

# REASONING

## 6ER18

First name \_\_\_\_\_

Last name \_\_\_\_\_

School \_\_\_\_\_

Class \_\_\_\_\_

Date of birth ○○ ○○ ○○○○

Date of test ○○ 05 2018

Total score  (maximum 20)



165103



Llywodraeth Cymru  
Welsh Government

1 Write the missing information in Cerian's report.



**My report**

Number of children who voted for each type of book

	<b>Fiction</b>	<b>Nature</b>	<b>History</b>	<b>Total</b>
Year 3	8	10	11	29
Year 4	6		8	26
Year 5	7			24
Year 6	13	10	5	28
Total	34	38	35	

2m

	<b>Most popular type of book</b>
Year 3	
Year 4	
Year 5	
Year 6	

The type of book that got the most votes is

2m



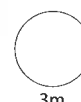
Fiction £5 per book	Nature £7 per book	History £8 per book
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Cerian buys the **same number** of fiction, nature and history books.

She spends exactly £240

How many of each type of book does she buy?

of each type of book



TOTAL



2 The table shows three number patterns.

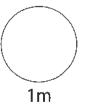
The number patterns continue down each column.

	Column A	Column B	Column C
Row 1	10	5	2
Row 2	20	10	4
Row 3	30	15	6
Row 4	40	20	8
Row 5	50	25	10
Row 6			

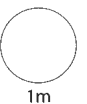
10 is in column A row 1, column B row 2 and column C row 5

Work out where 100 will be.

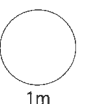
100 will be in column A row



100 will be in column B row

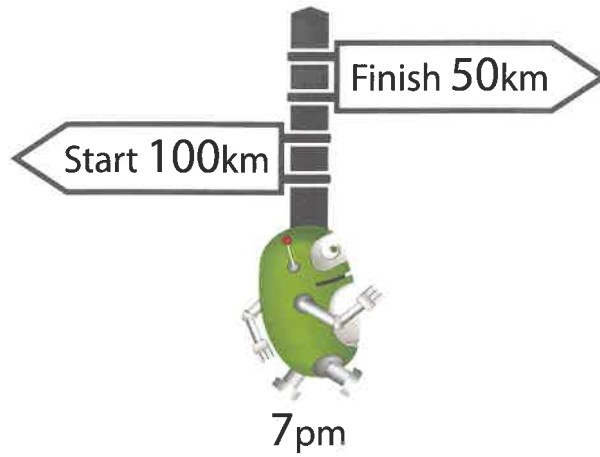


100 will be in column C row



3 The robot moves in straight lines at the **same speed**.

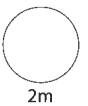
At 7pm it reaches this sign.



The robot left the start at 3pm.

At what time will it reach the finish?

pm



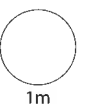
The next day, the robot moves like this:

forward 25m, turn right  $90^\circ$ , forward 50m, turn right  $90^\circ$ ,

forward 25m, turn right  $90^\circ$ , forward 50m

What **shape** is the robot's path?

Write the name of the shape.



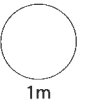
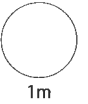
TOTAL



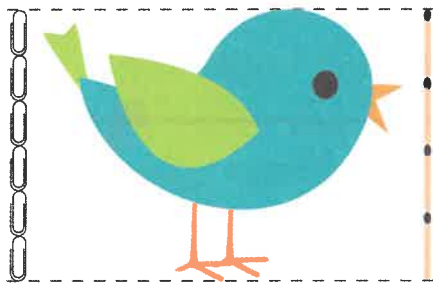
4 Write the missing numbers in these multiplication tables.

	×	2	
3		6	18
		8	

	×	2	
		14	63
			72



5 A drawing of a bird is 6 paperclips or 4 matchsticks high.



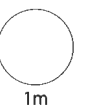
Not drawn accurately

A drawing of a cat is 12 **paperclips** high.

How many matchsticks high is it?

(Hint: the answer is **not 10**)

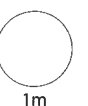
matchsticks
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A drawing of a rabbit is 6 **matchsticks** high.

How many paperclips high is it?

paperclips
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6 A shop sells toy cars and finger puppets.

All finger puppets cost the same.



1 car and 5 puppets cost £2.85



1 car and 10 puppets cost £5.10

Work out the cost of 1 car.



3m

TOTAL  
7m