Lin  
David  
Rosie
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:

Show your working. You may get a mark.

For these questions you may get a mark for showing your working.
1. Write these numbers in order of size, starting with the smallest.

901 1091 910 109 190

2. These two shapes are made from equilateral triangles.

Draw one line of symmetry on each shape.

Use a ruler.
Rosie collects data about birds visiting a bird table.

Here are her results.

<table>
<thead>
<tr>
<th>Bird</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blackbird</td>
<td></td>
</tr>
<tr>
<td>Sparrow</td>
<td></td>
</tr>
<tr>
<td>Robin</td>
<td></td>
</tr>
<tr>
<td>Blue tit</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

Draw **two** more lines to complete the graph.

Rosie saw **20 birds** altogether.

**What fraction** of the birds were blackbirds?
Here is a CD rack.

One rack holds 25 CDs.

David has 83 CDs.

How many racks does he need to hold all his CDs?

Lin has 6 racks full of CDs.

How many CDs does Lin have altogether?
5. Complete this diagram so that the three numbers in each line add up to **150**

```
| 60 | 90 | 40 |
| 50 | 80 |    |
```

6. **A clock shows this time.**

```
3:40 PM
```

**How long is it from this time until 5pm?**

6a

**What time was it quarter of an hour before the time on the clock?**

6b
Lin needs to solve this problem.

‘How many children are in the class?’

Tick (✓) all the information that Lin needs to solve her problem.

- There are 9 girls in the class.
- 5 girls in the class wear glasses.
- There are twice as many boys as girls in the class.

David needs to solve this problem.

‘How much do two oranges and one apple cost?’

Tick (✓) all the information that David needs to solve his problem.

- An orange costs 5p more than an apple.
- An apple costs 20p.
- David has £1.
The diagram shows distances on a train journey from Exeter to York.

How many kilometres is it altogether from Exeter to York?

km

What is the distance from Derby to York rounded to the nearest 10km?

km
A rectangular swimming pool is 25 metres long and 10 metres wide.

David swims 5 lengths.

Rosie swims 12 widths.

How much further does David swim than Rosie?

Show your working. You may get a mark.
10 Calculate \(2006 - 289\)

11 Match each decimal number to its equivalent fraction.

One has been done for you.

0.25 \(\rightarrow \frac{3}{4}\)

0.4 \(\rightarrow \frac{2}{10}\)

0.75 \(\rightarrow \frac{1}{4}\)

0.2 \(\rightarrow \frac{2}{5}\)
Five children have ticked this table to show on which days they are free to go out.

<table>
<thead>
<tr>
<th></th>
<th>Emma</th>
<th>David</th>
<th>Lin</th>
<th>Jack</th>
<th>Rosie</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mon</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Tue</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Wed</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Thu</td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Fri</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

On how many days are more than two children free to go out?

On which days are Lin and Rosie both free to go out together?
Write these numbers in the correct places on the diagram.

5  6  7  8

factors of 30  factors of 40

13 Total out of 4
Here is part of a time line.

Draw a line from each invention to the correct point on the time line.

One has been done for you.
Here is a number chart.
Every third number in the chart has a circle on it.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>3</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
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<td>10</td>
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<td>20</td>
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<tr>
<td>21</td>
<td>22</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The chart continues in the same way.
Here is another row in the chart.

Draw the missing circles.

71 72 73 74 75

Will the number 1003 have a circle on it? Circle **Yes** or **No**.

Yes / No

Explain how you know.
There are four shapes on this diagram.

The diagram is turned to the new position below.

Draw the three missing shapes.
This chart shows the number of books some children read last month.

How many children altogether read more than 9 books?

7 children read 4 books.
1 child read 5 books.


Explain how she can work this out from the chart.
18 Calculate $52.85 + 143.6$

19 This shape is made from 4 shaded squares.

Calculate the perimeter of the shape.

Show your working. You may get a mark.
Class 6 did a survey of the number of trees in a country park.

This pie chart shows their results.

Estimate the **fraction** of trees in the survey that are **oak** trees.

The children counted 60 **ash** trees.

Use the pie chart to estimate the **number** of **beech** trees they counted.
Here is a sketch of a triangle.

It is not drawn to scale.

Draw the full-size triangle **accurately** below.

Use a protractor (angle measurer) and a ruler.

One line has been drawn for you.
22 Calculate $848 \div 16$

Show your working. You may get a mark.

23 $k$ stands for a whole number.

$k + 7$ is greater than 100

$k - 7$ is less than 90

Find all the numbers that $k$ could be.
End of test