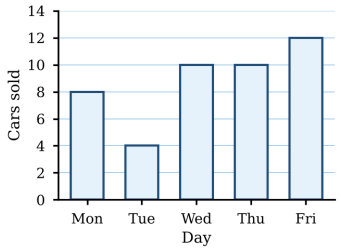
Day 138	B Tier 10-a-day
1 (a) Write down all the prime numbers between 46 and 55. (b) Explain why 51 is not a prime number.	
2 Simplify 9a + 7b + 8a + 5b	
3 The bar chart shows some information. (a) Write down the mode. (b) What fraction of the total is Mon? Give your answer in its simplest form. 	
4 A plumber charges a call-out fee of £19 plus £4 for each hour of work. (a) Work out the total cost for 7 hours. (b) The total cost is £51. Work out the number of hours.	
5 A rectangle has length (2x + 2) cm and width (x + 1) cm. The perimeter of the rectangle is 18 cm. (a) Work out the value of x. (b) Work out the area of the rectangle.	

Day 138	B Tier 10-a-day
6 Two buses leave a bus station at 11:30. One bus leaves every 12 minutes. The other bus leaves every 8 minutes. At what time do both buses next leave together?	
7 Two rectangles are joined to make a shape. The first is 9 cm by 5 cm. The second is 10 cm by 4 cm. Work out the total area of the shape.	
8 Use the fact that $47 \times 39 = 1833$ to work out (a) 470×390 (b) $18{,}330 \div 4.7$	
9 Show that $(2n + 11)^2 - (2n - 11)^2$ is a multiple of 88 for any whole number n.	
10 In a bag of counters, the ratio of red to white is 1 : 7. The ratio of white to yellow is 2 : 7. Write down the ratio red : white : yellow.	