Teacher's Papers and Answers

First published in 2012 as a downloadable pdf from www.merlinpublishers.com
This downloadable pdf of teachers' papers and answers is intended for use with the book Merlin Benchmark Maths (978-999091405-4)

Merlin Publishers Ltd
42, Mountbatten Street, Blata I-Bajda, Malta
www.merlinpublishers.com
Copyright © Merlin Publishers Ltd
This pdf may not be distributed, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission from the publishers.

## MENTAL MATHEMATICS

## TEACHER'S PAPER

TIME: 15 minutes

## Test Paper 1

## Guidelines for the conduct of the Mental Mathematics Examination

1. Words written in bold should be emphasised.
2. Read, in a loud and clear way, 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 darbtejn wara xulxin. Ismagћni sew. Wara jkollok il-ћin biex twegibha.

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

Jekk tieћu żball f'xi risposta, aqtagћha u ikteb ir-risposta t-tajba $\hbar d e j h a$.

- You will not be allowed to ask any questions once the test has started. Ma tistax issaqsi mistoqsijiet hekk kif it-test jibda.

6. At the end of the test, read out the following instructions, using exactly these words:

- The test is over; put down your pens.

It-test spic̈ca; poġgi l-bajrow fuq il-mejda.

## MENTAL MATHEMATICS

'For this group of questions, you will have 5 seconds to work out each answer and write it down.'
'Ghal dawn il-mistoqsijiet li gejjin, gћandek 5 sekondi biex taћseb u tikteb ir-risposta.'

| 1. | How many days are there in two weeks? |
| :---: | :--- |
| 2. | What is double fifty-three? |
| 3. | How many sides does a hexagon have? |
| 4. | What is the next number: <br> thirty-five, forty-five, fifty-five, ... |
| 5. | What must be added to thirty-five to make one hundred? |

'For the next group of questions, you will have 10 seconds to work out each answer and write it down.'
‘Ghal dawn il-mistoqsijiet li ġejjin, ghandek 10 sekondi biex tahseb u tikteb ir-risposta.,

| 6. | How many hours are there in three days? |
| :---: | :--- |
| 7. | Round one hundred and seventy-three to the nearest hundred. |
| 8. | Subtract thirty from one hundred and twenty. |
| 9. | How many grams are there in seven point three kilograms? |
| 10. | How many lots of four are there in thirty-six? |


| 11. | What is three point seven divided by one hundred? |
| ---: | :--- |
| 12. | What is forty multiplied by four hundred? |
| 13. | Which one of these numbers is exactly divisible by ten: <br> four thousand, three hundred and sixty-three or seven hundred and five? |
| 14. | How many centimetres in one quarter of a metre? |
| 15. | What is the sum of twenty-eight, twenty-two and fifty? |

'For this group of questions, you will have 20 seconds to work out each answer and write it down.'
'Ghal dawn il-mistoqsijiet li gejjin, gћandek 20 sekonda biex taћseb u tikteb ir-risposta.,

| 16. | Write two and three-fourths as a decimal fraction. |
| ---: | :--- |
| 17. | Mary bought a pen for eighty-five euro cents. <br> How much change did she receive from one euro? |
| 18. | What is ten percent of five hundred and sixty books? |
| 19. | The perimeter of a hexagon is forty-eight centimetres. <br> What is the length of one side? |
| 20. | A bus left Valletta at ten to six and arrived in Paola at half past six. <br> How long did the journey take? |

END OF MENTAL PAPER

## MENTAL MATHEMATICS

## TEACHER'S PAPER

TIME: 15 minutes

## Test Paper 2

## Guidelines for the conduct of the Mental Mathematics Examination

1. Words written in bold should be emphasised.
2. Read, in a loud and clear way, 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 darbtejn wara xulxin. Ismagћni sew. Wara jkollok il-ћin biex twegibha.

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

Jekk tieћu żball f'xi risposta, aqtagћha u ikteb ir-risposta t-tajba $\hbar d e j h a$.

- You will not be allowed to ask any questions once the test has started. Ma tistax issaqsi mistoqsijiet hekk kif it-test jibda.

6. At the end of the test, read out the following instructions, using exactly these words:

- The test is over; put down your pens.

It-test spic̈ca; poġgi l-bajrow fuq il-mejda.

## MENTAL MATHEMATICS

'For this group of questions, you will have 5 seconds to work out each answer and write it down.'
'Ghal dawn il-mistoqsijiet li gejjin, gћandek 5 sekondi biex taћseb u tikteb ir-risposta.'

| 1. | What is half of four point four? |
| :---: | :--- |
| 2. | How many faces does a cube have? |
| 3. | What is seven squared? |
| 4. | What is the next even number after ninety-eight? |
| 5. | What number must be added to fifty-five to make one hundred? |

'For the next group of questions, you will have 10 seconds to work out each answer and write it down.'
'Ghal dawn il-mistoqsijiet li gejjin, ghandek 10 sekondi biex taћseb u tikteb ir-risposta.'

| 6. | How many hours are there in two days? |
| :--- | :--- |
| 7. | How many ten euro cents coins are there in ninety euro cents? |
| 8. | Add ninety to three hundred and forty. |
| 9. | Seventy-six is divided by six. <br> What is the remainder? |
| 10. | Multiply eighty by eight. |

11. Write zero point seven kilograms in grams.
12. What is the sum of two angles on a straight line?
13. How many minutes are there between four o'clock and quarter to five?
14. 

Write this number in figures:
two thousand, one hundred and eight.
Which is the longest length:
15. three hundred centimetres or three point five metres?
'For this group of questions, you will have 20 seconds to work out each answer and write it down.'
'Ghal dawn il-mistoqsijiet li gejjin, gћandek 20 sekonda biex taћseb u tikteb ir-risposta.,

| 16. | Write zero point four as a fraction. <br> Give your answer in its simplest form. |
| ---: | :--- |
| 17. | Forty-eight percent of the people in a theatre are adults. <br> The rest are children. <br> What percentage are children? |
| 18. | An isosceles triangle has an angle of seventy degrees. <br> What is the size of the other two angles? |
| 19. | A rectangle has an area of two hundred and twenty centimetres squared. <br> One side of a rectangle is eleven centimetres. <br> What is the length of the other side? |
| 20. | The difference between two numbers is thirty. <br> The smallest number is fifty-five. <br> What is the largest number? |

## END OF MENTAL PAPER

## MENTAL MATHEMATICS

## TEACHER'S PAPER

TIME: 15 minutes

## Test Paper 3

## Guidelines for the conduct of the Mental Mathematics Examination

1. Words written in bold should be emphasised.
2. Read, in a loud and clear way, 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 darbtejn wara xulxin. Ismagћni sew. Wara jkollok il-ћin biex twegibha.

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

Jekk tieћu żball f'xi risposta, aqtagћha u ikteb ir-risposta t-tajba $\hbar d e j h a$.

- You will not be allowed to ask any questions once the test has started. Ma tistax issaqsi mistoqsijiet hekk kif it-test jibda.

6. At the end of the test, read out the following instructions, using exactly these words:

- The test is over; put down your pens.

It-test spic̈ca; poġgi l-bajrow fuq il-mejda.

