Day 44	B Tier 10-a-day
1 Write down the number of faces, edges and vertices of a triangular prism.	
2 Write the ratio 24 : 40 : 32 in its simplest form.	
3 Work out (a) $\frac{1}{4} + \frac{4}{9}$ (b) $\frac{11}{12} - \frac{1}{5}$ Give each answer in its simplest form.	
4 Coffee is sold in two sizes. Small: 250 g for £1.10 Large: 500 g for £1.90 Which size is better value for money? You must show your working.	
5 The first term of a sequence is 1. The term-to-term rule is: multiply by 2 and then add 4. Work out the 4th term.	

Day 44	B Tier 10-a-day
6 In a bag of counters, the ratio of black to yellow is 5 : 7. The ratio of yellow to white is 8 : 3. Write down the ratio black : yellow : white.	
7 Write these numbers in order of size. Start with the smallest. 8.1×10^3, 740,000, 6.1×10^{-4}, 93,000	
8 Solve $\frac{y}{3} + 8 > 13$	
9 An isosceles trapezium has parallel sides of length 30 m and 6 m. Each sloping side is 15 m long. (a) Work out the perpendicular height of the trapezium. (b) Work out the area of the trapezium.	
10 Show that $(2n + 5)^2 - (2n - 5)^2$ is a multiple of 40 for any whole number n.	