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

Annual Examinations for Primary Schools 2012

YEAR 4 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 naqralek kull mistoqsija darbatejn wara xulxin. Ismaghnī sew. Wara jkollok il-hin biex twieģibha.
   - If you make a mistake, cross out the wrong answer and write the correct answer next to it.
     
     Jekk tiehu żball f’xi risposta, aqtaghha u ikteb ir-risposta t-tajba hdejha.
   - You will not be allowed to ask any questions once the test has started. Maltistax 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.’
‘Ghal dawn il-mistoqsijiet li ġejjin, ghandek 5 sekondi biex taħseb u tikteb kull risposta.’

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>What is <strong>half of forty</strong>?</td>
</tr>
<tr>
<td>2</td>
<td>How many <strong>edges</strong> does a <strong>cube</strong> have?</td>
</tr>
<tr>
<td>3</td>
<td>How many <strong>days</strong> are there in <strong>two weeks</strong>?</td>
</tr>
<tr>
<td>4</td>
<td><strong>Round one hundred and seventy two</strong> to the <strong>nearest hundred</strong>.</td>
</tr>
<tr>
<td>5</td>
<td>Write in <strong>digits</strong> the number <strong>two hundred and fifty three</strong>.</td>
</tr>
</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.'

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>What needs to be <strong>added</strong> to six to make <strong>twenty</strong>?</td>
</tr>
<tr>
<td>7</td>
<td>What is <strong>fifty less than six hundred and eighty</strong>?</td>
</tr>
<tr>
<td>8</td>
<td>What is <strong>eight lots of hundred</strong>?</td>
</tr>
<tr>
<td>9</td>
<td>How many <strong>groups of five</strong> in <strong>forty five</strong>?</td>
</tr>
<tr>
<td>10</td>
<td>How many <strong>metres</strong> in <strong>three and a half kilometres</strong>?</td>
</tr>
<tr>
<td>11</td>
<td>What is the <strong>difference</strong> between <strong>one hundred</strong> … and … <strong>sixty three</strong>?</td>
</tr>
<tr>
<td>12</td>
<td>Ninety five, ninety seven, ninety nine… What is the <strong>next number</strong>?</td>
</tr>
<tr>
<td>13</td>
<td>How many <strong>twenty euro cent</strong> coins do I need to make <strong>one euro</strong>?</td>
</tr>
<tr>
<td>14</td>
<td>A <strong>bottle of water</strong> holds <strong>one thousand litres, one litre or one millilitre</strong>?</td>
</tr>
<tr>
<td>15</td>
<td>Write a <strong>fraction</strong> which is <strong>smaller</strong> than <strong>one half</strong>.</td>
</tr>
</tbody>
</table>
‘For this group of questions, you will have 20 seconds to work out each answer and write it down.’

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

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>Write <strong>twenty minutes past four</strong> as a <strong>digital time</strong>.</td>
</tr>
<tr>
<td>17</td>
<td>Mary thinks of a number. She <strong>divides her number</strong> by <strong>four</strong>, and she gets a <strong>six</strong>. What is <strong>Mary’s number</strong>?</td>
</tr>
<tr>
<td>18</td>
<td>There are <strong>fifty five people</strong> on a bus. <strong>Sixteen get off</strong> and <strong>twelve get on</strong>. How many people are <strong>left</strong> on the bus?</td>
</tr>
<tr>
<td>19</td>
<td>Write an <strong>odd number, between twenty and thirty</strong>, which can be <strong>exactly divided</strong> by three.</td>
</tr>
<tr>
<td>20</td>
<td><strong>An apple</strong> weighs <strong>thirty seven grams more than a banana</strong>. A <strong>banana</strong> weighs <strong>one hundred and twenty grams</strong>. What is the <strong>total weight</strong> of an <strong>apple and a banana</strong>?</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 4                                   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.
1.  

2. edges  

3. days  

4.  

5.  

6.  

7.  

8.  

9.  

10. metres
11.

12.

13. coins

14.

15.

16. ____ : ____

17.

18. people

19.

20. grams
1. Fill in:

a) \(67 + 4 = \) 

b) \(54 - \) 

c) \(\times 4 = 36\)

d) \(56 \div 8 = \) 

e) \(4.5\) m = 

f) Double = 16 = \(\) \(\times 4\)

g) 620, \(\) , 820, 920, \(\) , 1120

h) 230 minutes = \(\) hours \(\) minutes

i) Shade \(\frac{1}{4}\) of the counters.

j) Write two even numbers that total 50.
\(\) + \(\) = 50
2. Use all the 3 cards below in each question.

![Cards: 3, 7, 4]

Write:

a) the biggest 3 digit number.  
   ________

b) the smallest 3 digit number.  
   ________

c) a 3 digit number which has 4 as tens.  
   ________

d) a number which is ten less than 447.  
   ________

3. True or False.

<table>
<thead>
<tr>
<th></th>
<th>True</th>
<th>False</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) ( \frac{3}{4} ) kg <strong>is less than</strong> 1 kg</td>
<td>✔️</td>
<td></td>
</tr>
<tr>
<td>b) 1500 g <strong>is more than</strong> 1 kg 5 g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) 6 apples <strong>are always heavier than</strong> 3 kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) ( \frac{1}{4} ) kg + ( \frac{1}{4} ) kg <strong>is the same as</strong> 500 g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) 250 g + 120 g + 230 g + 1400 g = 20 kg</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. Look carefully at these 2-D shapes.

Match.

