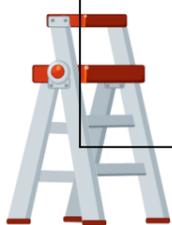
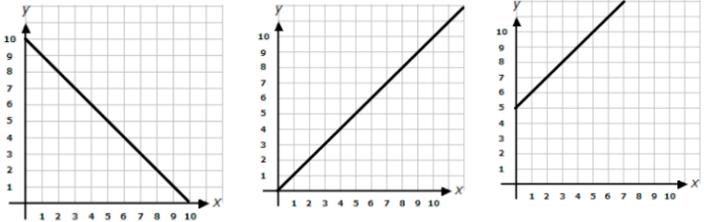
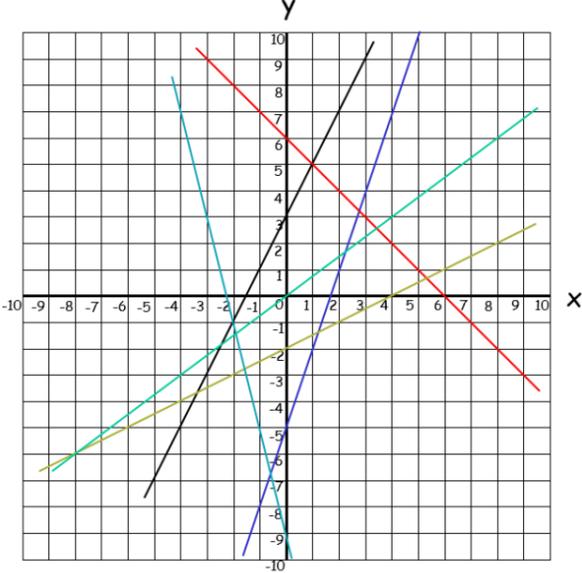
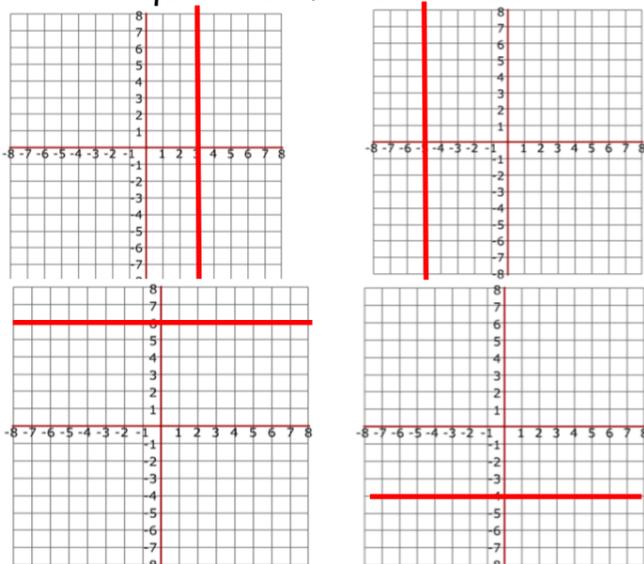


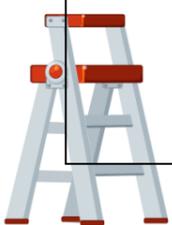
Percentage	I can ...	Prove it!															
	<b>4.4 I can use scales to solve distance and area problems</b>	The area of the Atlantic Ocean is $8.17 \times 10^7 \text{ km}^2$ and the area of the Pacific Ocean is $1.66 \times 10^8 \text{ km}^2$ . a. Which ocean is bigger? b. What is the difference in size between the two oceans?															
	<b>4.3 I can use standard form to solve simple problems</b>	1. The speed of light is approximately $2.998 \times 10^8 \text{ ms}^{-1}$ . How far can light travel in: a. 40 seconds                      b. 5 minutes c. 7 hours                              d. 1 day  2. An advertiser does an experiment to show how effective a disinfectant is against germs. In the experiment there are $1.001 \times 10^9$ germs in a petri dish. The disinfectant kills $9.999 \times 10^8$ germs. The advertiser claims the disinfectant "kills nearly all germs". Is this a reasonable claim? Show your working.															
