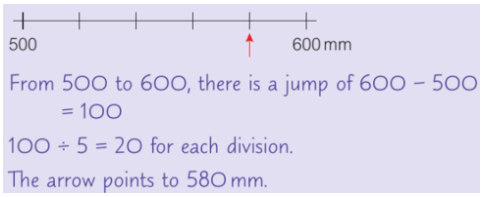
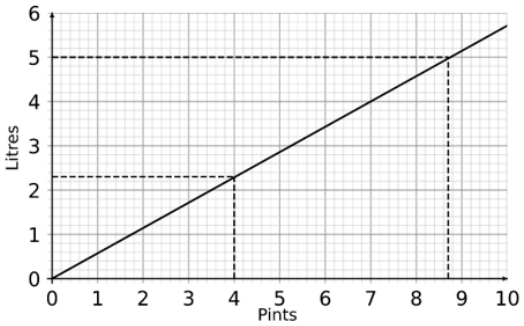
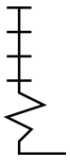
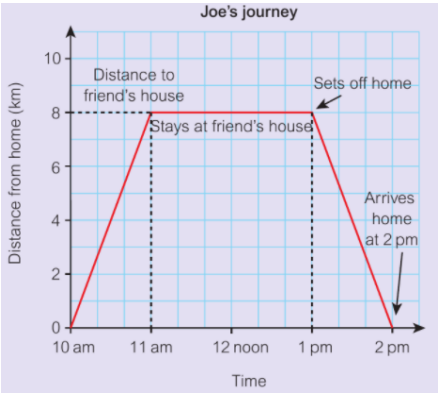
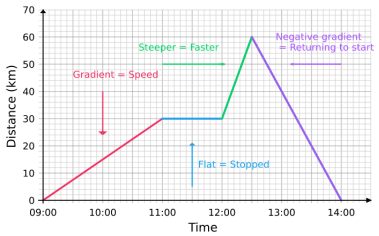
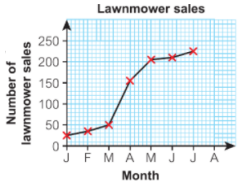
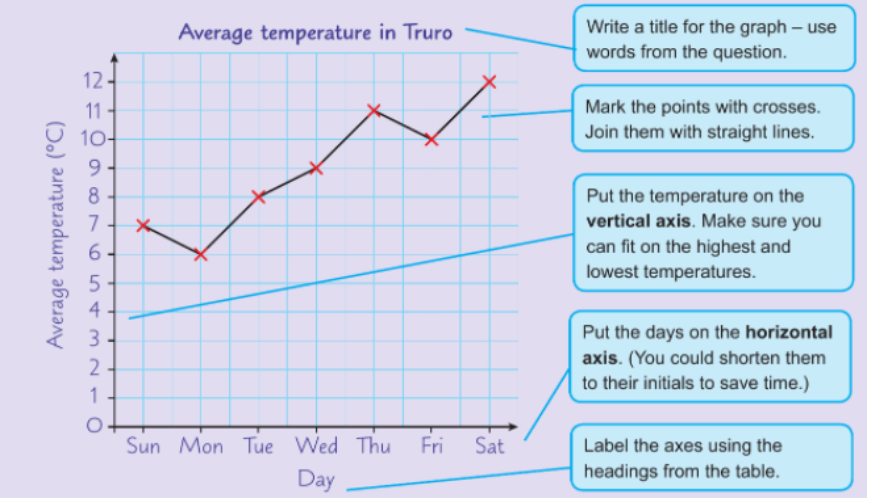
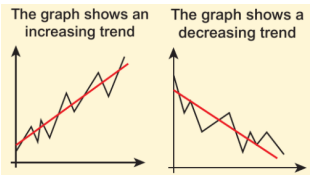
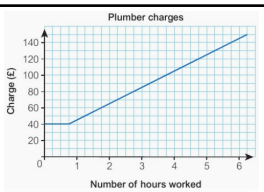
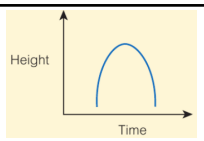
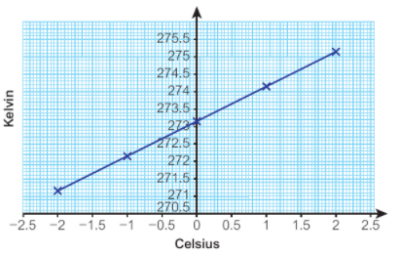
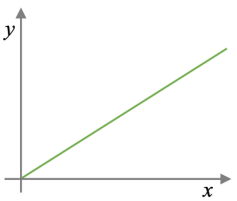
Prior Knowledge			
1	Metric conversions	3.5km = 3.5 x 1000 = 3500m Multiply to go to a smaller unit of measure 56mm = 56 ÷ 10 = 5.6cm Divide to go to a bigger unit of measure	Length: 1km = 1000m 1m = 1000mm 1m = 100cm 1cm = 10mm Mass: 1 tonne (t) = 1000kg 1kg = 1000g Capacity: 1 litre = 1000ml 1ml = $1cm^3$
2	Reading scales		Count the gaps, divide the known units by the number of gaps to find what each division represents.
Core Knowledge			
3	Conversion graph		A conversion graph converts values from one unit to another. This graph can be used to convert between pints and litres. Check the scale on both axes. To convert from pints use a ruler to draw a line up from the horizontal axis then across to the vertical axis. To convert from litres use a ruler to draw a line across from the vertical axis then down to the horizontal axis.
4	Axis break		A zigzag line on the axis shows the axis has missing values. This is used to save space and make graphs more readable. They can be used on both axes.
5	Distance-time graph		Time on horizontal axis Distance on vertical axis Horizontal line shows no movement.
6	Gradient		Gradient describes the steepness of the line, this shows the speed of the journey. Steeper lines show faster speed.
7	Line Graphs		The shape of a lie graph shows whether a quantity is increasing or decreasing. Time is plotted on the horizontal axis.

8	Drawing line graphs	The table shows average temperatures in Truro for a week in December. Draw a graph to show these temperatures. 	
9	Trends		Line graphs can help identify trends in the data.
10	Linear graph		A linear graph is a single straight line.
11	Non-linear graph		A non-linear graph is not a single straight line.
12	Curved graphs		Some graphs are curved. To draw a curved graph, plot the points then join them with a smooth curve. Keep your pencil on the paper between the points.
Depth Knowledge			
14	Temperature		Conversion graphs for temperature do not go through (0, 0) as 0℃ is not the same as 0℉ or absolute zero in Kelvin. Temperatures can be negative, other units of measure cannot.
15	Speed		Speed = Distance ÷ time Check your units before you calculate - you may need to convert to decimal time e.g. 1 hr 30 minutes = 1.5 hours
16	Direct proportion		When 2 quantities are in direct proportion, as one increases or decreases the other increases or decreases at the same rate. This means that when one quantity is zero, so is the other; when one doubles, so does the other.