## MENTAL MATHEMATICS

'For this group of questions, you will have 5 seconds to work out each answer and write it down.'
'Ghal dawn il-mistoqsijiet li gejjin, gћandek 5 sekondi biex taћseb u tikteb ir-risposta.'

| 1. | What is double twenty-six? |
| :---: | :--- |
| 2. | Which solid shape has two circular faces? |
| 3. | How many weeks in one year? |
| 4. | What is twenty less than two hundred sixty? |
| 5. | What is the next number: <br> thirty-six, thirty-three, thirty, ... |

'For the next group of questions, you will have 10 seconds to work out each answer and write it down.'
'Ghal dawn il-mistoqsijiet li g̀ejjin, ghandek 10 sekondi biex taћseb u tikteb ir-risposta. ${ }^{\prime}$

| 6. | What is one thousand subtract seven? |
| :---: | :--- |
| 7. | Multiply thirty-one by five. |
| 8. | Round three point eight to the nearest whole number. |
| 9. | How many minutes are there in one and a quarter hours? |
| 10. | Write seven-tenths as a percentage. |


| 11. | How many lines of symmetry does a regular pentagon have? |
| ---: | :--- |
| 12. | What are nine lots of ten? |
| 13. | What is six hundred and seventy divided by one hundred? |
| 14. | Write five thousand and six in figures. |
| 15. | What fraction of one kilometre is eight hundred metres? <br> Give your answer in its simplest form. |

'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, gћandek 20 sekonda biex taћseb u tikteb ir-risposta.,

| 16. | Write quarter past three in the afternoon as a twenty-four hour digital <br> time. |
| ---: | :--- |
| 17. | An equilateral triangle has a perimeter of thirty-nine centimetres. <br> How long is one of its sides? |
| 18. | Write three point zero five as a mixed fraction. |
| 19. | The perimeter of a square is thirty-six centimetres. <br> What is the area of the square? |
| 20. | A sale has twenty-five per cent off all prices. <br> A suit costs one hundred euro. <br> What is the cost of the suit during the sale? |

END OF MENTAL PAPER

## MENTAL MATHEMATICS

## TEACHER'S PAPER

TIME: 15 minutes

## Test Paper 4

## Guidelines for the conduct of the Mental Mathematics Examination

1. Words written in bold should be emphasised.
2. Read, in a loud and clear way, 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 darbtejn wara xulxin. Ismagћni sew. Wara jkollok il-ћin biex twegitha.

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

Jekk tieћu żball f'xi risposta, aqtagћha u ikteb ir-risposta t-tajba $\hbar d e j h a$.

- You will not be allowed to ask any questions once the test has started. Ma tistax issaqsi mistoqsijiet hekk kif it-test jibda.

6. At the end of the test, read out the following instructions, using exactly these words:

- The test is over; put down your pens.

It-test spic̈ca; poġgi l-bajrow fuq il-mejda.

## MENTAL MATHEMATICS

'For this group of questions, you will have 5 seconds to work out each answer and write it down.'
'Ghal dawn il-mistoqsijiet li gejjin, gћandek 5 sekondi biex taћseb u tikteb ir-risposta.,

| 1. | How many days are there is the month of April? |
| :---: | :--- |
| 2. | What is double one hundred and four? |
| 3. | How many sides does a pentagon have? |
| 4. | What is twenty multiplied by forty? |
| 5. | What must be added to six point three centimetres to make seven <br> centimetres? |

'For the next group of questions, you will have 10 seconds to work out each answer and write it down.'
'Ghal dawn il-mistoqsijiet li ġejjin, gћandek 10 sekondi biex taћseb u tikteb ir-risposta.'

| 6. | Add together forty-eight, forty and two. |
| :---: | :--- |
| 7. | What is five point two four multiplied by ten? |
| 8. | How many lines of symmetry does a regular hexagon have? |
| 9. | What is three point eight divided by one hundred? |
| 10. | Write three-tenths as a decimal fraction. |


| 11. | Write a number which is divisible by four and eleven. |
| :---: | :--- |
| 12. | Which of these angles is an acute angle: <br> thirty-six degrees, ninety-five degrees or ninety degrees? |
| 13. | Share three hundred sweets between three jugs. <br> How many sweets in each jug? |
| 14. | What fraction of twelve euro is nine euro? <br> Write your answer in its lowest terms. |
| 15. | Subtract one thousand nine hundred and ninety-nine from five thousand <br> and five. |

‘For this group of questions, you will have 20 seconds to work out each answer and write it down.'
‘Ghal dawn il-mistoqsijiet li gejjin, ghandek 20 sekonda biex tahseb u tikteb ir-risposta.'

| 16. | Write a factor of sixty-three. |
| ---: | :--- |
| 17. | Apples cost one euro thirty euro cents per kilogram. <br> What is the cost of one and a half kilogram of apples? |
| 18. | A train was due to leave at eleven o'clock in the morning, but it left two and a <br> half hours later. <br> At what time did the train leave? |
| 19. | Forty percent of the people in a circus are children, thirty percent are <br> women and the rest are men. <br> What percentage of people are men? |
| 20. | A full bottle holds three and a half litres of water. <br> A full jug holds one half litre. <br> How many jugs will fill the bottle? |

## END OF MENTAL PAPER

## MENTAL MATHEMATICS

## TEACHER'S PAPER

TIME: 15 minutes

## Test Paper 5

## Guidelines for the conduct of the Mental Mathematics Examination

1. Words written in bold should be emphasised.
2. Read, in a loud and clear way, 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 darbtejn wara xulxin. Ismagћni sew. Wara jkollok il-ћin biex twegibha.

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

Jekk tieћu żball f'xi risposta, aqtagћha u ikteb ir-risposta t-tajba $\hbar d e j h a$.

- You will not be allowed to ask any questions once the test has started. Ma tistax issaqsi mistoqsijiet hekk kif it-test jibda.

6. At the end of the test, read out the following instructions, using exactly these words:

- The test is over; put down your pens.

It-test spic̈ca; poġgi l-bajrow fuq il-mejda.

## MENTAL MATHEMATICS

'For this group of questions, you will have 5 seconds to work out each answer and write it down.'
'Ghal dawn il-mistoqsijiet li gejjin, gћandek 5 sekondi biex taћseb u tikteb irrisposta.'

| 1. | What is half of two hundred and ten? |
| :---: | :--- |
| 2. | What is the next number: <br> six hundred, five hundred, four hundred, ... |
| 3. | How many vertices does a cylinder have? |
| 4. | Round fifty-seven to the nearest ten. |
| 5. | How many days are there in July and August? |

'For the next group of questions, you will have 10 seconds to work out each answer and write it down.'
‘Ghal dawn il-mistoqsijiet li gejjin, ghandek 10 sekondi biex taћseb u tikteb ir-risposta. ${ }^{\prime}$

| 6. | What is twenty-three more than sixty? |
| :--- | :--- |
| 7. | How many millilitres are there in one quarter of a litre? |
| 8. | What is one hundred and one minus twenty-five? |
| 9. | How many weeks are equivalent to fifty-six days? |
| 10. | How many hours are there in one hundred and eighty minutes? |


| 11. | What is seven hundred and thirty-nine centimetres to the nearest metre? |
| ---: | :--- |
| 12. | What is the value of three in: <br> six thousand one hundred and thirty-one? |
| 13. | How many lots of ten are there in one hundred and ten? |
| 14. | Jane has twenty ten euro cents in her money box. <br> How much money does she have? |
| 15. | A bag of flour weighs one and a half kilograms. <br> Mum used five hundred grams of it. <br> How many flour is left in the bag? |

'For this group of questions, you will have 20 seconds to work out each answer and write it down.'
'Ghal dawn il-mistoqsijiet li gejjin, gћandek 20 sekonda biex taћseb u tikteb ir-risposta.'

| 16. | Two thousand divided by five is four hundred. <br> What is four hundred multiplied by five? |
| ---: | :--- |
| 17. | The area of a square is forty-nine centimetres squared. <br> What is the length of one side of the square? |
| 18. | John has twenty-five books on the shelf. He reads one-fifth of them. <br> How many books are left to read? |
| 19. | Elaine bought a car for fourteen thousand euro. <br> She paid ten percent deposit. <br> How much was the deposit? |
| 20. | A television programme starts at quarter to eight. <br> It lasts twenty-five minutes. |
| At what time does the programme finish? |  |

## END OF MENTAL PAPER

## MENTAL MATHEMATICS

## TEACHER'S PAPER

TIME: 15 minutes

## Test Paper 6

## Guidelines for the conduct of the Mental Mathematics Examination

1. Words written in bold should be emphasised.
2. Read, in a loud and clear way, 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 darbtejn wara xulxin. Ismagћni sew. Wara jkollok il-ћin biex twegibha.

