YEAR 6 MATHEMATICS TIME: 1h 30 min

Name: $\qquad$ Class: $\qquad$

1) $\begin{array}{r}452 \\ +134 \\ \hline\end{array}$
2) 

$\begin{array}{r}103 \\ \times \quad 3 \\ \hline\end{array}$
3) 815
$-672$
$\qquad$
$\qquad$
$\qquad$
4) $6 \longdiv { 5 2 5 }$
5) $25 \times 10=250$

Complete:
a) $250 \div 10=$ $\qquad$
b) $2.5 \times 10=$
c) $25 \times 9=250-$ $\square$
6) Look at this circle.

What part of the whole circle is shaded?
7) Work out the difference between 3.5 cm and 9 cm .


Give your answer as a:
a) fraction

b) decimal $=$ $\qquad$ -
c) percentage $=$ $\qquad$
8) Tom, Anna and Ben make patterns with dots.

The pictures show the first two patterns each child makes.
Draw the next pattern in each picture.

9) Choose the correct word to fill in.

| millimetres | grams | millilitres | seconds |
| :--- | :--- | :--- | :--- |
| centimetres | kilograms | litres | minutes |
| metres |  |  | hours |
| kilometres |  |  |  |

a) A bus trip from Valletta to Rabat takes about $\mathbf{3 0}$ $\qquad$ .
b) A desk could be about 75 $\qquad$ high.
c) A 1 cent coin weighs about 3 $\qquad$ .
d) The amount of water in a glass could be about 200 $\qquad$ .
10) This map shows some cities.

Air Malta planes fly to and from these cities.

a) Fill in the directions.
i) A plane flies $\qquad$ to go from Malta to Vienna.
ii) A plane flies $\qquad$ to go to Paris from Stockholm.
b) Complete:
i) A plane leaves Madrid. It flies East. To which city is it flying?
ii) A plane leaves London. It flies North West. To which city is it flying?
11) a) Look at the abacus.

Write the number shown in figures.

b) Shade $\mathbf{0 . 2}$ of this square.

c) Write down the numbers shown by the arrows at $\boldsymbol{A}$ and at $\mathbf{B}$.


Arrow at $\boldsymbol{A}$ shows $\qquad$ Arrow at $\mathbf{B}$ shows $\qquad$
12) Look at this table.

Fill in the missing weights. (The first one has been done for you.)

|  |  | $\mathbf{7 5 g}$ |  |
| :--- | ---: | ---: | ---: |
| Weight of empty tin | $\mathbf{3 3 5 g}$ | $1 \mathrm{~kg} \mathrm{365g}$ |  |
| Weight of contents only | $\mathbf{4 1 0 g}$ | 1 kg 500 g | $2 \mathrm{~kg} \mathrm{55g}$ |
| Weight of tin and contents |  |  |  |

13) Look at angles $\mathbf{A}, \mathbf{B}, \mathbf{C}, \mathbf{D}$.

a) Choose the correct words for each angle.

The first one has been done for you.

| a right | an acute | an obtuse | astratght |
| :---: | :---: | :---: | :---: |

(i) $\mathbf{A}$ is $\qquad$ angle.
(ii) $\mathbf{B}$ is $\qquad$ angle.
(iii) $\mathbf{C}$ is $\qquad$ angle.
(iv)
D is
$\qquad$ angle.
b) Look at these circles. Each circle is divided into equal parts.


Write down, in degrees, the size of the marked angle in each circle.
Angle E = $\qquad$ -

Angle F = $\qquad$ -

Angle G = $\qquad$ -


To answer this question, do not use a ruler.
Look at this pattern.
It is made from 3 different flat shapes.
a) Shape $A$ has 6 equal sides. Its perimeter is $\mathbf{1 2} \mathbf{~ c m}$. How long is one side of shape $A$ ?
$\qquad$ cm
b) Shape $B$ is a square. What is its perimeter?
$\qquad$ cm
c) Shape $C$ has $\mathbf{3}$ equal sides. What is its perimeter?
$\qquad$ cm
15) a) This is a rectangle. It is $\mathbf{6 c m}$ long and 4 cm wide.


What is the area of this rectangle?
$\qquad$ $\mathrm{cm}^{2}$
b) A second rectangle is half as long and twice as wide as the first rectangle.

What is the area of the second rectangle? $\qquad$ $\mathrm{cm}^{2}$
c) A third rectangle is twice as long and half as wide as the first rectangle.

What is the area of the third rectangle? $\qquad$ $\mathrm{cm}^{2}$
16) Look at this diagram. It is made from whole squares, half squares and quarter squares.

(a) What fraction is:
i) triangle $\mathbf{A}$ of triangle
B ?

i) triangle $\boldsymbol{A}$ ?

ii) triangle $\mathbf{B}$ of square $\mathbf{C}$ ?

ii) triangle $\boldsymbol{B}$ ?

iii) triangle $\boldsymbol{A}$ of square
C ?

iii) square $\boldsymbol{C}$ ?

(b) What fraction of the rectangle is:
17) Anna goes shopping.

This was her bill.
a) Fill in the missing numbers.

b) Anna pays her bill and has $\mathbf{L m} \mathbf{3 - 1 7}$ left in her purse.

How much money had she at first?

Lm $\qquad$
18) Look at this picture. It shows some TV programmes and a time-line.

a) The "Cartoons" programme starts at 16:40 and ends at 17:25.

How long is the "Cartoons" programme?
$\qquad$ minutes
b) Which two programmes are together $\mathbf{1}$ hour long ?
$\qquad$ ; $\qquad$ .
c) The 'News' programme is $\mathbf{2 0}$ minutes long. At what time does it end? $\qquad$
19) The table and the graphs show the vehicles carried by two Gozo Channel ferries.

| Vehicles |  |  |  |
| :---: | :---: | :---: | :---: |
| 1st Ferry | 19 |  | 10 |
| 2nd Ferry |  | 12 | 8 |


a) Complete:
i) the table by using the graphs.
ii) the graphs by using the table.
b) The ferry fare for one lorry and its driver is Lm 11.75.

What is the cost for all the lorries and their drivers on the 1st Ferry?
$\qquad$
20) Tom's father is laying tiles in his new bathroom. He needs 477 tiles. Tiles are bought in whole boxes only. Each box holds 15 tiles.

Complete to find out the number of boxes Tom's father needs.

$$
\begin{array}{r}
477 \\
-150 \\
\hline 327
\end{array} \leftarrow 10 \times 15
$$

$\qquad$ boxes.
21) Father's car tank can hold $\mathbf{3 0}$ litres of petrol when full but it is only $\mathbf{1} / \mathbf{6}$ full.
a) How many litres of petrol does the tank contain ?
$\qquad$ litres

Father uses $\frac{2}{2}$ (litre of petrol every day to drive to work.
b) How many litres of petrol does he use in $\mathbf{5}$ days?

c) What amount of petrol is left in the tank after $\mathbf{5}$ days? $\square$

22) This picture shows the weights of 6 bags.


Tom puts $\mathbf{3}$ bags on pan $\mathbf{A}$ and $\mathbf{3}$ bags on pan $\mathbf{B}$ to make pan A $\mathbf{1} \mathbf{k g}$ heavier than pan $\mathbf{B}$.

Fill in the weights on pan $\mathbf{A}$ and pan $\mathbf{B}$.


## END OF PAPER

Marking Scheme:
Questions 1-8 (3 marks each)
Questions 9-12 (4 marks each)
Questions 13-22 (6 marks each)

