Day 326	B Tier 10-a-day
1 A bag contains 4 pink beads, 8 blue beads and 5 gold beads. One is taken at random. Find the probability that it is pink or blue.	
2 A rectangular lawn measures 18 m by 9 m. A rectangle measuring 8 m by 3 m is cut out. Work out the area that is left.	
3 Work out 124 × 27	
4 A railway line is 3 km long. It is drawn on a map with scale 1 : 50 000. Work out the length of the railway line on the map, in cm.	
5 Write each answer as a single power of 4. (a) $4^6 \times 4^2$ (b) $4^8 \div 4^2$	

Day 326	B Tier 10-a-day
6 In a room, the ratio of red counters to blue counters is 4 : 7. There are 56 blue counters. More red counters join so that there are equal numbers of red counters and blue counters. How many red counters join?	
7 A is the point $(-8, -2)$ and B is the point $(8, 6)$. Find the coordinates of the midpoint of AB.	
8 In triangle ABC, AB = 5 m, BC = 6 m and angle ABC = 55°. (Calculator) Work out the area of the triangle. Give your answer correct to 1 decimal place.	
9 The equation $x^3 + x = 25$ has a solution between 2 and 3. (Calculator) Use trial and improvement to find this solution. Give your answer correct to 1 decimal place.	
10 Show that $(2n + 7)^2 - 49$ is a multiple of 4 for any whole number n.	