DIRECTORATE FOR QUALITY AND STANDARDS IN EDUCATION
Directorate for Curriculum Management and eLearning
Educational Assessment Unit

Annual Examinations for Primary Schools 2012

YEAR 5  MATHEMATICS MENTAL PAPER   TIME: 15 minutes

Teacher’s Paper

Guidelines for the conduct of the Mathematics Examination – Mental Paper

1. Words written in **bold** should be **emphasised**.

2. Read, **loudly and clearly**, each question **twice in succession**, and then allow 5, to 10, to 20 seconds as the test progresses through the three sections.

3. Access to rough paper for working out answers is **not allowed**. Any working on the answer sheet, however, will not be penalised.

4. The questions should be read out in **English** and **no code-switching/mixing is allowed**. Code-switching is permitted **only** for giving pupils instructions.

5. Before starting the test, read out the following instructions, using **exactly these words**:
   - *I will read out each question twice. Listen carefully both times. You will then have time to work your answer.*
     *Se naqrallek kull mistoqsijja darbtejn wara xulxin. Ismagħni sew. Wara jkollok il-hin biex tweġibha.*
   - *If you make a mistake, cross out the wrong answer and write the correct answer next to it.*
     *Jekk tiehu żball f’xi risposta, aqtagħha u ikteb ir-risposta t-tajba ħdejha.*
   - *You will not be allowed to ask any questions once the test has started.*
     *Ma tistax tistaqsi mistoqsijiet hekk kif jibda t-test.*

6. At the end of the test, read out the following instructions, **using exactly these words**:
   - *The test is finished; put down your pens.*
     *It-test spiċċa; poġgi l-bajrow fuq il-mejda.*
MENTAL PAPER

‘For this group of questions, you will have 5 seconds to work out each answer and write it down.’
‘Għal dawn il-mistoqsijiet li ġejjin, ghandek 5 sekondi biex tahseb u tikteb kull risposta.’

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Write the number <strong>five thousand, six hundred and thirty two</strong> in figures.</td>
</tr>
<tr>
<td>2</td>
<td>Which of these numbers is not a <strong>factor</strong> of <strong>sixteen</strong>: two, three, four or eight?</td>
</tr>
<tr>
<td>3</td>
<td>How many <strong>months</strong> are there in a <strong>year</strong>?</td>
</tr>
<tr>
<td>4</td>
<td>How many <strong>lines of symmetry</strong> does a <strong>square</strong> have?</td>
</tr>
<tr>
<td>5</td>
<td>Write the next number in the sequence: eighty one, seventy two, sixty three, fifty four.</td>
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</tbody>
</table>
‘For the next group of questions, you will have 10 seconds to work out each answer and write it down.’
‘Għal dawn il-mistoqsijiet li ġejjin, għandek 10 sekondi biex tahseb u tikteb kull risposta.’

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<table>
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<tbody>
<tr>
<td>6</td>
<td>What are <strong>eight lots of nine</strong>?</td>
</tr>
<tr>
<td>7</td>
<td>What is <strong>half of one hundred and sixteen</strong>?</td>
</tr>
<tr>
<td>8</td>
<td>Write a <strong>fraction</strong> which is <strong>equal to one half</strong>.</td>
</tr>
<tr>
<td>9</td>
<td>What must be <strong>added</strong> to sixty four to make a <strong>hundred</strong>?</td>
</tr>
<tr>
<td>10</td>
<td>Round <strong>five thousand and seventy five</strong> to the <strong>nearest hundred</strong>.</td>
</tr>
<tr>
<td>11</td>
<td>A <strong>square</strong> has a <strong>perimeter</strong> of <strong>thirty six centimetres</strong>. What is the <strong>length</strong> of <strong>one of its sides</strong>?</td>
</tr>
<tr>
<td>12</td>
<td><strong>Multiply sixty three by hundred</strong>.</td>
</tr>
<tr>
<td>13</td>
<td>Which is the <strong>smallest</strong> of these numbers: <strong>two point three</strong>, <strong>two point zero three</strong> or <strong>zero point two three</strong>?</td>
</tr>
<tr>
<td>14</td>
<td>What is <strong>forty four</strong> more than <strong>two hundred and forty five</strong>?</td>
</tr>
<tr>
<td>15</td>
<td>How much more than <strong>sixty two</strong> is <strong>three hundred and fifty</strong>?</td>
</tr>
</tbody>
</table>
‘For this group of questions, you will have 20 seconds to work out each answer and write it down.’

‘Għal dawn il-mistoqsijiet li ġejjin, għandek 20 sekonda biex tahseb u tikteb kull risposta.’

