## Ma

## Mathematics test

## KEY STAGE

2

## LEVELS

3-5

## Test A

## Calculator not allowed

First name
Last name
$\qquad$

School


For marker's use only

| Page | Marks |
| :---: | :---: |
| 5 |  |
| 7 |  |
| 9 |  |
| 11 |  |
| 13 |  |
| 15 |  |
| 17 |  |
| 19 |  |
| 21 |  |
| 23 |  |
| TOTAL |  |



## Instructions

You may not use a calculator to answer any questions in this test.

Work as quickly and as carefully as you can.
You have $\mathbf{4 5}$ minutes for this test.
If you cannot do one of the questions, go on to the next one.
You can come back to it later, if you have time.
If you finish before the end, go back and check your work.

## Follow the instructions for each question carefully.

This shows where you need to put the answer.
If you need to do working out, you can use any space on a page.

## Some questions have an answer box like this:



For these questions you may get a mark for showing your working.



| 150 |
| :---: |
| 250 |
| 350 |
| 450 |

200
400

| 150 |
| :--- |
| 250 |
| 350 |
| 450 |

3 Here is a tile.


The tile is turned.

One of the diagrams below shows the tile after it has been turned. Tick $(\checkmark)$ the correct diagram.


Kate has a piece of ribbon one metre long.

She cuts off 30 centimetres.


## How many centimetres of ribbon are left?



5 Here is part of a number sequence.

The numbers increase by the same amount each time.


The sequence continues.

## Circle all of the numbers below that would appear in the sequence.

$840 \quad 905 \quad 989 \quad 1000 \quad 2051 \quad \frac{{ }_{1 \text { mark }}^{5}}{}$
$6 \quad$ Here are three bags in a shop.


A
£11.50


B
£14.65


C
£16.50

How much does bag B cost to the nearest pound?


Jamie buys bag A and bag C.

How much change does he get from $£ 40$ ?

$\qquad$
$\qquad$

Class 6 launched some balloons at a school fete.

This diagram shows how far some of the balloons travelled.


How many balloons on the diagram travelled between 20 km and 30 km ?


## Estimate how far Hassan's balloon travelled.



8 Jamie makes a time line of part of his day.


What time does Jamie's morning break start?


Lunch lasts for three-quarters of an hour.

What time does lunch finish?

$\qquad$

Kate buys a torch and two batteries.


She pays £8.75 altogether.

How much does one battery cost?


10 The chart shows the number of sunny days and the number of windy days in six months.


Month

Which months had more windy days than sunny days?
$\qquad$

How many months had more than 15 sunny days?


How many more sunny days than windy days were there in June?

$\qquad$


12 Here are five patterns.

For each pattern put a tick $(\checkmark)$ if it has a line of symmetry. Put a cross $(\boldsymbol{x})$ if it does not.

$\qquad$

13 Here are two thermometers.

They show two different temperatures.


What is the difference between the two temperatures?

$\qquad$

14 Here is a grid of regular hexagons.

The shaded shape has an area of 3 hexagons and a perimeter of 14 cm .

Draw another shape on the grid which has an area of 4 hexagons and a perimeter of 14 cm .


15 Write one number which fits all three of these statements.

It is a multiple of 4

It is a multiple of 6

It ends in '8'


## Explain why a number which ends in ' 3 ' cannot be a multiple of 4


$\$$
0.5
0.8
0.23
0.09
0.67

17 Here are some shapes on a grid.


Write the letter of each shape that has one pair of parallel sides.
$\geqslant$ $\qquad$


Hassan bought a notebook and a pen.
He paid £1.10

Kate bought a notebook and 2 pens.
She paid £1.45

## Calculate the cost of a notebook.


$\qquad$
$19 \quad$ Here is a shaded square on $x$ and $y$ axes.


For each of these points, put a tick $(\checkmark)$ to show if it is inside the square or outside the square.

| inside <br> the square | outside <br> the square |
| :---: | :---: |
| $(60,70)$ | $\square$ |


$\qquad$

21 Two matchsticks have the same length as three bottle tops.


How many bottle tops will have the same length as 50 matchsticks?

$\qquad$

22 A cube has shaded shapes on three of its faces.


Here is a net of the cube.

Draw in the two missing shaded shapes.


23 Here are two spinners, A and B.

A

B

Hassan spins the pointer on each spinner.
He adds his two scores together.

For each statement put a tick $(\checkmark)$ to show if it is certain, possible or impossible.

One has been done for you.

|  | certain | possible impossible |
| :--- | :--- | :--- |
| The total will be |  |  |
| more than 15 |  |  |

24 Part of this number line is shaded.


Circle all the numbers below that belong in the shaded part of the number line.
$\geqslant$
1.1
1.4
$1 \frac{1}{3}$
$1 \frac{1}{5}$

25 Jamie draws a triangle.

He says,
'Two of the three angles in my triangle are obtuse'.

Explain why Jamie cannot be correct.


