this amount into the surface area you need to paint.
- Multiply by the number of coats you need.
- If you are estimating, round up to make sure you have enough.

You will need to do the measuring, but you can use a paint calculator to work out the rest for you!

Try www.dulux.co.uk/advice/paint_calculator/page2.jsp?location=intwalls&Submit.x=27&Submit.y=10 or www.paintquality.com/diy/calculator/calc.html if you prefer to use imperial measurements.



Set menu

Test questions

- 1 You are measuring a window for a new curtain track. You need 25 mm extra at each end of the window. The window itself is 60 cm wide. How much curtain track do you need?
(There are two correct answers.)
A 65 cm B 625 mm
C 6.25 cm D 650 mm
- 2 Screws come in different diameters (gauges) and different lengths. They also come in metric and imperial lengths!

Gauge or diameter	Length (mm)	Length (inches)
3 mm or imperial gauge 4	12 mm	1/2 "
	16 mm	5/8 "
	20 mm	3/4 "
	25 mm	1 "
	30 mm	1 1/4 "
	40 mm	1 1/2 "

The metric equivalent to a gauge 4 one inch screw is:

- A 3 mm diameter and 20 mm long
- B 4 mm diameter and 40 mm long
- C 3 mm diameter and 25 mm long
- D 4 mm diameter and 25 mm long

If you would like to try more questions at this level, go to Stop 4 of the Move Up Teacher Route on the Move On web site to try out the Move Up test.

Extras

Grin or Groan?

Jill asked her neighbour how much paint he had bought to decorate his hall, stairs and landing. He told her and she bought the same amount. After completing the job he asked her how it had gone. 'Fine' Jill said, 'but I've got two full cans left.' 'That's funny' replied her neighbour, 'so have I.'

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My dog's a blacksmith. Every time we open the front door he makes a bolt for it

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On an electrician's truck: 'Let us remove your shorts.'

Resources for tutors

Resources are available to download from www.move-on.org.uk. Register on the site to access the Move Up Teacher Route at www.move-on.org.uk/mu_route.asp.

If you have any resources, jokes, quizzes, games, etc., about gardening, please e-mail info@move-on.org.uk.

If the ideas on this page have encouraged you, or someone you work with, to try out some maths, please let us know.