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<table>
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<tbody>
<tr>
<td>16</td>
<td>Sam thinks of a number. He <strong>multiplies</strong> his number by <strong>six</strong> and the <strong>answer</strong> is <strong>seventy two</strong>. <strong>What is his number?</strong></td>
</tr>
<tr>
<td>17</td>
<td>If you add <strong>twelve</strong>, <strong>thirteen</strong> and <strong>fifteen</strong>, will the total be <strong>even</strong> or <strong>odd</strong>?</td>
</tr>
<tr>
<td>18</td>
<td>Mariah drinks <strong>one thousand, seven hundred and fifty millilitres</strong> from a <strong>two litre</strong> bottle of water. How many litres of water are <strong>left</strong> in the bottle?</td>
</tr>
<tr>
<td>19</td>
<td><strong>What is forty five</strong> divided by <strong>four</strong>? Write the remainder as a <strong>fraction</strong>.</td>
</tr>
<tr>
<td>20</td>
<td>Paula has <strong>two coins of one euro each</strong>. She spends <strong>one euro and twenty cent</strong> on a new pen. <strong>How much change</strong> does she have?</td>
</tr>
</tbody>
</table>

**END OF MENTAL PAPER**
DIRECTORATE FOR QUALITY AND STANDARDS IN EDUCATION
Department for Curriculum Management and eLearning
Educational Assessment Unit

Annual Examinations for Primary Schools 2012

YEAR 5 MATHEMATICS MENTAL PAPER TIME: 15 minutes

Name: _________________________________  Class: _____________

Instructions to Candidates

• The teacher will read each question twice. Listen carefully to the teacher both times. You will then have time to work your answer.

• If you make a mistake, cross out the wrong answer and write the correct answer next to it.

• You will not be allowed to ask any questions once the test has started.

• This paper carries a total of 20 marks.
MENTAL PAPER
ANSWER SHEET

1. 

2. 

3. months 

4. lines 

5. 

6. 

7. 

8. 

9. 

10. 

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<td>11.</td>
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<td>cm</td>
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<td>12.</td>
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<td>19.</td>
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<td>20.</td>
<td></td>
<td>cent</td>
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</tbody>
</table>
1. **Fill in:**

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<table>
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<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>a)</td>
<td>62 + □ = 100</td>
<td></td>
</tr>
<tr>
<td>b)</td>
<td>905 - 399 = □</td>
<td></td>
</tr>
<tr>
<td>c)</td>
<td>408 ÷ 4 = □</td>
<td></td>
</tr>
<tr>
<td>d)</td>
<td>8 × 25 = (8 × □) + (8 × □)</td>
<td></td>
</tr>
<tr>
<td>e)</td>
<td>$\frac{3}{4}$ litre &gt; □ ml</td>
<td></td>
</tr>
<tr>
<td>f)</td>
<td>5:40 pm, 5:55 pm, □:□ pm, □:□ pm, 6:40 pm</td>
<td></td>
</tr>
<tr>
<td>g)</td>
<td>□ × 10 = 725</td>
<td></td>
</tr>
<tr>
<td>h)</td>
<td><strong>Round 47.61 to the nearest whole number.</strong> □</td>
<td></td>
</tr>
<tr>
<td>i)</td>
<td>□ - 3.37 m = 7.54 m</td>
<td></td>
</tr>
<tr>
<td>j)</td>
<td>$\frac{17}{4}$ = □</td>
<td></td>
</tr>
</tbody>
</table>
2. **Which numbers match the clues?**

   **Note:** Each number can only be used once.

   a) This is equal to 409 × 3.

   b) This number is 10 more than 9295.

   c) This number is exactly divisible by 6.

   d) The tens digit is three times the hundreds digit.

   e) This number is 89 multiplied by 52.
3. These are the prices of items that are on sale.

<table>
<thead>
<tr>
<th>Item</th>
<th>Old Price</th>
<th>New Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>cap</td>
<td>€18</td>
<td>€9</td>
</tr>
<tr>
<td>shirt</td>
<td>€22·50</td>
<td>€10·25</td>
</tr>
<tr>
<td>jacket</td>
<td>€34·40</td>
<td>€18·20</td>
</tr>
<tr>
<td>trainers</td>
<td>€27·50</td>
<td>€12·75</td>
</tr>
</tbody>
</table>

Fill in the blanks with the items that are on sale.

a) The __________________ is exactly half the price now.

b) The __________________ now costs a little more than half the price.

c) The __________________ and the __________________ now cost a little less than half the price.

d) The pair of jeans now costs €14·75. Before, it was double the price.  
How much did it cost before the sale?  

\[ €___ \cdot ___ \]

4. Match. (The first one has been done for you.)

example  The capacity of a teaspoon is about 0·15 kg

a) A new born baby weighs about 3 kg

b) A kettle holds about 250 ml

c) The weight of an apple is about 1·5 litres

d) The capacity of a mug is about 5 ml
5.  a) I am a regular pentagon.
   One of my sides is 6 cm long.
   What is my Perimeter?

   ____ cm

   b) I am a rectangle.
   My area is 36 cm². My length is 4 times my width.
   What is my length?