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

Jekk tieћu żball f'xi risposta, aqtagћha u ikteb ir-risposta t-tajba $\hbar d e j h a$.

- You will not be allowed to ask any questions once the test has started. Ma tistax issaqsi mistoqsijiet hekk kif it-test jibda.

6. At the end of the test, read out the following instructions, using exactly these words:

- The test is over; put down your pens.

It-test spic̈ca; poġgi l-bajrow fuq il-mejda.

## MENTAL MATHEMATICS

'For this group of questions, you will have 5 seconds to work out each answer and write it down.'
'Ghal dawn il-mistoqsijiet li gejjin, gћandek 5 sekondi biex taћseb u tikteb ir-risposta.'

| 1. | What is double three hundred? |
| :--- | :--- |
| 2. | How many sides are there in a quadrilateral? |
| 3. | What is the next odd number after ninety-nine? |
| 4. | How many euro cents are there in three euro? |
| 5. | Round six point nine to the nearest whole number. |

'For the next group of questions, you will have 10 seconds to work out each answer and write it down.'
'Ghal dawn il-mistoqsijiet li gejjin, ghandek 10 sekondi biex taћseb u tikteb ir-risposta.'

| 6. | What is the next number: <br> two point two, two point four, two point six, ... |
| :---: | :--- |
| 7. | How many euro cents must be added to six euro forty to make seven euro? |$|$| 8. | What is the difference between one hundred fifty-five and two hundred? |
| :--- | :--- |
| 9. | What is the value of six in the number: <br> seventeen point six? |
| 10. | Eight hundred and six is divided by ten. <br> What is the remainder? |


| 11. | How many minutes are there in three quarters of an hour? |
| :---: | :--- |
| 12. | Which of these angles is a reflex angle: <br> an angle of one hundred eighty-five degrees or an angle of one hundred <br> degrees? |
| 13. | One thousand, one hundred and sixty-nine people were on the plane. <br> Thirty-one were children. <br> How many adults were on the plane? |
| 14. | Two angles are on a straight line. <br> The smallest angle is seventy-eight degrees. <br> What is the other angle? |
| 15. | How many litres are there in three thousand, one hundred and sixty <br> millilitres? |

‘For this group of questions, you will have 20 seconds to work out each answer and write it down.'
‘Ghal dawn il-mistoqsijiet li geejijin, ghandek 20 sekonda biex taћseb u tikteb ir-risposta.'

| 16. | Write an equivalent fraction of two-thirds, with a numerator of six. |
| ---: | :--- |
| 17. | Five times a number is one hundred and twenty-five. <br> What is the number? |
| 18. | One side of a regular pentagon is twelve centimetres. <br> What is the perimeter of the pentagon? |
| 19. | Jake thought of a number. He doubled it and added nine. <br> The answer was forty-nine. <br> What number did he start with? |
| 20. | Share twenty-three buns between four children. <br> Give your answer as a mixed fraction. |

## MENTAL MATHEMATICS

## TEACHER'S PAPER

TIME: 15 minutes

## Test Paper 7

## Guidelines for the conduct of the Mental Mathematics Examination

1. Words written in bold should be emphasised.
2. Read, in a loud and clear way, 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 darbtejn wara xulxin. Ismagћni sew. Wara jkollok il-ћin biex twegibha.

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

Jekk tieћu żball f'xi risposta, aqtagћha u ikteb ir-risposta t-tajba $\hbar d e j h a$.

- You will not be allowed to ask any questions once the test has started. Ma tistax issaqsi mistoqsijiet hekk kif it-test jibda.

6. At the end of the test, read out the following instructions, using exactly these words:

- The test is over; put down your pens.

It-test spic̈ca; poġgi l-bajrow fuq il-mejda.

## MENTAL MATHEMATICS

'For this group of questions, you will have 5 seconds to work out each answer and write it down.'
'Ghal dawn il-mistoqsijiet li gejjin, gћandek 5 sekondi biex taћseb u tikteb ir-risposta. ${ }^{\prime}$

| 1. | What is half of eighty-eight? |
| :---: | :--- |
| 2. | How many months are there in three years? |
| 3. | What is the next number: <br> fifteen, eighteen, twenty-one, ... |
| 4. | What is hundred more than three hundred and fourteen? |
| 5. | What is two hundred take away nine? |

'For the next group of questions, you will have 10 seconds to work out each answer and write it down.'
'Ghal dawn il-mistoqsijiet li g̀ejjin, ghandek 10 sekondi biex tahseb u tikteb ir-risposta. ${ }^{\prime}$

| 6. | What is twenty point six divided by ten? |
| :--- | :--- |
| 7. | How many centimetres in three metres? |
| 8. | Write five point seven as a mixed fraction. |
| 9. | How many lines of symmetry does an equilateral triangle have? |
| 10. | What is the total length of seven point four metres and zero point six <br> metres? |


| 11. | What is the sum of all the angles in a square? |
| ---: | :--- |
| 12. | What is fifty percent of two hundred? |
| 13. | Sam buys a sports magazine for sixty-five euro cents. <br> What change does he receive from two euro? |
| 14. | The last bus from Rabat is one hour before midnight. <br> At what time is the last bus? |
| 15. | Dad shared fifty stickers equally among his four children. <br> How many stickers does he have left? |

'For this group of questions, you will have 20 seconds to work out each answer and write it down.'
'Ghal dawn il-mistoqsijiet li gejjin, gћandek 20 sekonda biex taћseb u tikteb ir-risposta. ${ }^{\prime}$

| 16. | What is one fifth of three hundred? |
| ---: | :--- |
| 17. | Write three-quarters as a decimal fraction. |
| 18. | Sarah takes twenty minutes to walk home from school. <br> She leaves school at half past two. <br> At what time does she arrive home? |
| 19. | The area of a rectangular carpet is seventy-two metres squared. <br> The length of the carpet is nine metres. <br> What is its width? |
| 20. | A jug holds four litres of water. <br> A glass holds two hundred millilitres of water. <br> How many glasses can be filled from the jug? |

## MENTAL MATHEMATICS

## TEACHER'S PAPER

TIME: 15 minutes

## Test Paper 8

## Guidelines for the conduct of the Mental Mathematics Examination

1. Words written in bold should be emphasised.
2. Read, in a loud and clear way, 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 darbtejn wara xulxin. Ismagћni sew. Wara jkollok il-ћin biex twegibha.

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

Jekk tieћu żball f'xi risposta, aqtagћha u ikteb ir-risposta t-tajba $\hbar d e j h a$.

- You will not be allowed to ask any questions once the test has started. Ma tistax issaqsi mistoqsijiet hekk kif it-test jibda.

6. At the end of the test, read out the following instructions, using exactly these words:

- The test is over; put down your pens.

It-test spic̈ca; poġgi l-bajrow fuq il-mejda.