Note: The first one has been done for you.

a) This shape has many lines of symmetry.

b) This shape is a hexagon.

c) This shape has 4 right angles and 4 equal sides.

d) This shape is a pentagon.

e) This shape has 2 lines of symmetry.
5. a) Use the digits \( \begin{array}{c} 9 \\ 2 \\ 4 \end{array} \) to write the number:

- nearest to 250
- nearest to 500

b) Use the digits \( \begin{array}{c} 4 \\ 7 \\ 9 \\ 6 \end{array} \) to make the total.

\[ \begin{array}{c} 4 \\ 7 \\ 9 \\ 6 \end{array} \] \[ + \] \[ \begin{array}{c} \hline \\ \hline \end{array} \] = \[ 116 \]

6. Jamie takes 250 ml of orange juice to a picnic.

He drinks half of it at lunchtime, then drinks another 65 ml in the afternoon.

a) How much does he drink in all?

\[ \text{______ ml} \]

b) How much is left in the packet?

\[ \text{______ ml} \]
7. Martina loves working with fractions.
   a) This is the plan of Martina’s bedroom. It is in the shape of a square.
      \(\frac{1}{4}\) of her bedroom is a reading area.
      
      Shade \(\frac{1}{4}\) of her bedroom.
      
      Martina’s bedroom

   b) Martina collects stickers. These are some of the stickers she has.
      Some are smiley faces and some are sad faces.
      \(\frac{1}{8}\) of her stickers are smiley faces.
      
      Fill in to make a fraction which is equal to \(\frac{1}{8}\).
      
      \[
      \frac{1}{8} = \boxed{\quad}\n      \]

   c) Martina has 3 chocolates. Each chocolate has 5 equal slices.
      She eats 2 equal slices from 1 chocolate. How much chocolate is left?
      
      \[
      \text{She eats} \quad 2 \text{ equal slices from} \quad 1 \text{ chocolate}. \quad \boxed{\quad} \quad \boxed{\quad}
      \]
8. Tom goes on a picnic with his friends.
   These are some things which he has in his backpack.

   ![Images of objects: drinking can, ball, game, lunch box]

   a) **Match** the things on the left to the names of 3-D shapes on the right.

   drinking can  |  sphere
   ball          |  cuboid
   game          |  cylinder
   lunch box     |  cube

   b) The picture on your right shows a **cone**.
      **Tick ✓** the correct answer.

      (i) How many faces does the cone have? 1 2 3
      (ii) How many edges does the cone have? 1 2 3
      (iii) How many vertices does the cone have? 1 2 3
9. The cinema is showing these 3 cartoons.

<table>
<thead>
<tr>
<th>Cartoon</th>
<th>Start</th>
<th>End</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRUCKS</td>
<td>8:00</td>
<td>9:50</td>
</tr>
<tr>
<td>POP STAR</td>
<td>10:00</td>
<td>11:05</td>
</tr>
<tr>
<td>DINO</td>
<td>11:15</td>
<td>12:45</td>
</tr>
</tbody>
</table>

a) (i) **TRUCKS** starts at 8:00.  
Mark this time on the clock.  
(ii) **TRUCKS** ends at 9:50.  
Mark this time on the clock.

(iii) **How long** is the film **TRUCKS**?

_______ minutes

b) Ben is watching a film at the cinema at **quarter to 11**.  
Which film is he watching? (Tick ✓ the correct answer.)

TRUCKS [ ] POP STAR [ ] DINO [ ]

c) Jessica decides to watch **DINO**. She is at the cinema **20 minutes earlier**.  
What time is she at the cinema?

____:____

MENU

<table>
<thead>
<tr>
<th>Item</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>juice</td>
<td>22c</td>
</tr>
<tr>
<td>melon</td>
<td>30c</td>
</tr>
<tr>
<td>soup</td>
<td>35c</td>
</tr>
<tr>
<td>pie</td>
<td>€1.68</td>
</tr>
<tr>
<td>burger</td>
<td>€3.86</td>
</tr>
<tr>
<td>fish</td>
<td>€2.79</td>
</tr>
<tr>
<td>apple tart</td>
<td>59c</td>
</tr>
<tr>
<td>ice cream</td>
<td>43c</td>
</tr>
<tr>
<td>yoghurt</td>
<td>41c</td>
</tr>
</tbody>
</table>

a) How much did each pay?

<table>
<thead>
<tr>
<th></th>
<th>Maya</th>
<th>Luke</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b) How much change did Maya receive from two coins of €2?

€___·___

c) Luke had €3.06 left in his wallet after lunch.

Tick ☑ the 4 coins that make this amount.

<table>
<thead>
<tr>
<th>Coin</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

(Blank for coins)

d) You have just 1 euro. You want to spend it all.

What can you buy from the MENU above?

___________ and ___________
11. a) **You are at the farm.**

Write down **what you see** if you look:

(i) South

(ii) North East

(iii) South West

(iv) West

b) **You are at the farm facing North.**

**What** are you going to face if you turn:

(i) 1 right angle clockwise?

(ii) 1 right angle anticlockwise?

c) **Use Compass Points** to complete these sentences:

i) The beach is ___________ of the hills.

ii) The bridge is ___________ of the campsite.
12. All Year 4 children in a school are asked to choose their most favourite fruit.

From the bar chart above:

a) Which is the most favourite fruit? __________

b) Which is the least favourite fruit? __________

c) How many more children prefer the pear to the kiwi? __________ children

d) How many children are there in all? __________ children
13. Mr Galea, the drama teacher, needs to group the children in class.

If I group the children in teams of 8, there will be 1 extra child.
If I group the children in teams of 4, there will be 1 extra child.
If I group the children in teams of 3, there will be 1 extra child.
I have less children than 30 but more children than 20.

a) How many children are there in Mr Galea’s class?

__________ children

b) Which is the best way for Mr Galea to group the children, so that all the children are in equal groups?

_____________________________

_____________________________

END OF PAPER

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

Mathematics – Written Paper – Year 4 Primary – 2012