END OF PRIMARY BENCHMARK
2014
SECOND SESSION
MATHEMATICS
WRITTEN PAPER
80 marks
1 hour 30 minutes
WRITTEN PAPER

1. Work out:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a. $438 - 99 = \underline{\phantom{00}}$</td>
<td>b. $789 + \underline{\phantom{00}} = 2000$</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>c. $20 \times 30 = \underline{\phantom{00}}$</td>
<td>d. $168 \div \underline{\phantom{00}} = 7$</td>
</tr>
</tbody>
</table>

2a. Complete.

Use the digits in each question only once.

i) Write the smallest odd number using $\underline{3\ 4\ 5\ 6}$ → \underline{\phantom{00}}

ii) Using $\underline{1\ 3\ 4\ 5}$ write a number that when rounded to the nearest 100 is 4500. → \underline{\phantom{00}}

b. Write these numbers in ascending order (smallest first).

$\underline{53\cdot3\ 53\ 5\cdot33\ 0\cdot53\ 5\cdot3}$

\underline{smallest', largest'}
3a. The weighing scales below shows a total weight of ________ kg.

b. Complete the following:
   i) __________ kg
   ii) __________ kg

4. Look at the two diagrams below.
   The number in each rectangle is the sum of the two numbers in the circles on each side of the rectangle.
   Work out A, B and C.

   i) 3
      11
      8  23  15
   ii) 4.2
       7.03
       B  C  5.76

   A = ________  B = ________  C = ________
5. Sue is a book writer. She can type 9 pages in 27 minutes using her laptop.

a. How long does she take to type 1 page? 

b. How many pages can she type in 1 hour 21 minutes?

c. How long will Sue take to type a whole book of 78 pages? 
Give your answer in hours and minutes.

6. The total length of a rubber, a key and a pencil is 13 cm.

Use the ruler in the picture to answer the questions below.

a. What is the length, in cm, of the rubber?

b. What is the length, in cm, of the pencil?

c. What is the difference, in mm, between the longest object and the shortest object?
7. **Match a – e and complete f.**

The first one has been done for you.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>a right angle</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>23°</td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td>45°</td>
<td>a. an acute angle</td>
</tr>
<tr>
<td>c.</td>
<td>90°</td>
<td>$2\frac{1}{2}$ right angles</td>
</tr>
<tr>
<td>d.</td>
<td>180°</td>
<td>a clockwise turn from North to North East</td>
</tr>
<tr>
<td>e.</td>
<td>225°</td>
<td>the angles on a straight line</td>
</tr>
<tr>
<td>f.</td>
<td>360°</td>
<td>____________________________</td>
</tr>
</tbody>
</table>

8. **Look at this shape.**

a. What **fraction** of the shape **is shaded**?

Give your answer in its **simplest form**.

_____

b. What **percentage** of the whole shape **is shaded**?

_____%

c. **Shade more squares** so that **80%** of the shape **is shaded**.
9. Peter, a farmer, has a rectangular field. He uses part of the field for crops and the other part for flowers. Look at the diagram below.

a. Work out the perimeter of the field that Peter uses for flowers.

b. Work out the area of the field that he uses for crops.
10. Tom works in a sports shop. He packs tennis balls in tubes.

   a. Each tube contains 6 balls.
      One box holds 16 tubes of balls.
      How many balls does he have in one box?

          ______ balls

   b. Tom has 480 tennis balls to pack.
      i) How many boxes does he need to pack all the balls?

          ______ boxes

      ii) Tom takes 5 minutes to pack 6 balls in one tube.
           How long does it take to pack 480 balls in the tubes?
           Give your answer in hours and minutes.

          ______ hours ______ minutes
11. This line graph shows the temperatures in °C, in Malta, over 12 hours.

<table>
<thead>
<tr>
<th>Time</th>
<th>Temperature (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:00</td>
<td>0</td>
</tr>
<tr>
<td>10:00</td>
<td>2</td>
</tr>
<tr>
<td>12:00</td>
<td>4</td>
</tr>
<tr>
<td>14:00</td>
<td>8</td>
</tr>
<tr>
<td>16:00</td>
<td>12</td>
</tr>
<tr>
<td>18:00</td>
<td>14</td>
</tr>
<tr>
<td>20:00</td>
<td>18</td>
</tr>
</tbody>
</table>

a. What is the temperature at midday? ______°C

b. What is the lowest temperature shown on the graph? ______°C

c. At what times does it reach 16 °C? ______ and ______

d. What is the difference in temperature between 08:00 and 12:00? ______°C

e. What happens to the temperature between 16:00 and 20:00?
12. Maria uses **12 identical squares** to make this shape, Shape A.

