Day 350	B Tier 10-a-day
1 Island B has a population of 4,500. Its area is 30 km^2. Work out the population density. Give your answer in people per km^2.	
2 (a) Write down all the factors of 48. (b) Write down all the multiples of 8 between 41 and 65.	
3 The scale of a map is 1 : 25 000. Two villages are 6 cm apart on the map. Work out the real distance between them. Give your answer in kilometres.	
4 Work out the value of this expression. (Calculator) $\frac{3.4 + 8.4}{5.1 \times 2.2}$ Give your answer correct to 2 significant figures.	
5 A cube has side length 14 cm. Work out the total surface area of the cube.	

Day 350	B Tier 10-a-day
6 A straight line has equation $y = 3x + 2$ (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, 6).	
7 In a bag of counters, the ratio of white to blue is 6 : 7. The ratio of blue to red is 5 : 2. Write down the ratio white : blue : red.	
8 Solve the simultaneous equations $3x - 4y = -26$ $3x + 2y = 4$	
9 $A = 5 \times 7^2$ $B = 2^3 \times 3 \times 7^2$ Write down, as a product of prime factors, (a) the HCF of A and B (b) the LCM of A and B	
10 (a) Write down the inequality shown on the number line. (b) Write down all the integers that satisfy the inequality. 	