

## Instructions

For each group of five questions, work out the correct answers.

Mark each answer on the answer sheet by choosing one of the options A–J.

### Example i



A	B	C	D	E	F	G	H	I	J
120cm	54cm	18cm	2km	8m	19mm	42cm	6cm	11m	80cm

What is the perimeter of Rectangle A?

The correct answer is G, 42cm. The answer G has been marked for you on the answer sheet.



**You have 15 minutes for this section.**

**Do not turn the page until you are told to do so.**



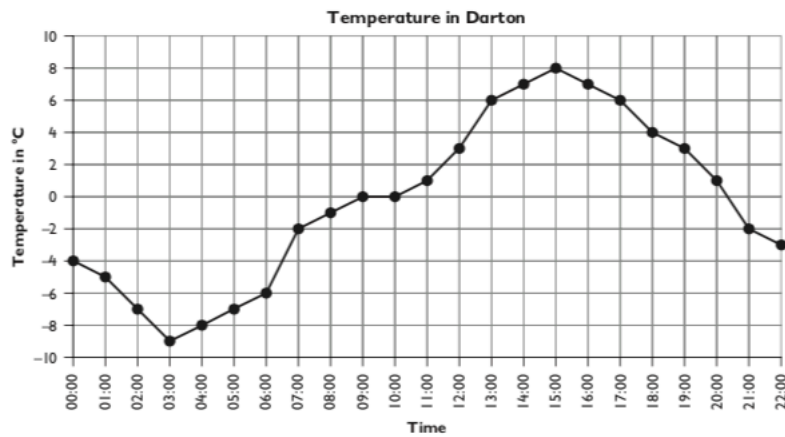
## Instructions

For each group of five questions, work out the correct answers.

Mark each answer on the answer sheet by choosing one of the options A–J.

This table shows the temperature in Darton over a number of hours.

Use this graph to answer questions 1–5.



A	B	C	D	E	F	G	H	I	J
1	0.15	8	17	5	3	4	0.17	19	11

- 1** What was the range of temperatures in °C?
- 2** For how many readings did the temperature fall below freezing (0°C)?
- 3** What was the biggest drop in temperature over one hour in °C?
- 4** What was the average temperature reading in °C from 07:00–13:00 inclusive?
- 5** Tom's cat will only go outside when the temperature is above 2°C.  
For how many hours would Tom's cat have been happy to venture out?

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This pie chart shows the summer holiday destinations of Year 6 children at one school. 25 children are planning to holiday in England.

Use this pie chart to answer questions 6–10.



A	B	C	D	E	F	G	H	I	J
120	5	110	2	8	25	4	6	10	100

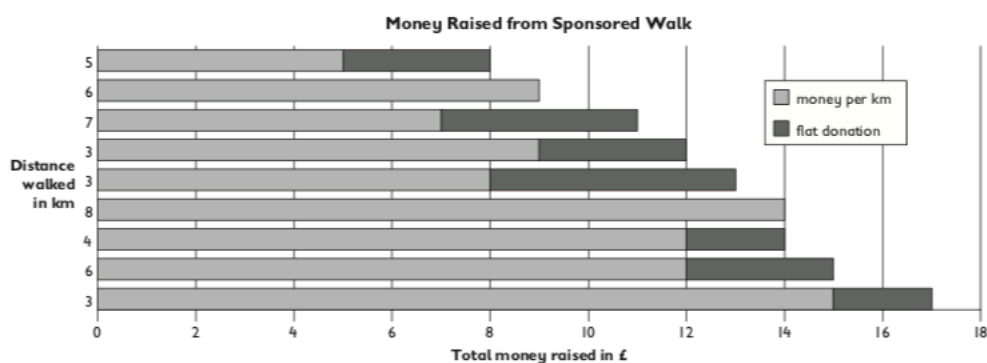
- 6** 20 children will visit Europe. What is the size of the angle, in degrees, of the sector that represents Europe?
- 7** How many children plan to holiday in the USA?
- 8** Twice as many children will be going to Africa as those not having a holiday. Three times as many children will be going to the USA than those not having a holiday. How many children will be going to Africa?
- 9** If 3 children will be holidaying in Asia, what percentage of Year 6 is this?
- 10** Three-fifths of the children in Year 6 borrow a book from school to read during the summer holidays. A third of those who don't borrow a book from school, have already purchased a book to read in the holidays. How many children have already bought a book to read in the holidays?

**Go to the next page.**



The graph below shows the money raised from a sponsored walk. Nine children took part and the distance in kilometres (km) walked by each child is shown. The money was raised as an amount per km, or as a flat donation that was not dependent on the distance walked.

Use this graph to answer questions 11–15.



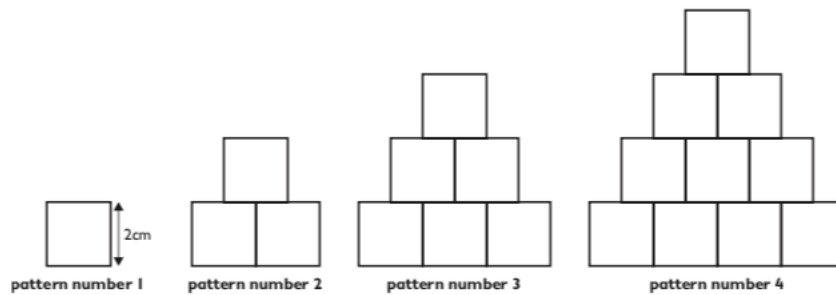
A	B	C	D	E	F	G	H	I	J
£1.50	4km	£2	3km	6km	£5	4.5km	5km	£1	£3

- 11** What was the largest flat donation given?
- 12** One child received a quarter of their money from flat donations. How many km did this child walk?
- 13** What is the mean distance covered by the children during the sponsored walk?
- 14** The child who walked 8km had two sponsors. One sponsored 75p per km. How much did the other sponsor pay per km?
- 15** One child received 80% of their money by being sponsored per km. How much did this child receive in flat donations?

Go to the next page.



Look at these patterns made up of small squares.  
Each small square has a side length of 2cm.  
Use these patterns to answer questions 16–20.



A	B	C	D	E	F	G	H	I	J
7cm	4	9cm	14cm	9	56	20cm	99	14	100

- 16** What is the height of pattern number 7?
- 17** What is the difference in height between pattern number 10 and pattern number 20?
- 18** What is the difference between the numbers of squares in pattern number 100 and pattern number 99?
- 19** Which pattern number contains 45 squares?
- 20** Which pattern number is the first to exceed 100 squares?

**STOP WORKING.** You may check your work from this section only.