## MENTAL MATHEMATICS

'For this group of questions, you will have 5 seconds to work out each answer and write it down.'
'Ghal dawn il-mistoqsijiet li gejjin, gћandek 5 sekondi biex taћseb u tikteb ir-risposta.'

| 1. | What is double one hundred? |
| :---: | :--- |
| 2. | How many weeks are there in twenty-one days? |
| 3. | How many vertices does a cuboid have? |
| 4. | What is nine multiplied by three? |
| 5. | What is the next number: <br> twelve, eighteen, twenty-four, ... |

'For the next group of questions, you will have 10 seconds to work out each answer and write it down.'
‘Ghal dawn il-mistoqsijiet li gejjin, ghandek 10 sekondi biex taћseb u tikteb ir-risposta. ${ }^{\prime}$

| 6. | What is two hundred twenty take away thirty? |
| :--- | :--- |
| 7. | What is seven point eight multiplied by one hundred? |
| 8. | Round five hundred and sixty-eight to the nearest ten. |
| 9. | Add six hundred grams to four hundred grams. <br> Give your answer in kilograms. |
| 10. | How many millilitres are there in six point four eight litres? |


| 11. | How many twenty euro cents coins are there in eighty cents? |
| ---: | :--- |
| 12. | Write seven tenths as a percentage. |
| 13. | How many lots of five are there in fifty-five? |
| 14. | Add together twenty, thirty-five and forty-five. |
| 15 | Which of these numbers is divisible by one hundred: <br> three hundred and five, five hundred and sixteen or one thousand? |

'For this group of questions, you will have 20 seconds to work out each answer and write it down.'
‘Ghal dawn il-mistoqsijiet li g̀ejjin, ghandek 20 sekonda biex tahseb u tikteb ir-risposta.,

| 16. | Six times a number is three hundred sixty. <br> What is the number? |
| ---: | :--- |
| 17. | What is three fourths of two hundred and eight euro? |
| 18. | Fifteen percent of the children in a class like football. Twenty percent like <br> volleyball. The rest like netball. <br> What percentage of children like netball? |
| 19. | A rectangle measures eleven centimetres by twenty centimetres. <br> What is the area of the rectangle? |
| 20. | Justin worked for eight days in June. <br> What fraction of the whole month did he work? <br> Give your answer in its simplest form. |

## MENTAL MATHEMATICS

## TEACHER'S PAPER

TIME: 15 minutes

## Test Paper 9

## Guidelines for the conduct of the Mental Mathematics Examination

1. Words written in bold should be emphasised.
2. Read, in a loud and clear way, 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 darbtejn wara xulxin. Ismagћni sew. Wara jkollok il-ћin biex twegibha.

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

Jekk tieћu żball f'xi risposta, aqtagћha u ikteb ir-risposta t-tajba $\hbar d e j h a$.

- You will not be allowed to ask any questions once the test has started. Ma tistax issaqsi mistoqsijiet hekk kif it-test jibda.

6. At the end of the test, read out the following instructions, using exactly these words:

- The test is over; put down your pens.

It-test spic̈ca; poġgi l-bajrow fuq il-mejda.

## MENTAL MATHEMATICS

'For this group of questions, you will have 5 seconds to work out each answer and write it down.'
'Ghal dawn il-mistoqsijiet li gejjin, gћandek 5 sekondi biex taћseb u tikteb ir-risposta. ${ }^{\prime}$

| 1. | What is half of eighty-two? |
| :---: | :--- |
| 2. | How many faces does a cylinder have? |
| 3. | How many hours are there in four days? |
| 4. | What is the next number: <br> thirty, thirty-five, forty, ... |
| 5. | What is eight squared? |

'For the next group of questions, you will have 10 seconds to work out each answer and write it down.'
‘Ghal dawn il-mistoqsijiet li gejjin, ghandek 10 sekondi biex tahseb u tikteb ir-risposta. ${ }^{\prime}$

| 6. | How many millilitres are there in six litres? |
| :---: | :--- |
| 7. | Subtract twenty-nine from eighty. |
| 8. | Round ten point six to the nearest whole number. |
| 9. | Write a common factor of twenty and thirty-five. |
| 10. | What is the difference between six point two and five point zero? |


| 11. | How many lines of symmetry does a regular octagon have? |
| ---: | :--- |
| 12. | A notebook costs fifty cents. <br> How many notebooks can be bought from one euro? |
| 13. | Write this number in figures: <br> three thousand, one hundred and nine. |
| 14. | Write one quarter as a decimal fraction. |
| 15. | Thirteen multiplied by sixteen is two hundred and eight. <br> What is two hundred and eight divided by sixteen? |

'For this group of questions, you will have 20 seconds to work out each answer and write it down.'
'Ghal dawn il-mistoqsijiet li gejjin, gћandek 20 sekonda biex taћseb u tikteb ir-risposta. ${ }^{\prime}$

| 16. | Now it is quarter to three. What was the time twenty minutes earlier? |
| ---: | :--- |
| 17. | A side of a square is five point two centimetres. <br> Work out the perimeter of a square. |
| 18. | Sue doubles a number. <br> Then she adds three to the answer to get thirteen. <br> What is the number she started with? |
| 19. | Two-sixths of the children in a class like Mathematics. <br> What fraction of the class does not like Mathematics? <br> Give your answer in its simplest form. |
| 20. | The teacher shared thirty apples between four children. <br> How many apples did each child receive? <br> Give your answer as a mixed fraction. |

## MENTAL MATHEMATICS

## TEACHER'S PAPER

TIME: 15 minutes
Test Paper 10

## Guidelines for the conduct of the Mental Mathematics Examination

1. Words written in bold should be emphasised.
2. Read, in a loud and clear way, 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 darbtejn wara xulxin. Ismagtni sew. Wara jkollok il-ћin biex twegibha.

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

Jekk tieћu żball f'xi risposta, aqtagћha u ikteb ir-risposta t-tajba $\ddagger d e j h a$.

- You will not be allowed to ask any questions once the test has started. Ma tistax issaqsi mistoqsijiet hekk kif it-test jibda.

6. At the end of the test, read out the following instructions, using exactly these words:

- The test is over; put down your pens.

It-test spičca; pog̀gil l-bajrow fuq il-mejda.

## MENTAL MATHEMATICS

'For this group of questions, you will have 5 seconds to work out each answer and write it down.'
'Ghal dawn il-mistoqsijiet li gejjin, gћandek 5 sekondi biex taћseb u tikteb ir-risposta. ${ }^{\prime}$

| 1. | What is double eleven? |
| :---: | :--- |
| 2. | Which month comes three months after July? |
| 3. | How many minutes are there in three hours? |
| 4. | What is one hundred subtract five? |
| 5. | What is the next number: <br> seventy, sixty, fifty, ... |

'For the next group of questions, you will have 10 seconds to work out each answer and write it down.'
‘Ghal dawn il-mistoqsijiet li gejjin, ghandek 10 sekondi biex tahseb u tikteb ir-risposta.'

| 6. | What must be added to zero point three to get two? |
| :---: | :--- |
| 7. | Round four hundred and twelve to the nearest hundred. |
| 8. | What number must be multiplied by five to get thirty? |
| 9. | How many grams are there in six point six kilograms? |
| 10. | What is five point three divided by ten? |


| 11. | What is twenty percent of two hundred euro? |
| ---: | :--- |
| 12. | Which number is exactly divisible by two, <br> thirty-five, forty-two or sixty-three? |
| 13. | What is three hundredths as a decimal fraction? |
| 14. | What is the total amount of thirty euro, forty-five euro and twenty-five <br> euro? |
| 15. | What is a quarter of four thousand eight hundred litres? |

'For this group of questions, you will have 20 seconds to work out each answer and write it down.'
'Ghal dawn il-mistoqsijiet li gejjin, gћandek 20 sekonda biex taћseb u tikteb ir-risposta.,

| 16. | How many right angles are there between three o'clock and nine o'clock? |
| ---: | :--- |
| 17. | Two angles in an isosceles triangle are twenty degrees each. <br> What is the third angle? |
| 18. | A square has a perimeter of forty-four centimetres. <br> How long is one of its sides? |
| 19. | An aeroplane is due to leave at five minutes past ten. <br> It leaves thirty minutes late. <br> At what time does the aeroplane leave? |
| 20. | There are thirty-three biscuits in a bag. <br> The dog ate one third of them. <br> How many biscuits are left in the bag? |

