END OF PRIMARY BENCHMARK

2021

SECOND SESSION

MATHEMATICS

WRITTEN PAPER

80 marks

1 hour 30 minutes
1. **Work out.**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a) $245 + 165 = \phantom{000}$</td>
<td>b) $472 - 231 = \phantom{000}$</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>c) $34 \times 62 = \phantom{000}$</td>
<td>d) $515 \div 5 = \phantom{000}$</td>
</tr>
</tbody>
</table>

(4 marks)

2. **Look at the matchstick pattern below.**

**Figure 1**  
**Figure 2**  
**Figure 3**  
**Figure 4**

There are **3 matchsticks in Figure 1** and **5 matchsticks in Figure 2**.

a) How many **matchsticks** are there in **Figure 5**?

b) How many **matchsticks** are there in **Figure 10**?

(4 marks)
3. Look at the map of The World below.

![Map of the World](image)

a) Fill in with compass directions.

i. Africa is _________ of Europe.

ii. Europe is _________ of South America.

b) Fill in each blank with the name of a continent.

i. ___________ is West of Asia.

ii. ___________ is South of Africa.

(4 marks)
4. **Tick (✓) the best estimate.**

a) The **mass** of a **new born baby**.

- 3 kg
- 30 g
- 30 kg
- 300 g

b) The **full capacity** of a **bath**.

- 2 l
- 22 ml
- 220 ml
- 220 l

c) The **height** of a **classroom door**.

- 2.5 m
- 25 cm
- 25 m
- 250 m

d) The **area** of a **classroom floor**.

- 5 cm²
- 5 km²
- 50 m²
- 500 cm²

(4 marks)
5a) Look at the shapes below. 
Each small square on the grid has an area of 1 cm$^2$.

![Grid with shapes A and B]

i. What is the **perimeter** of shape A?  

ii. What is the **area** of shape B?

b) On the grid below, draw a **regular polygon** with an **area** of 25 cm$^2$ and a **perimeter** of 20 cm.

Each small square on the grid has an area of 1 cm$^2$.

(5 marks)
   He arrives at Bugibba at 14:20.

a) How long is the journey from Floriana to Bugibba?

   Show your working here.

   minutes

b) Draw 14:20 on the clock face.

   c) Write 14:20 in 12-hour clock format.

   : (5 marks)
7. The table below shows the prices of different types of cinema ticket.

<table>
<thead>
<tr>
<th>Ticket Type</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults</td>
<td>€8.30</td>
</tr>
<tr>
<td>Children</td>
<td>€5.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ticket Type</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family</td>
<td>€19.00</td>
</tr>
<tr>
<td>2 adults and 2 children OR 1 adult and 3 children</td>
<td></td>
</tr>
</tbody>
</table>

a) What is the difference in price between a ticket for 1 adult and a ticket for 1 child?

Show your working here.

€

b) Some friends spend €33.20 on tickets. Each of them is 15 years old. How many friends are there altogether?

Show your working here.

friends in all

c) There are 2 adults and 3 children in family Briffa. They choose the best offer for them. How much do they pay in all?

Show your working here.

€

(5 marks)
8. Coach Tim packs **60 bean bags** to be used during training.

a) \[ \frac{1}{2} \text{ of the bean bags are red.} \]
How many bean bags are red?

Show your working here.

![Show your working here.]

red bean bags

b) \[ \frac{15}{60} \text{ of all the bean bags are green.} \]

\[
\frac{15}{60} = \frac{\square}{4}
\]

Show your working here.

![Show your working here.]

yellow bean bags

c) \[ \frac{1}{3} \text{ of the remaining bean bags are yellow.} \]

How many **yellow** bean bags are there?

Show your working here.

yellow bean bags

(5 marks)
9a) Look at the shape below.

![Shape Diagram]

i. This is a _______________.

ii. It has ____ faces.

b) Ann makes a cube from the net below.
When the net is folded, the numbers opposite each other add up to 10.

Complete the numbers on the net.

1

7 4

(5 marks)
10a) What is the **size of Angle X**?

\[ \text{Angle X is } 100^\circ \]

b) Triangle ABC has **one line of symmetry**.

i. The **length** of side AC is \( \text{cm} \).

