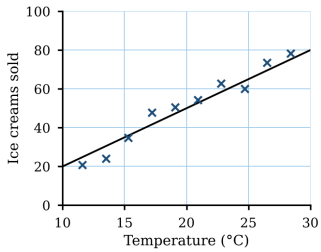
Day 210	B Tier 10-a-day
1 Simplify 6a + 9b + 5a + 2b	
2 Write down all the common factors of 16 and 32.	
3 The probability that a seed grows is 30%. Work out the probability that a seed does not grow.	
4 Solve $n - 16 = 4$	
5 $\mathbf{a} = \begin{pmatrix} 1 \\ -6 \end{pmatrix}$ $\mathbf{b} = \begin{pmatrix} 6 \\ -6 \end{pmatrix}$ Work out (a) $3\mathbf{a} + \mathbf{b}$ (b) $4\mathbf{a} + \mathbf{b}$	

Day 210	B Tier 10-a-day
6 A straight line has equation $y = 7x + 7$ (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 A block of concrete is a cuboid measuring 9 cm by 7 cm by 8 cm. The density of concrete is 2.5 g/cm^3. Work out the mass of the block.	
8 The scatter graph shows information about temperature and ice creams sold. A line of best fit is drawn. (a) Describe the correlation. (b) Use the line of best fit to estimate the ice creams sold when temperature is 22. 	
9 Will is paid £10 per hour for a 30 hour week. (Calculator) Overtime is paid at double time. In one week he works 6 hours of overtime. Work out his total pay for that week.	
10 An equilateral triangle has sides of length $(2x + 8)$ m. The perimeter of the triangle is 96 m. Work out the value of x.	