## END OF MENTAL PAPER

## MENTAL MATHEMATICS

| 1. | 14 days | 2. | 106 | 3. | 6 sides |
| :---: | :--- | :---: | :--- | :---: | :--- |
| 4. | 65 | 5. | 65 |  |  |
| 6. | 72 hours | 7. | 200 | 8. | 90 |
| 9. | 7300 g | 10. | 9 lots | 11. | 0.037 |
| 12. | 16,000 | 13. | 4000 | 14. | 25 cm |
| 15. | 100 |  |  |  |  |
| 16. | $2 \cdot 75$ | 17. | 15 c | 18. | 56 books |
| 19. | 8 cm | 20. | 40 minutes |  |  |

## WRITTEN PAPER

| No. | Answer | No. | Answer |
| :---: | :---: | :---: | :---: |
| 1. a) | 300 | 2. a) | rectangle |
| b) | 901 | b) | right-angled triangle |
| c) | 10 | c) | pentagon |
| d) | 112 | d) | octagon |
| 3. a) | millilitres | 4. a) | 9643 |
| b) | grams | b) | 49 or 63 |
| c) | litres | c) | 694; 394; 964; 946 or 436 |
| d) | kilograms | d) | 49; 4 or 64 |
| 5. a) i) | 7008 and 7012 | 6. a) | $\begin{array}{lll} \hline \hline 30+20 & \text { and } & 185-135 \\ 0 \cdot 5 \times 100 & \text { and } & 250 \div 5 \end{array}$ |
| ii) | 8938 | b) | 5 |
| b) | 18,500 |  |  |
| c) | Twelve thousand, five hundred and two |  |  |
| 7. a) | $3 \frac{7}{8}$ | 8. a) | Saturday $30^{\text {th }}$ |
| b) | 31 pieces | b) | $15^{\text {th }}$ April or $15^{\text {th }}$ April 2011 |
| c) | $\underline{49}$ | c) | $13^{\text {th }}$ April or $13{ }^{\text {th }}$ April 2011 |
|  | 80 | d) | $6^{\text {th }}$ May or $6^{\text {th }}$ May 2011 |
| 9. a) | 2100 ml | 10. a) | 78 kg |
| b) i) | 10 glasses | b) | 90.75 kg |
| ii) | 100 ml | c) | 91 kg |



## MENTAL MATHEMATICS

| 1. | $2 \cdot 2$ | 2. | 6 faces | 3. | $7 \times 7=49 ;$ or 49 |
| :---: | :--- | :---: | :--- | :---: | :--- |
| 4. | 100 | 5. | 45 |  |  |
| 6. | 48 hours | 7. | 9 coins | 8. | 430 |
| 9. | 4 | 10. | 640 | 11. | 700 grams |
| 12. | $180^{\circ}$ | 13. | 45 minutes | 14. | 2108 |
| 15. | $3 \cdot 5$ |  |  |  |  |
| 16. | $2 / 5$ | 17. | $52 \%$ | 18. | $55^{\circ} ; 55^{\circ}$ |
| 19. | 20 cm | 20. | 85 |  |  |

## WRITTEN PAPER



| 13. | a) | 550 customers | 14. | a) |  | $€ 2 \quad € 1 \cdot 85 \quad € 1 \cdot 20$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | b) | February |  | b) |  | $€ 0 \cdot 65$ |  |
|  | c) |  | 300 customers |  | c) |  | Tuna Salad and Juice or <br> Chicken Salad and Water |
|  | d) |  | 500 customers |  |  |  |  |
|  | e) | Drawing of 5 faces to <br> represent 500 customers |  | d) |  | $€ 1 \cdot 80$ |  |
| 15. | a) | 10 cm | 16. | a) | i) | No |  |
|  | b) | $25 \mathrm{~cm}^{2}$ |  |  | ii) | The total cost of all the clothes is <br> $€ 355$ and she has only $€ 300$ |  |
|  | c) | $150 \mathrm{~cm}^{2}$ |  | b) |  | $€ 75$ |  |

## MENTAL MATHEMATICS

| 1. | 52 | 2. | cylinder | 3. | 52 weeks |
| :---: | :--- | :---: | :--- | :--- | :--- |
| 4. | 240 | 5. | 27 |  |  |
| 6. | 993 | 7. | 155 | 8. | 4 |
| 9. | 75 minutes | 10. | $70 \%$ | 11. | 5 lines of symmetry |
| 12. | 90 | 13. | $6 \cdot 7$ | 14. | 5006 |
| 15. | $\underline{8}$ or $\frac{4}{5}$ |  |  |  |  |
| 16. | $15: 15$ | 17. | 13 cm | 18. | $3 \frac{5}{100}$ or $3 \frac{1}{20}$ |
| 19. | $81 \mathrm{~cm}^{2}$ | 20. | $€ 75$ |  |  |

## WRITTEN PAPER

| No. | Answer | No. | Answer |
| :---: | :---: | :---: | :---: |
| 1. a) | 3100 | 2. a) |  |
| b) | 1007 |  |  |
| c) | 10 |  |  |
| d) | 1000 | b) |  |
| 3. a) | longer | 4. | 2468 is double 1234; or 4286 is double 2143; or 6240 is double 3120 |
| b) | less |  |  |
| c) | shorter |  |  |
| d) | more |  |  |
| 5. a) i) | $1 \cdot 25$ | 6. | Start at 35, double it $\rightarrow 70$ |
| ii) | $3 \cdot 25$ |  | Divide it by $7 \rightarrow 10$ |
| b) | 1/4 |  | Square it $\quad \rightarrow \quad 100$ |
| c) i) | $2 \cdot 75$ |  | Add $58 \rightarrow 158$ |
| ii) | Correct marking of 2.75 on the same number line |  | Halve it $\quad \rightarrow \quad 79$ |
| 7. a) | Dividing the cake in 6 equal parts. Correct and clear marking of 5 pieces of the cake | 8. a) | €6-30 |
| b) | 23 pieces | b) | $€ 2 \cdot 20$ |
| c) | 25 pieces |  |  |


| 9. a) | Thursday | 10. a) | bottle B; bottle D |
| :---: | :---: | :---: | :---: |
| b) | $9{ }^{\text {th }}$ of June; Meeting | b) | bottle A |
| c) | 4 or four; Wednesday | c) | $\frac{3}{20}$ |
|  |  | d) | 6 bottles |
| 11. a) | Isosceles; Triangle D | 12. a) | 45 minutes |
| b) | Right | b) | 08:30 + 05:25 13:55 |
| c) | Triangle B |  |  |
| d) | $180^{\circ}$ |  |  |
| 13. a) | 50 coffee | 14. a) | Sunday; 10 o'clock |
| b) | 10 hot chocolates | b) | €16 |
| c) | 150 drinks | c) | $€ 32 \cdot 50$ |
| d) | 75 \% |  |  |
| 15. a) | $66 \mathrm{~cm}^{2}$ | 16. a) | 90c |
| b) i) | $198 \mathrm{~cm}^{2}$ | b) | $540 \mathrm{c}=€ 5 \cdot 40$ |
| ii) | 78 cm | c) | $€ 16 \cdot 20$ |

