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## NOTES FOR THE TEACHER

The following tests give pupils practice at answering the sort of questions that they will be asked in the progress test.

The mental test is the 1999 Key Stage 2 mental test.

- Each pupil needs a copy of the pupil's answer sheet.
- Read each question twice.
- Pupils can use jottings but emphasise that they are not necessary.
- Allow the stated time for each question.
- Each question is worth 1 mark.

The written test uses some questions from previous Key Stage 2 tests.
The questions cover work from Units 9 to 12.

- The paper should take about 30 minutes.
- Appropriate working should be shown.
- A mark scheme is included.

It is important that the results of the tests are used:

- to recognise pupils' progress;
- to focus future teaching on correcting misconceptions.


## MENTAL TEST: QUESTIONS

## SECTION

Say to the children:
Now we are ready to start the test. I shall read each question twice. For this first group of questions, you will have 5 seconds to work out each answer and write it down.

## Question number 1

How many twenty pence pieces are there in two pounds?

## Question number 2

Subtract forty from one hundred and twenty.

## Question number 3

Multiply seven by nine.

## Question number 4

How would quarter past four in the afternoon be shown on a 24-hour digital clock?

## Question number 5

How many millilitres are there in two and a half litres?

## SECTION 2

Say to the children:
For each of the next group of questions, you will have 10 seconds to work out the answer and write it down.

## Question number 6

Jan buys a newspaper for eighty pence and pays with a five pound note.
How much change does she get?

## Question number 7

What is twice five hundred and forty?

## Question number 8

A bus is due to arrive at nine-fifty. It is twenty-five minutes late. At what time will it arrive?

## Question number 9

A square playground has a perimeter of 100 metres. How long is one of its sides?

## Question number 10

Add three point five to four point eight.

## Question number 11

Imagine a triangular prism. How many faces does it have?

## Question number 12

The sequence of numbers on your answer sheet follows the rule double and subtract one. What is the next number?

## Question number 13

Put a ring around the fraction on your answer sheet which is equivalent to forty per cent.

## Question number 14

Calculate the difference between three hundred and forty and seven hundred and ten.

## Question number 15

When rolling a fair dice numbered one to six, what is the probability of getting an odd number?

## SECTION 3

Say to the children:
For each of the next group of questions, you will have 15 seconds to work out the answer and write it down.

## Question number 16

Add together thirty-eight, twenty-three and forty-four.

## Question number 17

In a sale, there is fifty per cent off all prices. A chair costs forty-five pounds in the sale. How much was it before the sale?

## Question number 18

What number is halfway between twenty-four and forty?

## Question number 19

The pie chart on your answer sheet shows the favourite colours of one hundred and twenty children. Use the chart to estimate the number of children who chose red.

## Question number 20

Put a ring around the expression on the answer sheet which gives the answer nearest to 100 .

Say to the children:
Put your pens down now. The test is finished.

## Mental test 3

 Pupil's answer sheet

$$
\frac{\text { PAGE }}{411}
$$

## Mental test 3: answers

## SECTION 1

Time: 5 seconds each

| 1 | 10 |
| :---: | :---: |
| 2 | 80 |
| 3 | 63 |
| 4 | $16: 15$ |
| 2500 | ml |
| $2 \frac{12}{2}$ litres |  |

## SECTION 2

Time: 10 seconds each

| 6 | $£ 4.20$ | $80 p$ |
| :---: | :---: | :---: |
| 7 | 1080 | 540 |


| $\mathbf{8}$ | $10: 15$ | $9: 50$ |
| :--- | :--- | :--- |

$$
925 \mathrm{~m}
$$

| 10 | 8.3 | 3.5 | 4.8 |
| :--- | :--- | :--- | :--- |

$15 \quad \frac{1}{2}\left(\frac{3}{6}, 50 \%\right)$
$\square$

| 12 | 3 | 5 | 9 | 17 | 33 |
| :--- | :--- | :--- | :--- | :--- | :--- |


| 13 | $\frac{1}{40}$ | $\frac{40}{60}$ | $\frac{1}{4}$ | $\frac{4}{10}$ | $\frac{1}{400}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 14 |  | 370 | 340 | 710 |  |

