## MATHEMATICS

## KEY STAGE 22004

## LEVELS <br> TEST A $3-5$

## CALCULATOR NOT ALLOWED

| PAGE | MARKS |
| :---: | :---: |
| 5 |  |
| 7 |  |
| 9 |  |
| 11 |  |
| 13 |  |
| 15 |  |
| 17 |  |
| 19 |  |
| TOTAL |  |



First Name

## Last Name

School

## 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.


2 Here is a square.


What fraction of the square is shaded?



These are the prices of sandwiches, drinks and fruit.

| Sandwiches |  | Drinks |  | Fruit |  |
| :--- | ---: | :--- | :--- | :--- | :---: |
| cheese | $£ 1.45$ | milk $55 p$ | apple 15p |  |  |
| tuna | $£ 1.70$ | cola $45 p$ | pear 20p |  |  |
| salad | $£ 1.20$ | juice | $65 p$ | melon 25p |  |

Shereen buys a tuna sandwich, milk and a pear.

## How much does she pay?



Mike has 80p to spend on a fruit and a drink.
What two things can he buy for exactly 80p?
and


Measure accurately the length of the diagonal of this square.

Give your answer in centimetres.


Use each number card once to make the answer to each calculation an even number.



Alan has 45 beans.
He plants $\mathbf{3}$ beans in each of his pots.

## How many pots does he need?



Leila puts 4 seeds in each of her pots.
She uses 6 pots and has 1 seed left over.

How many seeds did she start with?


7
Here are five shapes on a square grid.


Write the letters of the two shapes which have a line of symmetry.
and

8 Calculate 13.6-2.8

Abbie takes the temperature outside at midday on the first day of each month.

The graph shows her results from January to December.


How many months on the graph show a temperature between $10^{\circ} \mathrm{C}$ and $20^{\circ} \mathrm{C}$ ?


Find the difference in temperature shown on the graph between July and August.


10 A shop sells three types of sunglasses.


What is the difference in price between the most expensive and least expensive sunglasses?


The shop also sells sun hats.


How much change does he get from $\mathbf{£ 1 0}$ ?



A film starts at 6:45pm.
It lasts 2 hours and 35 minutes.

## What time will the film finish?



12 Here is a sorting diagram for numbers.
Write a number less than 100 in each space.

|  | even | not even |
| :--- | :--- | :--- |
| a square number |  |  |
| not a square number |  |  |

This is a drawing of a pentagonal prism.


Tick $(\checkmark)$ the one shape that is a net for the pentagonal prism.


Write in the missing numbers in this multiplication grid.

| * $x$ | 5 |  |  |
| :---: | :---: | :---: | :---: |
| 4 | 20 | 36 | 32 |
|  | 35 | 63 | 56 |
|  | 30 | 54 | 48 |

15 Millie has some star-shaped tiles.
Each edge of a tile is 5 centimetres long.


She puts two tiles together to make this shape.


Work out the perimeter of Millie's shape.


Mr Khan makes a blackcurrant drink for a party.
He pours blackcurrant squash into a jug.


How much water must he add to make $\mathbf{5 0 0}$ millilitres of drink?


Calculate $31.6 \times 7$


18 Mari is the presenter of a weekly radio show.


She always plays five new songs for every two old songs.

Last week she played 15 new songs.
How many songs did she play altogether?


19 Julie says,

## 'I added three odd numbers and my answer was $50{ }^{\prime}$

Explain why Julie cannot be correct.
$\geqslant$
$\qquad$
$\qquad$
$\qquad$

Here is a kite.


Write the coordinates of point $\mathbf{D}$.


## 21 Calculate $900 \div(45 \times 4)$

Liam thinks of a number.
He multiplies the number by 5 and then subtracts 60 from the result.


His answer equals the number he started with.

What was the number Liam started with?



Here is a part of a train timetable.

| Edinburgh | - | $09: 35$ | - | - | $13: 35$ | - | - |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Glasgow | $09: 15$ | - | $11: 15$ | $13: 15$ | - | $13: 45$ | $15: 15$ |
| Stirling | $09: 57$ | - | $11: 57$ | $13: 57$ | - | $14: 29$ | $15: 57$ |
| Perth | $10: 34$ | $10: 51$ | $12: 34$ | $14: 34$ | $14: 50$ | $15: 15$ | $16: 35$ |
| Inverness | - | $13: 10$ | - | - | $17: 05$ | - | - |

How long does the first train from Edinburgh take to travel to Inverness?


Ellen is at Glasgow station at $1: 30 \mathrm{pm}$.
She wants to travel to Perth.
She catches the next train.
At what time will she arrive in Perth?

 Here is an equilateral triangle inside a square.


The perimeter of the triangle is 48 centimetres.

## What is the perimeter of the square?



QCA key stage 2 team, 83 Piccadilly, London W1J 8QA

## Order refs:

QCA/04/1253 (pupil pack)
QCA/04/1252 (mark schemes pack)