\( \text{AC is } 6.5 \text{ cm} \)

ii. The **length** of side BC is \( \text{cm} \).

\( \text{BC is } 3.5 \text{ cm} \)

iii. **Angle B is** \( 72^\circ \).

Work out the size of Angle A.

\( \text{Angle A is } 36^\circ \)

c) **A triangle has 2 obtuse angles.**

Is this **true**?

Tick (✓) the correct answer.

- Always True
- Sometimes True
- Never True

(5 marks)
11. Andrew, Timothy and Lisa go to the school canteen. Below there is the menu.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuna Ftira</td>
<td>€1</td>
</tr>
<tr>
<td>Ham and Cheese Sandwich</td>
<td>75c</td>
</tr>
<tr>
<td>Chicken Wrap</td>
<td>€1.50</td>
</tr>
<tr>
<td>Oat Bar</td>
<td>80c</td>
</tr>
<tr>
<td>Bottle of Water</td>
<td>50c</td>
</tr>
</tbody>
</table>

a) Andrew buys a ham and cheese sandwich and a bottle of water. How much money does Andrew spend?

Show your working here.

€

b) Timothy buys a chicken wrap. He has €5. How much change does he get?

Show your working here.

€

c) Lisa buys 3 different items and spends €2.05. Which items does she buy?

(5 marks)
12. Martina is filling a bucket with water. 
   In **10 seconds** the bucket fills up to **0.72 l**.

   a) How much water is there in the bucket in **1 minute**?

   Show your working here.

   l

   b) More time passed and there is **5.48 l** in the bucket.

   How much more water is needed to fill a **12 l bucket**?

   Show your working here.

   l

   c) Another **12 l** bucket full of water is hit and now has a crack.

   It loses a **quarter** of its water.

   How much water is **left** in this bucket?

   Show your working here.

   l

   (5 marks)
13. Pamela is thinking of a 4-digit number.

- It contains four of the following digits: 1, 2, 3, 4, 5, 6 and 7.
- Pamela uses each digit only once.
- The digit in the Thousands position is double the digit in the Hundreds position.
- When rounded to the nearest 1000 this number becomes 6000.
- This number is an even number.
- The number is exactly divisible by 9 but not divisible by 5.

The number Pamela is thinking of is \boxed{\_\_\_\_} or \boxed{\_\_\_\_}. (6 marks)
14a) Kevin spends €8.55 on stationery.
   He pays with 1 note and 8 coins.
   Which note and coins does he use to pay?
   **Note:** Not all 8 coins have the same value.

b) Kevin gets some pocket money every Sunday.
   Work out:
   
   i. the total number of Sundays in June 2021.
   **Note:** This year the first day of June was a Tuesday.
   
   ii. the total number of Sundays in July 2021.
   
   (6 marks)
15. Look at the different fruit below.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2 apples</td>
<td>2 bananas</td>
<td>7 cherries</td>
<td>2 pears</td>
<td>5 strawberries</td>
</tr>
<tr>
<td>400 g</td>
<td>450 g</td>
<td>100 g</td>
<td>350 g</td>
<td>100 g</td>
</tr>
</tbody>
</table>

a) Amy prepares different fruit salads.
Each of these salads has **apples and two other types of fruit**.
How many different types of fruit salad can Amy make?

Show your working here.

b) Amy prepares **banana and cherry** smoothies.
She uses 2 bananas and 7 cherries in each smoothie.
What is the total mass of fruit Amy uses for 6 of these smoothies?

**Note:** Write your answer in kilograms.

Show your working here.

(6 marks)
16a) Jake conducts a survey to find out how many cousins each student in the Year 6 class at Sunshine School has.
   The table below shows all the information he collects.

<table>
<thead>
<tr>
<th>Number of cousins</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>More than 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of students</td>
<td>1</td>
<td>2</td>
<td>18</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Work out the **mean number of cousins per student**.

Show your working here.

b) Jake carries out the same survey with the Year 5 class.
   There are 22 students in the Year 5 class.
   The **mean number of cousins per student** is 1.
   Complete the table below.

<table>
<thead>
<tr>
<th>Number of cousins</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>More than 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of students</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Show your working here.