$\square$
$\square$

## SECTION 3

Time: 15 seconds each

| 16 | 105 | 38 | 23 |
| :--- | :--- | :--- | :--- |


| 17 | $£$ | 90 | $£ 45$ |
| :--- | :--- | :--- | :--- |


| 18 | 32 | 40 |
| :--- | :--- | :--- |

1930 children


20

$$
\begin{gathered}
50 \times 1949 \times 20 \xlongequal{1.9 \times 50} \\
4.9 \times 1.95 .9 \times 20
\end{gathered}
$$

## Written test 3 Pupil's answer sheet



Name
Total marks
You have 30 minutes for this test.
There are ten questions to answer.
1
Circle the largest number in each box.

| 357 | 753 |
| :---: | :---: |
| 573 |  |
| 2053 | 2035 <br> 2305 |

2
Work out:
(a) $30 \div 5$
(b) $65 \div 4$
(1 mark)
(1 mark)

3
(a) $57+29=$
(b) $432+98=$
(a) Circle the numbers in the box that are divisible by 5.
(b) Write down the numbers in the box that are less than 15.
(c) Write all the numbers in the box in ascending order.


A boat can safely carry 145 kilograms.

| Name | Mary | Ann | John | Bob | Huw | Kate |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Weight in kg | 59.5 | 41.1 | 39.8 | 80.3 | 28.2 | 32.1 |

Work out if the boat can safely carry Mary and Bob.
You must show your working.
$\square$

## 6

Calculate $374 \times 6=$

A piece of cheese has a mass of $\mathbf{3 5 0}$ grams.

(2 marks)
a) Mark an arrow ( $\downarrow$ ) on the scale to show the reading for $\mathbf{3 5 0} \mathbf{~ g . ~}$
$0 \quad 500 \mathrm{~g} \quad 1 \mathrm{~kg} \quad 1500 \mathrm{~g} \quad 2 \mathrm{~kg}$
$\qquad$

Here are some apples.
b) What is the total mass of these apples?


How would quarter past four in the afternoon be shown on a 24-hour digital clock?

9

Some children go camping. It costs $£ 2.20$ for each child to camp each night. How much will each child have to pay for the $\mathbf{6}$ nights? Show your working. You may get a mark.


There are $\mathbf{7 0}$ children. Each tent takes up to $\mathbf{6}$ children.
What is the least number of tents they will need?
Show your working. You may get a mark.
(2 marks)


Gavin was ill in March.


For how many days was his temperature marked as more than $37^{\circ} \mathrm{C}$ ?


Which date showed the largest change in temperature from the day before?
(1 mark)


Estimate Gavin's highest temperature shown on the graph. Give your answer to 1 decimal place.

## Written test 3: answers

| 357573 | $3(2305)^{2035}$ | (2 marks) |
| :---: | :---: | :---: |
| a) $6 \quad$ b) $16 \frac{1}{4}$ | (16 r 1 or 16.25) | (2 marks) |
| b) 530 |  | (2 marks) |
|  | (b) 3 and 5 | (1 mark) |
|  |  | (1 mark) |
|  | (c) 3, 5, 15, 17, 20, 26 | (1 mark) |

5
Mary and Bob weigh $59.5 \mathrm{~kg}+80.3 \mathrm{~kg}=139.8 \mathrm{~kg}$.
Since this is less than 145 kg , it can safely carry Mary and Bob. (1 mark)
(6) 2244

(1 mark)
b) $\mathbf{1 7 0 0} \mathrm{g}$ or $\mathbf{1} \mathrm{kg} 700 \mathrm{~g}$
(1 mark)
(16:15
(1 mark)

(2 marks)
12 tents
(2 marks)

109 days
8th March
$39.1^{\circ} \mathrm{C}$ or $39.2^{\circ} \mathrm{C}$

