Day 126	B Tier 10-a-day
1 Write 5.3495 (a) correct to 2 decimal places, (b) correct to 3 significant figures.	
2 A car uses 40 litres of petrol to travel 480 km. Work out how many kilometres it travels on each litre of petrol.	
3 A cube has volume 1728 cm^3. Work out the side length of the cube.	
4 A straight line has equation $y = 6x + 1$ (a) Write down the gradient of the line. (b) Write down the equation of a line that is parallel to this line and passes through the point (0, 7).	
5 (a) Convert 8000 g to kg. (b) Convert 2 m^2 to cm^2.	

Day 126 **B Tier 10-a-day**

6 $y = 4x^2 - 6x - 6$
Work out the value of y when $x = -2$

7 Work out
(a) $\frac{2}{9} \times \frac{4}{5}$
(b) $\frac{1}{2} \div \frac{5}{6}$
Give each answer in its simplest form.

8 A straight line has gradient -2 and passes through the point $(-3, -2)$.
Find the equation of the line.

9 The table shows the masses of some parcels.
(a) Write down the modal class.
(b) Work out an estimate for the mean.

Mass, m (kg)	Frequency
$0 < m \leq 5$	10
$5 < m \leq 10$	8
$10 < m \leq 15$	4
$15 < m \leq 20$	8
$20 < m \leq 25$	2

10 A boat sails 8 m on a bearing of 000° from P to Q, then 15 m on a bearing of 090° to R.
(Calculator)
(a) Work out the distance PR.
(b) Work out the bearing of R from P.
Give your answers correct to 1 decimal place.

