## Ma

## Mathematics test

## KEY STAGE

2

LEVELS<br>3-5

## Test B

## Calculator allowed

First name
Last name
School


For marker's use only | Page | Marks |
| :---: | :---: |
|  | 5 |
|  | 7 |
|  | 9 |
|  | 11 |
| 13 |  |
|  | 15 |
| 17 |  |
|  | 19 |
| 21 |  |
|  | 23 |
| TOTAL |  |
|  |  |



## Instructions

You may 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 method.

Join each number to the set of numbers that it belongs to.
One has been done for you.


Here is a diagram for sorting shapes.

One of the shapes is in the wrong place.
Put a cross ( $\mathbf{x}$ ) on it.

$\qquad$

Join each clock face to the correct digital time.



Ben buys three bottles of milk and six cakes.

How much does he spend altogether?

$\qquad$

For each net, put a tick $(\checkmark)$ if it folds to make a pyramid.
Put a cross $(\mathbf{x})$ if it does not.


6 This chart shows the number of cars in a car park at different times on one day.


There are 80 cars in the car park when it is full.

How many empty spaces were there in the car park at 3 pm ?


Circle all the times when the car park was less than half full.

| 10 | 11 | 12 | 1 | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $a m$ | am | noon | pm | pm | pm | pm |

$\qquad$


How much more money does Emily need to make exactly £5?


Nisha has thirty 5 p coins and twenty 10p coins.

How much money does she have altogether?

'When you halve any even number, the answer is always an odd number'.


## Is she correct? <br> Circle Yes or No.

Yes / No

Explain how you know.

$\qquad$


Write each label in the correct position on the sorting diagram below.


9

1 mark

10 Shade $\frac{1}{5}$ of this shape.



He rotates the grid to a new position.

Shade in the missing parts of the design.


11
$\qquad$

Here are five digit cards.


Use each card once to complete the statements below.


13 Draw two more circles on this grid to make a design that has a line of symmetry.



She adds the two numbers together and divides the result by 2
Her answer is 44

One of Emily's numbers is 12

What is Emily's other number?

$\qquad$

1540 children each chose their favourite flavour of yogurt.

This chart shows the results.
yogurt flavour

| peach |  | banana |  | lemon |  |  | raspberry |  |  |  |  | plain |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

number of children

How many children chose lemon yogurt?


How many more children chose raspberry than plain yogurt?



Emily, Ben and Nisha take part in a sponsored swim to collect money for charity.

Emily collects £2.75 more than Nisha.
Ben collects £15
Nisha collects $£ 7$ less than Ben.

Altogether how much money do the three children collect?

$\qquad$

17 This scale shows the dates of floods and the height of the water in the floods.


How high was the water in the 1955 flood?


How much higher was the water in the 1969 flood than in the 1948 flood?


$$
\begin{aligned}
& \text { Small peaches } \\
& 15 \text { p each }
\end{aligned}
$$



Large peaches 25p each

Emily has $£ 5$ to spend on peaches.

She decides to buy only small peaches or only large peaches.

How many more small peaches than large peaches can she buy for $£ 5$ ?


19 How much less than 1000 is $9.7 \times 9.8 \times 9.9$ ?

$\qquad$

Spinner $P$ has 4 equal sections.
Spinner $Q$ has 6 equal sections.


Ben spins the pointer on each spinner.

For each statement below, put a tick $(\checkmark)$ if it is correct. Put a cross $(\mathbf{x})$ if it is not correct.

Ben is more likely to score 4 on spinner $P$ than on spinner $Q$.


The score on spinner $P$ is certain to be less than the score on spinner Q .


Ben is equally likely to score an even number on spinner P and spinner Q .


A score of less than 3 is equally likely on spinner P and spinner Q .


21 Here is a regular octagon with two vertices joined to make the line $A B$.

Join two other vertices to draw one line that is parallel to the line $A B$.


21a
1 mark

Here is the octagon again.

Join two vertices to draw one line that is perpendicular to the line $A B$.


21b
$\qquad$

$23 \quad \boldsymbol{m}$ stands for a whole number greater than 10 and less than 20 $\boldsymbol{n}$ stands for a whole number greater than 2 and less than 10

What is the smallest number that $\boldsymbol{m} \times \boldsymbol{n}$ could be?


What is the largest number that $\boldsymbol{m}-\boldsymbol{n}$ could be?


24 The perimeter of a square is 72 centimetres.


The square is cut in half to make two identical rectangles.


What is the perimeter of one rectangle?


2 marks
$\qquad$