## ANSWERS

TEST PAPER 4

## MENTAL MATHEMATICS

| 1. | 30 | 2. | 208 | 3. | 5 sides |
| :---: | :--- | :---: | :--- | :---: | :--- |
| 4. | 800 | 5. | $0 \cdot 7 \mathrm{~cm}$ |  |  |
| 6. | 90 | 7. | $52 \cdot 4$ | 8. | 6 lines |
| 9. | $0 \cdot 038$ | 10. | $0 \cdot 3$ | 11. | 44 |
| 12. | $36^{\circ}$ | 13. | 100 sweets | 14. | $3 / 4$ |
| 15. | 3006 |  |  |  |  |
| 16. | $1 ; 3 ; 7 ; 9 ; 21$ or 63 | 17. | $€ 1 \cdot 95$ | 18. | $13: 30$ or $1: 30$ p.m. |
| 19. | $30 \%$ | 20. | 7 jugs |  |  |

## WRITTEN PAPER

| No. | Answer | No. | Answer |
| :---: | :---: | :---: | :---: |
| 1. a) | 6000 | 2. a) | Shape C |
| b) | 2000 | b) | Shape A |
| c) | 9000 | c) | Shape D |
| d) | 105 | d) | Shape B |
| 3. a) | ml | 4. a) | 9632 |
| b) | ltrs | b) | 2369 or 2396 |
| c) | kg | c) | 369 or 396 or 936 or 963 |
| d) | g | d) | 36 or 63 or 93 or 69 or 369 any other number divisible by 3 |
| 5. a) | $1.4 \mathrm{~m} ; 21 / 4 \mathrm{~m} ; 3.5 \mathrm{~m} ; 360 \mathrm{~cm}$ | 6. | Odd numbers: 11, 23, 29, 53, 67 |
| b) | 225 cm |  | Less than 50: 11, 23, 29 |
| c) | 2.2 m |  | Greater than 20: 23, 29 |
| d) | Correct marking of $21 / 2 \mathrm{~m}$ |  | Answer: 29 |
| 7. a) | 1026 stickers | 8. a) | $5{ }^{\text {th }}$ August or $5^{\text {th }}$ August 2011 |
| b) | 84 pages | b) | 5 times |
|  |  | c) | Marking $28{ }^{\text {th }}$ August with an X |
|  |  | d) | $3^{\text {rd }}$ September or $3^{\text {rd }}$ September $2011$ |
| 9. a) | 4750 g | 10. a) | 1000 sandwiches |
| b) | 3500 g | b) | 400 sandwiches |
| c) | 0.7 kg | c) | $\frac{6}{7}$ |
|  |  | d) | $€ 7000$ |


| 11. a) i) | $150^{\circ}$ | 12. a) i) | No |
| :---: | :---: | :---: | :---: |
| ii) | $30^{\circ} ; 150^{\circ}$ | ii) | $30+15=45 \text { and } 10+15=25$ <br> Other valid examples can be given. |
| b) i) | angles | b) | $11-8=3 \text { and } 13-4=9$ <br> Other valid examples can be given. |
| ii) | scalene |  |  |
| 13. a) | 200 French tourists | 14. a) | $€ 126$ |
| b) | 2000 tourists | b) | $€ 630$ |
| c) | $\frac{1}{5}$ | c) | $€ 504$ |
| d) | Drawing of block graph up to 400 |  |  |
| 15. a) | $72 \mathrm{~cm}^{2}$ | 16. a) | $€ 834$ |
| b) i) | $144 \mathrm{~cm}^{2}$ | b) i) | 7 days in Milan |
| ii) | 48 cm | i) | 7 days in Milan costs $€ 800$, which is $€ 34$ cheaper than a week in Greece. <br> or <br> A week in Greece is $€ 34$ more expensive than 7 days in Milan. |

## MENTAL MATHEMATICS

| 1. | 105 | 2. | 300 | 3. | 0 vertices |
| :---: | :--- | :---: | :--- | :---: | :--- |
| 4. | 60 | 5. | 62 days |  |  |
| 6. | 83 | 7. | 250 ml | 8. | 76 |
| 9. | 8 weeks | 10. | 3 hours | 11. | 7 metres |
| 12. | 3 tens or 30 | 13. | 11 | 14. | $€ 2$ |
| 15. | 1 kg or 1000 g |  |  |  |  |
| 16. | 2000 | 17. | 7 cm | 18. | 20 books |
| 19. | $€ 1400$ | 20. | $8: 10$ |  |  |

## WRITTEN PAPER

| No. | Answer | No. | Answer |
| :---: | :---: | :---: | :---: |
| 1. a) | 1000 | 2. a) | $\square$ |
| b) | 8000 |  |  |
| c) | 10 | b) i) | hexagon |
| d) | 115 | i) | 6 |
| 3. a) | 30 cm | 4. a) | 7 ltrs |
| b) | 5 m 40 cm | b) | 7500 ml |
| c) | 1.5 m | c) | 6700 ml |
| d) | 130 cm | d) | 6.751 lrs |
| 5. a) | Correct marking of 7.5 | 6. | Square numbers $\quad \rightarrow 16,36$ |
| b) | 3 |  | Multiple of 2, div by $6 \rightarrow 36$ |
| c) | 4 |  | Double $\rightarrow 72$ |
|  |  |  | To get 100 add $\rightarrow 28$ |
| 7. a) | 1/4 | 8. a) | Mr Joe |
| b) | 1/8 | b) | Thursday, Saturday |
| c) | 1/2 | c) | Wednesday $14^{\text {th }}$, morning |
|  |  | d) | Mr Long written correctly on the timetable |
| 9. a) | 21.5 kg | 10. a) | 63 cm |
| b) | 2150 g | b) | 0.37 m |
| c) | 19.35 kg or 19.350 kg | c) i) | No |
|  |  | ii) | She had 37 cm of string left, so she needed another 3 cm to have enough string. ( 40 cm ) |


| 11. a) i) | Jane | 12. a) | 07:55 |
| :---: | :---: | :---: | :---: |
| i) | Angle a is an acute angle (less than $90^{\circ}$ ), therefore the correct angle is $50^{\circ}$, so Jane is right. | b) | 12:10 p.m. |
| b) i) | $115^{\circ}$ |  |  |
| ii) | $115^{\circ}$ |  |  |
| 13. a) | 30 c | 14. a) | 14 m |
| b) | No. of bottles $6 \rightarrow € 1 \cdot 80$ | b) | $84 \mathrm{~m}^{2}$ |
|  | No. of bottles $10 \rightarrow € 3$ or $€ 3 \cdot 00$ | c) | 1/6 |
| c) | 13 bottles |  |  |
| 15. a) i) | 24 plants | 16. a) i) | hexagon |
| ii) | $€ 7.77$ | ii) | 11 straws, 16 straws |
| b) | $€ 4 \cdot 81$ | b) | 31 straws |
| c) | $€ 240$ | c) | 5 straws |
|  |  | d) | 9 patterns |

## MENTAL MATHEMATICS

| 1. | 600 | 2. | 4 sides | 3. | 101 |
| :--- | :--- | :---: | :--- | :--- | :--- |
| 4. | 300 cents | 5. | 7 |  |  |
| 6. | $2 \cdot 8$ | 7. | 60 c | 8. | 45 |
| 9. | $\underline{6}$ or 6 tenths | 10. | 6 | 11. | 45 minutes |
| 10. | $185^{\circ}$ | 13. | 1138 | 14. | $102^{\circ}$ |
| 15. | $3 \cdot 16$ ltrs or $3 \cdot 160$ ltrs |  |  |  |  |
| 16. | $\frac{6}{9}$ | 17. | 25 | 18. | 60 cm |
| 19. | 20 | 20. | $5 \frac{3}{4}$ buns |  |  |