	<b>4.2 I can solve problems involving indirect proportion</b>	1. In a science experiment, $p$ is found to be inversely proportional to $t$ . When $p = 34.2$ , $t = 0.9$ Find $t$ when $p = 47.8$  2. The pressure of water from a hose is inversely proportional to the square of the hose radius. For a hose of radius 1.5cm, the water pressure is 40 Pa. What hose radius do you need for a pressure of 70 Pa?															
	<b>3.1 I can solve problems involving direct proportion</b>	<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;"><b>PAINT PRICES</b></p> <p>Calculate the missing prices of the paint cans below. The prices are proportional to the amount of paint in the can.</p> <div style="text-align: center;"> </div> <table style="width: 100%; text-align: center; margin-top: 10px;"> <tr> <td>£ ...</td> <td>£ ...</td> <td>£15</td> <td>£ ...</td> <td>£ ...</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>0.6 litres</td> <td>0.75 litres</td> <td>1 litre</td> <td>2.5 litres</td> <td>4.54 litres (1 gallon)</td> </tr> </table> </div>	£ ...	£ ...	£15	£ ...	£ ...						0.6 litres	0.75 litres	1 litre	2.5 litres	4.54 litres (1 gallon)
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	<b>4.1 I can use standard form to express very large and very small numbers</b> <b>4.2 I can order numbers in standard form</b>	Put the following numbers in size order (smallest to largest) <i>Hint: Either convert them all to standard form or convert them all to normal numbers</i> 1. $6 \times 10^3, 0.076, 9.2 \times 10^4, 4 \times 10^{-3}, 67000$ 2. $0.09, 5 \times 10^{-3}, 0.5, 8 \times 10^{-4}, 5.4 \times 10^{-2}$ 3. $45000, 4 \times 10^5, 5.7 \times 10^{-6}, 9 \times 10^{-8}, 2 \times 10^7$ 4. $0.004, 3 \times 10^{-2}, 0.09, 8 \times 10^{-4}, 6.4 \times 10^{-3}$															



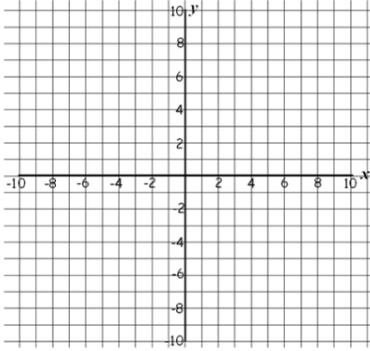
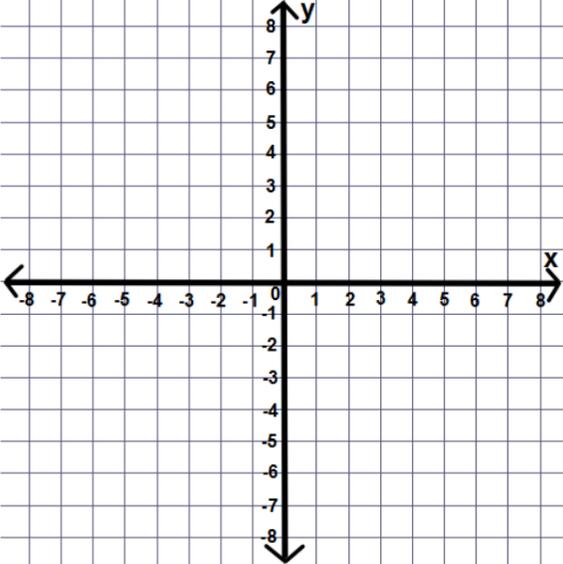
Percentage	I can ...	Prove it!