   Each square is of side **2 cm**.

   ![Shape A](image)

   a. Work out the **perimeter** of Shape A.

   ____ cm

   b. What is the **area** of Shape A?

   ____ cm²

   c. Maria wants to make another shape.

   This new shape will have an **area of 64 cm²**.

   How many **squares of side 2 cm** does she need to **add to Shape A**?

   ____ more squares
13. The petrol gauge of Tania’s car measures from 0 to 48 litres. The arrow marks the amount of fuel in the tank.

a) The tank has \[______ \text{l} \] of petrol.

b) The car uses 750 ml of petrol for every 5 km.

i) Tania drives a distance of 100 km every day. How many litres of petrol does she use every day?

\[______ \text{l} \]

ii) Tania fills the fuel tank until it is full. How many kilometres does she drive to use all the petrol in the tank?

\[______ \text{km} \]
14. Sam looks at the April 2014 calendar.

<table>
<thead>
<tr>
<th>APRIL 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUN MON TUE WED THU FRI SAT</td>
</tr>
<tr>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>6 7 8 9 10 11 12</td>
</tr>
<tr>
<td>13 14 15 16 17 18 19</td>
</tr>
<tr>
<td>20 21 22 23 24 25 26</td>
</tr>
<tr>
<td>27 28 29 30</td>
</tr>
</tbody>
</table>

a. How many Sundays were there in April 2014?

[_____ Sundays]

b. Sam works from Monday to Saturday.
   He did not work from the 14th to the 19th.
   How many days did Sam work during the month of April?

[_____ days]

c. Sam celebrates his birthday on the last day of May.
   In 2014, Sam’s birthday was on a:

   [ ] Wednesday   [ ] Thursday   [ ] Friday   [ ] Saturday

   Tick (✓) the correct answer.
15. A teacher looks at the two offers below.

Offer A

Box of 4 pencils
€0.68

Offer B

Box of 6 pencils
€0.90

a. Will the teacher save most money by choosing Offer A or Offer B? Explain.

Offer _____ because _____________________________________________________________

b. The teacher wants to buy 48 pencils for his year 6 students.

The teacher decides to buy some boxes with 4 pencils and some boxes with 6 pencils.

He spends a total of €7.44.

How many of each box does he buy?

_______ boxes of 4 pencils

_______ boxes of 6 pencils
16. Tickets are sold for an afternoon and evening performance of a play at the local theatre.
   The theatre is made up of **15 rows**. Each row has **23 seats**.

   a. How many people can be seated at the theatre?

   ______ people

   b. All tickets are sold for the afternoon performance.
   The prices for the tickets are shown in the table below.
   Find the **total amount** collected from the sale of all tickets.

<table>
<thead>
<tr>
<th>Prices</th>
<th>Row 1 to Row 10</th>
<th>€35</th>
</tr>
</thead>
<tbody>
<tr>
<td>Golden Circle</td>
<td>Reading</td>
<td>€35</td>
</tr>
<tr>
<td>Silver Circle</td>
<td>Reading</td>
<td>€25</td>
</tr>
</tbody>
</table>

   € ______

---

**END OF PAPER**

**Marking Scheme**

<table>
<thead>
<tr>
<th>Mental Paper</th>
<th>Written Paper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nos.</td>
<td>Nos.</td>
</tr>
<tr>
<td>1 - 20</td>
<td>1 - 4</td>
</tr>
<tr>
<td>20 × 1 mark</td>
<td>4 × 4 marks</td>
</tr>
<tr>
<td>= 20 marks</td>
<td>= 16 marks</td>
</tr>
<tr>
<td>5 - 12</td>
<td>8 × 5 marks</td>
</tr>
<tr>
<td>40 marks</td>
<td>= 40 marks</td>
</tr>
<tr>
<td>13 - 16</td>
<td>4 × 6 marks</td>
</tr>
<tr>
<td>24 marks</td>
<td>= 24 marks</td>
</tr>
<tr>
<td>TOTAL</td>
<td><strong>100 marks</strong></td>
</tr>
</tbody>
</table>