## WRITTEN PAPER

| No. | Answer | No. | Answer |
| :---: | :---: | :---: | :---: |
| 1. a) | 700 | 2. a) | 1000 ml |
| b) | 2000 | b) | 1.5 kg |
| c) | 400 | c) | 300 ml |
| d) | 105 | d) | 20 kg |
| 3. a) i) | The cuboid has 12 straight edges. | 4. | 234 is half of 468 243 is half of 486 |
| ii) | The cone is a solid shape. |  | 324 is half of 648 |
| b) |  |  | 342 is half of 684 |
|  |  |  | 423 is half of 846 |
|  |     |  | 432 is half of 864 |
|  |  |  | 134 is half of 268 |
|  | $\square$ |  | Any other valid answers |
| 5. a) | $500 \mathrm{ml} ; 4.25 \mathrm{ltrs} ; 73 / 4 \mathrm{ltrs}$ | 6. | $60+163+60+\underline{\mathbf{7 7}}$ |
| b) | 12.5 ltrs |  | $77+\underline{\mathbf{1 3 0}}+53+100$ |
|  |  |  | $60+\underline{\mathbf{1 5 0}}+\underline{\mathbf{5 0}}+100$ |
| 7. a) | 18 stickers | 8. a) | Football training |
| b) | 8 stickers | b) | 10 o'clock |
|  |  | c) | Monday |
|  |  | d) | half past two; weekend |
| 9. a) | 2500 g | 10. a) | 6.5 m or $61 / 2 \mathrm{~m}$ |
| b) | 0.75 kg | b) | $€ 97 \cdot 50$ |
| c) | 1.650 kg or 1.65 kg |  |  |
| d) | mushrooms and carrots |  |  |


| 11. a) | Correct drawing of an angle of $135^{\circ}$, using the protractor | 12. a) | 13 pages |
| :---: | :---: | :---: | :---: |
| b) i) | $180^{\circ}$; $45^{\circ}$ | b) | Chapter 6 |
| ii) | acute; obtuse |  |  |
|  |  | c) | 57 pages |
| 13. a) i) | Tuesday | 14. a) | 27 m |
| ii) | Friday | b) | $4.5 \mathrm{~m}^{2}$ |
| b) | 900 children | c) | $38 \mathrm{~m}^{2}$ |
| c) | 150 children |  |  |
| 15. a) |  | 16. a) | $€ 4 \cdot 53$ |
| b) | 1 hour 30 minutes | b) | $€ 12 \cdot 87$ |
| c) | 7:30 p.m. |  |  |
| d) | 50 minutes |  |  |

ANSWERS
TEST PAPER 7
MENTAL MATHEMATICS

| 1. | 44 | 2. | 36 months | 3. | 24 |
| :---: | :--- | :---: | :--- | :---: | :---: |
| 4. | 414 | 5. | 191 |  |  |
| 6. | $2 \cdot 06$ | 7. | 300 cm | 8. | $5 \frac{7}{10}$ |
| 9. | 3 lines | 10. | 8 or $8 \cdot 0$ | 11. | $360^{\circ}$ |
| 12. | 100 | 13. | $€ 1 \cdot 35$ | 14. | 11 o'clock, $11: 00$ or $23: 00$ |
| 15. | 2 stickers |  |  |  |  |
| 16. | 60 | 17. | $0 \cdot 75$ | 18. | $2: 50$ or 10 to 3 |
| 19. | 8 cm | 20. | 20 glasses |  |  |

## WRITTEN PAPER

| No. | Answer | No. | Answer |
| :---: | :---: | :---: | :---: |
| 1. a) | 10 | 2. a) | circle; pentagon |
| b) | 100 | b) | squares; right-angled |
| c) | 6 |  |  |
| d) | 104 |  |  |
| 3. a) | less than | 4. a) | 5350 |
| b) | more than | b) | 5445 |
| c) | heavier than | c) | 535 |
| d) | lighter than | d) | 5352 |
| 5. a) | shorter | 6. a) | 12 |
| b) | 4.75 km or 4.750 km | b) | 0.012 |
| c) | 4500 m | c) | 1 |
| d) | 1500 m | d) | $2 \cdot 4$ |
| 7. a) | 1/6 | 8. a) | $14^{\text {th }}$ |
| b) i) | 8400 m | b) | Wednesday |
| ii) | 5.6 km | c) | $25^{\text {th }}$ |
|  |  | d) | $19^{\text {th }}$ |
| 9. a) | 4237 books | 10. a) | 12 roses |
| b) | 1700 books | b) | 36 roses |
| c) | 250 books | c) | 42 dozens |
| 11. a) | $60^{\circ}$ | 12. a) | $€ 420$ |
| b) | $40^{\circ}$ | b) i) | €70 |
| c) | $180^{\circ}$ | ii) | $€ 72$ |
| d) | Any angle larger than $180^{\circ}$ but less than $360^{\circ}$ |  |  |
| e) | An acute angle is an angle less than $90^{\circ}$ |  |  |


| 13. a) i) | 400 visitors | 14. a) | 11:20 a.m. |
| :---: | :---: | :---: | :---: |
| ii) | Correct marking of 400 visitors on the graph | b) i) | 135 minutes |
| b) | August | ii) | 35 minutes |
| c) | 350 | c) i) | 4:40 p.m. |
| d) | $1 / 5$ visitors |  |  |
| 15. a) i) | 12 cm | 16. a) | 50 c |
| ii) | 3 cm | b) | 4 sharpeners 5 rubbers 5 pencils |
| b) | $24 \mathrm{~cm}^{2}$ |  |  |
| c) | 40 cm |  |  |

## MENTAL MATHEMATICS

| 1. | 200 | 2. | 3 weeks | 3. | 8 vertices |
| :---: | :--- | :---: | :--- | :---: | :--- |
| 4. | 27 | 5. | 30 |  |  |
| 6. | 190 | 7. | 780 | 8. | 570 |
| 9. | 1 kg | 10. | 6480 ml | 11. | 4 |
| 12. | $70 \%$ | 13. | 11 | 14. | 100 |
| 15. | 1000 or one thousand |  |  |  |  |
| 16. | 60 | 17. | $€ 156$ | 18. | $65 \%$ |
| 19. | $220 \mathrm{~cm}^{2}$ | 20. | $\frac{4}{15}$ |  |  |

## WRITTEN PAPER

| No. | Answer | No. | Answer |
| :---: | :---: | :---: | :---: |
| 1. a) | 1604 | 2. a) | Ticking the first two shapes |
| b) | 9052 | b) | cuboid; 8 vertices |
| c) | 10 |  |  |
| d) | 106 |  |  |
| 3. a) | m | 4. a) | 0.025 m |
| b) | cm | b) | 2.5 m |
| c) | km | c) | 0.75 m |
| d) | mm | d) | 7.5 m |
| 5. a) | 9:00 a.m. | 6. | $\begin{aligned} & \hline 7.5 \times 10=\underline{\mathbf{7 5}} \\ & 10 \times 13=\mathbf{1 3 0} \\ & 7.5 \times \mathbf{1 0 0}=750 \\ & 100 \times 13=\underline{\mathbf{1 3 0 0}} \end{aligned}$ |
| b) | 11:00 a.m. |  |  |
| c) | 12:30 p.m. |  |  |
| d) | 7 hours |  |  |
| 7. a) | Correct marking of $2^{2 / 3}$ | 8. a) | 8188 persons |
|  |  |  |  |
|  |  |  |  |
| b) | $31 / 3$ | b) i) | 5316 passengers |
| c) | $\frac{12}{36}$ | ii) | 157 crew members |
| 9. a) | Filling in $30^{\text {th }}$ and 31 ${ }^{\text {st }}$ of July | 10. a) | 1500 ml ; 9 ltrs |
| b) | $18^{\text {th }}$ July |  |  |
| c) | Correct marking of $18^{\text {th }}$ July on the calendar | b) | 297 ltrs |
| d) | 15 days |  |  |


| 11. a) i) | $97^{\circ}$ | 12. a) | €42.02 |
| :---: | :---: | :---: | :---: |
| ii) | $45^{\circ}$ |  |  |
| b) i) | ... a scalene triangle because there are no equal angles | b) | $€ 20 \cdot 12$ |
| ii) | acute; obtuse |  |  |
| 13. a) | February | 14. a) | $15 \mathrm{~m}^{2}$ |
| b) | 9 | b) i) | 6 m |
| c) | May and June |  | 4 m |
| d) | 12 days | ii) | $24 \mathrm{~m}^{2}$ |
| 15. a) | 8 hours | 16. a) | 21 kg |
| b) | 3 hr 10 min |  |  |
| c) i) | 7:45 | b) | 7 kg |
| ii) | 17:00 |  |  |
| iii) |  |  |  |

