## Ma

## Mathematics test

## KEY STAGE

## 2

LEVELS<br>3-5

## Test A

## Calculator not 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 not use a calculator to answer any questions in this test.

Work as quickly and as carefully as you can.
You have 45 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.

shortest

2 Join each box to the correct number.
One has been done for you.


32
half of 98
44
double $4 \times 4$
49


Draw the reflection of the shaded shape in the mirror line.
Use a ruler.

$\qquad$

This pictogram shows how much they have collected.

stands for
£100

| $\sqrt{3}$ Save Dolphins |  | $囚$ | $\bigotimes$ | $\bigotimes$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Wildwatch | $\Theta$ |  | $\rangle$ |  |  |
| ${ }^{3}$ Plant-a-Tree |  |  |  |  |  |

How much more have they collected for Save Dolphins than Plant-a-Tree?


The target for Wildwatch is $£ 500$

How much more money do they need to collect for Wildwatch?


5b
1 mark

How much money have they collected altogether, rounded to the nearest hundred pounds?


6 The numbers in this sequence increase by 75 each time.

Write in the two missing numbers.

## 725

800
875
950 $\square$


7
7 A square always has four sides.

Is it true that a four-sided shape is always a square?

## Circle Yes or No.

Yes / No

Explain how you know.

$\qquad$

8 On a sheet of stickers there are 5 circles, 2 stars and one rectangle.


How many stickers are there altogether on 4 sheets?


Nisha needs 55 circles.

How many sheets of stickers does she need?


Ben has 10 sheets of stickers.

How many more circles than rectangles does he have?


This chart shows the number of people with birthdays in each three months of the year.


Months

From the chart, how many people have a birthday before July?


9a

1 mark

Nobody has a birthday in October.

Six people have a birthday in November.

How many people have a birthday in December?

$\qquad$

## Here is a number chart.

Circle the smallest number on the chart that is a multiple of both 2 and 7

| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

Here is the same number chart.

Circle the largest number that is not a multiple of 2 or 3 or 5

| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

11 A shop sells scarves and hats.


Ben buys one of the scarves and the $£ 4.50$ hat.

How much change does he get from $£ 20$ ?


Emily buys two scarves and a hat.

What is the most she could pay?

$\qquad$


Which two rectangles fit together, without overlapping, to make a square?



14 Here are four digit cards.


Use each digit card once to make the decimal number nearest to 20

$\qquad$

15 Here is part of the timetable for Class 6 on a Monday.


Look at the timetable.

How long is it from the end of break to the start of lunch?

${\underset{1 \text { mark }}{ }}^{15 a}$

Nisha leaves the Science lesson after 25 minutes.

Then she goes to the dentist.

What time does she leave the Science lesson?



17 Emily has 6 cubes.

She sticks them together to make this model.


She paints the sides of the model grey all the way round.

She leaves the top and the bottom of the model white.

How many of the cubes in the model have exactly two faces painted grey?

$\qquad$

18 This regular 12-sided shape has a number at each vertex.


Ben turns the pointer from zero, clockwise through $150^{\circ}$

Which number will the pointer now be at?


Nisha turns the pointer clockwise from number 2 to number 11

Through how many degrees does the pointer turn?



The same square is used in the diagrams below.

What fraction of this diagram is shaded?


$\qquad$

20 This graph shows the number of people living in a town.


Look at the graph.

How many people lived in the town in $1985 ?$

20a
1 mark

In which year was the number of people the same as in $1950 ?$

20b
1 mark

Find the year when the number of people first went below 20000


21 Ben thinks of a number.
He adds half of the number to
a quarter of the number.

The result is 60

What was the number Ben first thought of?

$\qquad$


How many millilitres are equal to 1 cup?


23 The numbers in this sequence increase by 7 each time.

$$
\begin{array}{lllll}
1 & 8 & 15 & 22 & 29
\end{array}
$$

The sequence continues in the same way.

Will the number 777 be in the sequence? Circle Yes or No.

## Yes / No

## Explain how you know.


$\qquad$


Emily makes 250 grams of a snack mixture.
$15 \%$ of the weight is raisins, $25 \%$ is banana chips and the rest is peanuts.

How many grams of peanuts does she use?


