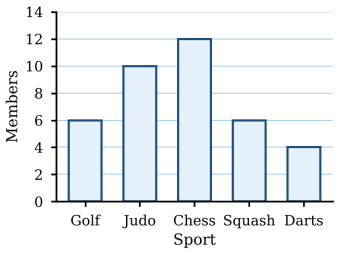
Day 247 **B Tier 10-a-day**

1 Here is a list of numbers.
36, 92, 56, 47, 64, 17, 19, 51
From the list, write down
(a) an odd number that is not prime
(b) a cube number

2 The bar chart shows some information.
(a) Write down the mode.
(b) What fraction of the total is Squash? Give your answer in its simplest form.

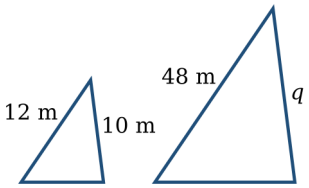


3 Work out
(a) 4.7×0.8
(b) 0.47×5

4 The table shows the numbers of brothers and sisters of some students.
Work out the mean.

Siblings	0	1	2	3
Frequency	6	9	9	6

5 Write each number as an ordinary number.
(a) 9.6×10^3
(b) 8×10^{-5}

Day 247	B Tier 10-a-day
6 A straight line has equation $y = x + 2$ (a) Write down the coordinates of the point where the line crosses the y-axis. (b) Work out the coordinates of the point where the line crosses the x-axis.	
7 The two triangles are similar. (a) Work out the scale factor of the enlargement from the smaller triangle to the larger triangle. (b) Work out the value of q. The diagram is not drawn accurately. 	
8 The equation $x^3 - 2x = 36$ has a solution between 3 and 4. (Calculator) Use trial and improvement to find this solution. Give your answer correct to 1 decimal place.	
9 Triangle XYZ is isosceles with XY = XZ = 6 m. (Calculator) The base YZ = 6 m. Work out the size of angle XYZ. Give your answer correct to 1 decimal place.	
10 A rectangle has length $(x + 3)$ cm and width $(x - 2)$ cm. The area of the rectangle is 36 cm^2. (a) Show that $x^2 + x - 42 = 0$ (b) Hence work out the length of the rectangle.	