## MENTAL MATHEMATICS

| 1. | 41 | 2. | 3 faces | 3. | 96 hours |
| :---: | :--- | :---: | :--- | :---: | :--- |
| 4. | 45 | 5. | 64 |  |  |
| 6. | 6000 ml | 7. | 51 | 8. | 11 |
| 9. | 5 | 10. | $1 \cdot 2$ | 11. | 8 lines |
| 12. | 2 notebooks | 13. | 3109 | 14. | $0 \cdot 25$ |
| 15. | 13 |  |  |  |  |
| 16. | $2: 25$ | 17. | $20 \cdot 8 \mathrm{~cm}$ | 18. | 5 |
| 19. | $2 / 3$ | 20. | $71 / 2$ |  |  |

## WRITTEN PAPER

| No. | Answer | No. | Answer |
| :---: | :---: | :---: | :---: |
| 1. a) | 12,056 | 2. a) | hexagon |
| b) | 1300 |  | 6 equal sides and 6 lines of symmetry |
| c) | 70 | b) | $\square \square$ |
| d) | 106 |  | \% |
|  |  |  | - |
|  |  |  |  |
|  |  |  |  |
| 3. a) | millimetres | 4. a) | 51; 57; 61; 65; 67; 71 or 75 |
| b) | metres | b) | 45 |
| c) | centimetres | c) | 16 |
| d) | metres | d) | 14 |
| 5. a) | Sara - 4 min 40 sec Joseph - 6 min | 6. | Even Numbers - 6, 10, 24, 60 <br> Multiples of 5-10, 60 <br> Less than $50-10$ |
| b) | Max |  |  |
| c) | 140 seconds |  | Odd Numbers - 3, 25, 31, 81 <br> Square Numbers - 25, 81 <br> Divisible by $5-25$ <br> 10 multiplied by $25=\mathbf{2 5 0}$ |
| 7. a) | $\frac{8}{30} \text { or } \frac{4}{15}$ | 8. a) i) | $19^{\text {th }}$ September |
| b) | $\frac{11}{15}$ | ii) | Correct marking of the $19^{\text {th }}$ September on the calendar |
| c) | 17 girls | b) | 4 times |
|  |  | c) | $26^{\text {th }}$ September |


| 9. a) | 22,000 | 10. a) | 7500 metres |
| :---: | :---: | :---: | :---: |
| b) | 4988 supporters | b) | 45 km |
| c) | 1013 buses | c) | 1350 km |
| 11. a) i) | a right-angled triangle | 12. a) | 7:00 p.m. |
| ii) | $180^{\circ}$ | b) | $\begin{array}{cccc} 11 & 12 & 1 \\ 10 & 4 & 2 \\ 9 & & 3 \\ 8 & & \\ 7 & 6 & 5 & 4 \\ & \end{array}$ |
| b) |  | c) i) | 21:00 |
|  |  | ii) | 9:00 p.m. |
| c) | $56^{\circ}$ |  |  |
| 13. a) | 170 visitors | 14. a) | $27 \mathrm{~m}^{2}$ |
| b) | Correct marking of 170 visitors on the graph | b) | $14 \mathrm{~m}^{2}$ |
| c) | 110 visitors | c) | kitchen |
| d) | 154 Italians | d) | $13 \mathrm{~m}^{2}$ |
| 15. a) | $€ 0 \cdot 42$ | 16. $\begin{aligned} & \text { a) } \\ & \\ & \text { b) }\end{aligned}$ | 163 kg bags |
| b) | 62 c |  | 168 kg bags |
| c) | $€ 2 \cdot 72$ |  | $113 \mathrm{~kg} \text { bags }$ |
|  |  |  | 78 kg bags |

## MENTAL MATHEMATICS

| 1. | 22 | 2. | October | 3. | 180 minutes |
| :---: | :--- | :---: | :--- | :---: | :--- |
| 4. | 95 | 5. | 40 |  |  |
| 6. | $1 \cdot 7$ | 7. | 400 | 8. | 6 |
| 9. | 6600 g | 10. | $0 \cdot 53$ | 11. | $€ 40$ |
| 12. | 42 | 13. | $0 \cdot 03$ | 14. | $€ 100$ |
| 15. | 1200 ltrs |  |  |  |  |
| 16. | 2 right angles | 17. | $140^{\circ}$ | 18. | 11 cm |
| 19. | $10: 35$ | 20. | 22 biscuits |  |  |

## WRITTEN PAPER

| No. | Answer | No. | Answer |
| :---: | :---: | :---: | :---: |
| 1. a) | 2700 | 2. a) | 300 g |
| b) | 600 | b) | 13 km |
| c) | 4 | c) | $0 \cdot 2$ ltrs |
| d) | 10 | d) | 20 cm |
| 3. a) | $\square \mathrm{b})^{\circ} \square^{\circ}$ | 4. a) | $25 \cdot 38$ |
|  |  | b) | 2500 |
|  | - | c) | $253 \cdot 8$ |
|  |  | d) | 2438 |
| 5. a) | $\begin{aligned} & \mathrm{A}=7 \cdot 25 ; \mathrm{B}=8 \text { or } 8 \cdot 0 \\ & \mathrm{C}=9 \cdot 5 \text { or } 9 \cdot 50 \end{aligned}$ | 6. | $\begin{aligned} & \text { Starting number }=35 \\ & \text { Double the number }=70 \end{aligned}$ |
| b) | 6 |  | Add $40=110$ |
| c) | $83 / 4$ |  | Half the number $=55$ |
| 7. a) | The second shape represents $1 / 4$ | 8. a) | tenth |
| b) | $\frac{1}{2}=\frac{3}{6}=\frac{4}{8}$ | b) | Saturday |
| c) | 35 | c) | $8^{\text {th }}$; Mr Jones |
|  |  | d) | 6 days; $16^{\text {th }}$ |
| 9. a) | 668 seats | 10. a) | 30 onions |
| b) i) | 4271 seats | b) i) | 20 bundles |
| ii) | 729 seats | ii) | 14 bundles |
| 11. a) i) | Acute angle | 12. a) | 8:08 a.m. |
| ii) | $125^{\circ}$ |  |  |
| b) i) | No | b) | 12:43 or 12:43 p.m. |
| ii) | Angle $y$ is not an acute angle because it is greater than $90^{\circ}$ |  |  |


| 13. a) | Adventure books | 14. a) | $€ 1130$ |
| :---: | :---: | :---: | :---: |
| b) | 15 children | b) | $€ 1017$ |
| c) | 100 children | c) | $€ 1983$ |
| d) | 1/4 |  |  |
| 15. a) i) | Tom | 16. a) | 9 sticks |
| ii) | $36 \mathrm{~cm}^{2}$ is a square number. $6 \times 6$ make $36 \mathrm{~cm}^{2}$ therefore it is a square | b) | 3 sticks |
| b) i) | Correct drawing of $5 \times 5$ square | c) | 10 sticks |
| ii) | 20 cm | d) | 33 sticks |