   ____ cm
6.  a) **Tick (✓) the nets that can be folded to make a cube.**

   (i)  
   (ii)  
   (iii)  
   (iv)  

b) **Match.**

   - **cube**  
     • 3-D shape  
     • it has 3 faces and 2 edges  
     • it has no vertices

   - **isosceles triangle**  
     • 3-D shape  
     • all its faces are squares  
     • it has 12 edges

   - **cylinder**  
     • 2-D shape  
     • all 3 sides are equal  
     • it has 3 lines of symmetry

   - **equilateral triangle**  
     • 2-D shape  
     • 2 of its sides are equal  
     • it has 1 line of symmetry
7. Complete.

a) Write these in ascending order (*smallest first*).

\[
\begin{align*}
0.45 & \quad \frac{1}{2} & \quad \text{four tenths} \\
& & \\
& & \\
& & \\
\end{align*}
\]

b) Donna spends \( \frac{1}{3} \) of the day sleeping.

Her sister Fiona spends \( \frac{1}{4} \) of the day sleeping.

(i) Who sleeps the most? Tick (✓) the correct answer.

Donna \[ \square \] or Fiona \[ \square \]

(ii) Give a reason for your answer.

________________________________________

________________________________________


c) Fill in to make equivalent fractions.

\[
\begin{align*}
\frac{1}{4} & = \frac{6}{\square} \\
\frac{2}{3} & = \frac{\square}{24}
\end{align*}
\]
8. On the 14th August Katrina will be 8 years old. Her parents are throwing a pool party for Katrina and her friends.

**August 2012**

<table>
<thead>
<tr>
<th>Sunday</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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</tbody>
</table>

a) **When** shall they have the party, so that everyone can come?

Katrina will be on holiday in Paris from the 12th August till the 19th August.

Her best friend Tania will be spending the last 7 days of the month in Gozo.

Faye has piano lessons in the morning and dancing lessons in the afternoon on Wednesdays and Fridays.

On Thursday 23rd August, Sara has another birthday party.

Katrina doesn’t wish to have her pool party before her birthday.

On Monday 20th August, Gabriella will spend a day at her grandma to help her with the house chores.

_____ August

b) Mark, Katrina’s brother, celebrates his birthday on the 12th November. How many days are there from Katrina’s birthday to Mark’s birthday?

_______ days
9. Mum buys $1 \frac{3}{4}$ kg ricotta.

a) She uses 500 g ricotta for the lasagna. **How much** does she have **left**?

b) Her son Mark **takes 220 g from the remaining ricotta** for some sandwiches he is preparing. **How much** ricotta is **left now**?

c) Mum wants to prepare some ricotta pies. **For each ricotta pie** she will need 50 g of ricotta. **How many pies** can she make with the **remaining ricotta**?
10. The local library is a very popular place for both children and adults. This graph shows how many people borrowed books from the library last week.

![Bar graph showing book borrowing distribution by day.]

### a) Complete this information table.

<table>
<thead>
<tr>
<th>Days of the week</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
</tr>
</thead>
<tbody>
<tr>
<td>People</td>
<td>50</td>
<td>75</td>
<td>20</td>
<td>70</td>
<td>120</td>
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</tbody>
</table>

### b) Complete the graph.

### c) How many people borrowed books from the library last week?

________ people

### d) \( \frac{3}{5} \) of the people who borrowed books last week were children.

How many adults borrowed books from the library?

________ adults
11. Craig and William planned to spend Saturday afternoon together. This was their plan:

a) The boys decided to meet 40 minutes before 4:00 pm. On the clock face, draw the time they met.

b) The film was 1 hour 35 minutes long. At what time did the film end?

\[ \_\_\_:\_\_ \text{pm} \]

(c) This clock face shows the time William was back home. Tick (✓) the time that matches the clock face.

(i) ten minutes to eight
(ii) ten minutes past nine
(iii) ten minutes to nine
12. Aaron is at the MAIN ENTRANCE of the Water Fun Park, facing the GARDEN.

![Diagram of Water Fun Park with labels: restaurant, sunbathing area, children's area, slides, garden, pool, car park 1, car park 2, MAIN ENTRANCE]

a) Fill in, using the directions.

(i) Aaron wants to go to the garden first. He has to go ______________.

(ii) To go from the garden to the pool, Aaron has to walk ______________.

(iii) Aaron has lunch at the restaurant. The restaurant is ______________ of the garden.

(iv) Then, he goes to the slides. The slides are ____________ of the restaurant.

b) Aaron is at the slides facing North.

To face car park 1 he has to turn ( $3\frac{1}{2}, 1\frac{1}{2}, 2$ ) right angles.

This is equal to ____________ °.
13. **Who am I?**

*Note: I am a number from 1 to 100.*

Follow all the clues below to guess who I am.

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<td>98</td>
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<td>100</td>
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</tbody>
</table>

I am an even number but not a square number.

I am a two digit number.

I am a multiple of 4 and 8.

One of my digits is odd.

The sum of my digits is 5.

The difference between my digits is 1.

I am ____

---

**END OF PAPER**

**Marks’ Scheme**  
Nos.  
1 a - j  $10 \times 2 = 20$  
2 - 7  $6 \times 4 = 24$  
8 - 13  $6 \times 6 = 36$  
**TOTAL** 80  

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