 <p>76%</p>	<p>2.6 I can interpret real life linear graphs</p>	<p>Match each statement to a graph below</p> <p>a) Height of a 10cm candle burning to nothing after 10 minutes.</p> <p>b) The amount of money your friend will owe you if you lend them £5 and charge them £1/day interest.</p> <p>c) Every year an Oak tree grows by 1 metre.</p> 
 <p>72%</p>	<p>2.5 I can identify parallel and perpendicular lines</p>	<p>Write the equations of three lines which are parallel to the lines below:</p> <p>a) <math>y = 2x + 8</math></p> <p>b) <math>2x + y = 8</math></p> <p>c) <math>1/2x - 8 = y</math></p> <p>Now write three lines which are perpendicular to the lines above.</p>
 <p>68%</p>	<p>1.3 I can solve problems with co-ordinates</p>	<p>Draw a set of axes to help you answer the questions below:</p> <p>1. (1,3) (5,3)(5,7) are 3 vertices of a rectangle. Plot these points.</p> <p>a) What is the co-ordinate of the last vertices?</p> <p>b) What are the co-ordinates of the midpoint of each side? Plot and label each one.</p> <p>b) What is the co-ordinate of the centre of the rectangle?</p> <p>2. (-3,4)(-2,1)(-5,0) are 3 vertices of a square. Plot these points.</p> <p>a) What is the co-ordinate of the missing vertices?</p> <p>b) What is the co-ordinate of the centre of the square?</p> <p>3. Plot (-4,-3)(5,-7) and draw a line between them.</p> <p>Plot (-4,-8)(5,-7) and draw a line between them.</p> <p>What is the co-ordinate of the point of intersection?</p>



Percentage	I can ...	Prove it!																											
 <p>64%</p>	<p>2.4 I can identify the equation of a line using <math>y=mx + c</math></p>	 <p>Match up the straight lines with equations below:</p> <ol style="list-style-type: none"> <li><math>y = 2x + 3</math></li> <li><math>y = 3x - 5</math></li> <li><math>y = -x + 6</math></li> <li><math>y = \frac{1}{2}x - 2</math></li> <li><math>y = -4x - 9</math></li> <li><math>y = \frac{3}{4}x</math></li> </ol>																											
 <p>60%</p>	<p>2.3 I can identify the features of a linear graph</p>	<table border="1"> <thead> <tr> <th data-bbox="1136 1427 1394 1576">Equation</th> <th data-bbox="1394 1427 1661 1576">Gradient (steepness)</th> <th data-bbox="1661 1427 1919 1576">Y Intercept (where line hits y axis)</th> </tr> </thead> <tbody> <tr> <td data-bbox="1136 1576 1394 1656"><math>y=2x + 1</math></td> <td data-bbox="1394 1576 1661 1656">2</td> <td data-bbox="1661 1576 1919 1656">1</td> </tr> <tr> <td data-bbox="1136 1656 1394 1736"><math>y=4x + 3</math></td> <td data-bbox="1394 1656 1661 1736"></td> <td data-bbox="1661 1656 1919 1736"></td> </tr> <tr> <td data-bbox="1136 1736 1394 1816"><math>y=6x + 5</math></td> <td data-bbox="1394 1736 1661 1816"></td> <td data-bbox="1661 1736 1919 1816"></td> </tr> <tr> <td data-bbox="1136 1816 1394 1896"><math>y=2x - 1</math></td> <td data-bbox="1394 1816 1661 1896"></td> <td data-bbox="1661 1816 1919 1896"></td> </tr> <tr> <td data-bbox="1136 1896 1394 1976"><math>y=x + 5</math></td> <td data-bbox="1394 1896 1661 1976"></td> <td data-bbox="1661 1896 1919 1976"></td> </tr> <tr> <td data-bbox="1136 1976 1394 2056"><math>y= 4x - 3.5</math></td> <td data-bbox="1394 1976 1661 2056"></td> <td data-bbox="1661 1976 1919 2056"></td> </tr> <tr> <td data-bbox="1136 2056 1394 2136"><math>y = 5x - 5</math></td> <td data-bbox="1394 2056 1661 2136"></td> <td data-bbox="1661 2056 1919 2136"></td> </tr> <tr> <td data-bbox="1136 2136 1394 2205"><math>y= -6x + 2.5</math></td> <td data-bbox="1394 2136 1661 2205"></td> <td data-bbox="1661 2136 1919 2205"></td> </tr> </tbody> </table>	Equation	Gradient (steepness)	Y Intercept (where line hits y axis)	$y=2x + 1$	2	1	$y=4x + 3$			$y=6x + 5$			$y=2x - 1$			$y=x + 5$			$y= 4x - 3.5$			$y = 5x - 5$			$y= -6x + 2.5$		
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 <p>56%</p>	<p>2.1 I can identify equations of horizontal and vertical lines</p>	<p>Find the equations of the lines below:</p> 																											



