# END OF PRIMARY BENCHMARK 

# MATHEMATICS <br> WRITTEN PAPER 

80 Marks<br>1 hour 15 minutes

1. Work out:

2. Which shape am I?

Complete the following table about flat and solid shapes.
Use the shape names below.
(Note: There are 2 extra shape names.)

| cube | cone | cylinder |
| :---: | :---: | :---: |
| rectangle | sphere | square |

a) I look like a football.
b) All my 6 faces are squares.
c) I am a flat shape with 4 lines of symmetry.
d) I have $\mathbf{3}$ faces, 2 edges and $\mathbf{0}$ vertices.
3. Look at each scale and complete the sentences.
a)


The arrow points to
b)


The weighing scales read

c)


This is a 1 litre measuring jug.


4a) Draw all the possible lines of symmetry, if any, of the following shapes.
i)

ii)
iii)

b) Which two of the shapes below have the same area?


Shape A

have the same area.

5. Choose numbers from the following table to fill in the boxes below

Use each number only once.

| 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 |

a) two odd numbers
b) two multiples of $\mathbf{8}$
c) two square numbers
d) a pair of numbers that adds to 90


6a) This clock shows the time Jamie wakes up in the morning during the week.
At what time does Jamie wake up?

b) Jamie leaves home for school at $\mathbf{5}$ minutes to $\mathbf{8}$.
i) Mark this time on the clock.

ii) He arrives at school $\mathbf{1 5}$ minutes later.

At what time does he arrive at school?

iii) This clock shows the time Jamie arrives back home from school. Write down an estimate for the size of the smaller angle, between the minute hand and the hour hand, on this clock.


7a) Tick $(\checkmark$ ) the correct statement for each of these two decimal numbe (Note: There is only $\mathbf{O N E}$ correct statement each time.)
i) $\mathbf{1 1 \cdot 2 5}$

It has got 2 tenths.


It has no wholes.


It is equal to $11 \frac{1}{2}$.

ii) $\mathbf{1 6 . 7}$

It is equal to $167 \times 10$.

It has got 7 hundredths.

When rounded to the nearest whole number, the result is 17 .
b) Use all the number cards below to write a decimal number which:

- has got no tenths
- has 8 in the units position
- $\quad$ is between 20 and 30

c) Circle the numbers which together add up to the decimal number in the box.


8. Martina is sick. The doctor tells Martina to take $\mathbf{5}$ millilitres ( ml ) of sy 3 times a day for 5 days.
a) How many millilitres ( $\boldsymbol{m l}$ ) of syrup does Martina take everyday?

$\qquad$ $m l$
b) The capacity of the bottle is $\mathbf{9 0}$ millilitres ( $\boldsymbol{m l}$ ).

How much syrup is left in the bottle after 5 days?

c)


Work out the number of teaspoons Martina needs in order to fill the whole water bottle with water.

9. A group of seven friends are collecting the stickers of their favourite cartoon characters.

| Friends | Jane | Mario | John | Susan | David | Mary | Tom |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number <br> of <br> stickers | 46 | 87 | 47 | 61 | 90 | 13 | 76 |

a) Work out the total number of cartoon stickers that the friends have collected.
$\qquad$ stickers
b) What is the mean number of cartoon stickers collected by the seven friends?
$\qquad$ stickers
c) Write down the total number of stickers collected by the girls as a fraction of the total number of stickers collected by all the friends.

Write your answer in its simplest form.

10. This graph shows the distance travelled and the time taken by a tourn a holiday.

a) How many kilometres did he travel in:
i) 3 hours?

ii) $\quad 90$ minutes?

b) How long did he take to travel:
i) $\quad 50 \mathrm{~km}$ ?
ii) 125 km ?
c) The tourist wants to travel $\mathbf{2 0 0} \mathbf{~ k m}$.
i) How long will he take?
ii) Explain your answer.
$\qquad$
$\qquad$
11. Julia has a number of equilateral triangles.

Each equilateral triangle has a perimeter of $\mathbf{1 2} \mathbf{~ c m}$.

a) Work out the length of each side of the equilateral triangle.
$\square$
b) Julia uses these triangles to form one big equilateral triangle.

i) Work out the perimeter of the big equilateral triangle.

ii) Shade $\frac{1}{4}$ of the big equilateral triangle.
12. Maria's Greengrocer sells $\mathbf{8} \mathbf{~ k g}$ of oranges for $€ \mathbf{~} \cdot \mathbf{8 4}$.

Karl's Greengrocer sells $\mathbf{6} \mathbf{~ k g}$ of oranges for $€ \mathbf{~} \mathbf{3 0}$.

a) i) Which of these two greengrocers sells oranges at a cheaper price?

ii) By how much (per kg) are the oranges cheaper?

## $€$

$\qquad$
b) Dad wants to buy $\mathbf{1 2} \mathbf{~ k g}$ of oranges.

How much does he save by buying from the cheaper shop?
$€$
13. All the Year 6 children in a school were asked about their favourite ho



| $\frac{1}{10}$ |
| :---: |
| of all the |
| children have |
| OTHER |
| HOBBIES |

a) What percentage of the children like computer games?

b) More children prefer reading rather than collecting stickers.

Is this True or False? Tick $(\nabla)$ the correct answer.


False


Give a reason for your answer.
$\qquad$
$\qquad$
c) How many Year $\mathbf{6}$ children are there in this school?
$\qquad$ children
14. The problems a) and b) shown below are incomplete.

You need at least one more fact from A, B, or C before you can solve them.

First choose the missing fact and then work out the problems.
a) There are $\mathbf{6}$ rows of soldiers with an equal number of soldiers in each row. How many soldiers are there?

## Missing fact:

| A. | There are over 100 soldiers. |
| :---: | :--- |
| B. | There are 25 soldiers in each row. |
| C. | There are 12 missing soldiers. |

## Working:

Ans: $\qquad$ soldiers
b) For a school outing, the headmaster needs to get buses for $\mathbf{8 1 0}$ students. How many buses does he need?

Missing fact:

| A. | One bus carries 30 students. |
| :---: | :--- |
| B. | 30 buses carry 1 student. |
| C. | 30 students were absent for the outing. |

Working:

Ans: $\qquad$ buses
15. Dad has $\mathbf{9}$ pieces of rope, each $\mathbf{3 4} \mathbf{~ c m}$ long.
a) What is the total length of the $\mathbf{9}$ pieces of rope?

b) Dad tied all the pieces of rope together to form a long rope. He used 5 cm of rope to make each knot.

i) How many knots are needed to tie all the pieces together?
$\qquad$ knots
ii) How long is the rope when all the $\mathbf{9}$ pieces are tied together?

c) Dad wants to use this rope to reach a height of 2.95 m .
i) Does he have enough rope to reach this height?

Tick $(\checkmark)$ the correct answer.

ii) Give a reason for your answer.
$\qquad$
$\qquad$
16. From a boutique


| a dress and a hat <br> cost <br> $€ 68$ |
| :---: |

> a suit and a dress cost
> $€ 130$

a) Deborah wants to buy two suits, a hat and a dress.

How much will Deborah spend altogether?

$$
€
$$

$\qquad$
b) What is the price of one suit?


## END OF PAPER

## Marking Scheme

| Mental Paper | Nos. | $1-20$ | $20 \times 1$ mark | $=$ | 20 marks |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Written Paper | Nos. | $1-4$ | $4 \times 4$ marks | $=$ | 16 marks |
|  |  | $5-12$ | $8 \times 5$ marks | $=$ | 40 marks |
|  |  | $13-16$ | $4 \times 6$ marks | $=$ | 24 marks |
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