# What's the point of a graph?

Percentage	I can ...	Prove it!																																																																								
 <p>52%</p>	1.2 I can find the midpoint of a line	Find the midpoint of the lines below: a) (-6,-6) (-2,-2) b) (-10, 5) (-6,3) c) (12,-4) (6, -2) d) (4,-2) (-3,6) e) (-7,-7) (-4,6) f) (18, -27) (-1,-22)																																																																								
 <p>48%</p>	2.2 I can plot co-ordinates to generate a straight line	Fill in the tables below and plot the co-ordinates of each straight line <table border="1" style="margin-top: 10px;"> <tr><td colspan="8" style="text-align: center;"><math>y = x</math></td></tr> <tr><td>x</td><td>-8</td><td>-5</td><td>-2</td><td>0</td><td>2</td><td>5</td><td>8</td></tr> <tr><td>y</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table> <table border="1" style="margin-top: 10px;"> <tr><td colspan="8" style="text-align: center;"><math>y = 2x</math></td></tr> <tr><td>x</td><td>-5</td><td>-3</td><td>-1</td><td>0</td><td>1</td><td>3</td><td>6</td></tr> <tr><td>y</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table> <table border="1" style="margin-top: 10px;"> <tr><td colspan="8" style="text-align: center;"><math>y = 3x</math></td></tr> <tr><td>x</td><td>-3</td><td>-2</td><td>-1</td><td>0</td><td>1</td><td>2</td><td>3</td></tr> <tr><td>y</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table> 	$y = x$								x	-8	-5	-2	0	2	5	8	y								$y = 2x$								x	-5	-3	-1	0	1	3	6	y								$y = 3x$								x	-3	-2	-1	0	1	2	3	y							
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 <p>44%</p>	1.1 I can plot co-ordinates in all four quadrants	2. Plot the points and join them <i>in order</i> with a straight line. <table border="1" style="margin-top: 10px;"> <tr><td>(4, 6)</td></tr> <tr><td>(1, 1)</td></tr> <tr><td>(6, 4)</td></tr> <tr><td>(4, 0)</td></tr> <tr><td>(6, -4)</td></tr> <tr><td>(1, -1)</td></tr> <tr><td>(4, -6)</td></tr> <tr><td>(0, -4)</td></tr> <tr><td>(-4, -6)</td></tr> <tr><td>(-1, -1)</td></tr> <tr><td>(-6, -4)</td></tr> <tr><td>(-4, 0)</td></tr> <tr><td>(-6, 4)</td></tr> <tr><td>(-1, 1)</td></tr> <tr><td>(-4, 6)</td></tr> <tr><td>(0, 4)</td></tr> <tr><td>(4, 6)</td></tr> </table> 	(4, 6)	(1, 1)	(6, 4)	(4, 0)	(6, -4)	(1, -1)	(4, -6)	(0, -4)	(-4, -6)	(-1, -1)	(-6, -4)	(-4, 0)	(-6, 4)	(-1, 1)	(-4, 6)	(0, 4)	(4, 6)																																																							
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### Key Words:

- Parallel
- Perpendicular
- Gradient
- Co-ordinate
- Axis
- Inverse proportion
- Direct proportion
- Midpoint
- Horizontal
- Vertical
- Equation
- $y = mx + c$

