

DIRECTORATE FOR QUALITY AND STANDARDS IN EDUCATION

Department of Curriculum Management

Educational Assessment Unit

Annual Examinations for Primary Schools 2015

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**. However, any working on the answer sheet, will not be penalised.
4. The questions should be read out in **English** and **no code-switching/mixing or translation 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. You may write down any information you think is useful whilst I read the questions.*
Se naqralek kull mistoqsija darbtejn wara xulxin. Ismagħni sew. Tista' tnizzel kull informazzjoni li tħoss li hi bżonjuża waqt li jien inkun qed naqra il-mistoqsijiet.
 - *You will then have time to work your answer. Any working on your answer sheet, will not be penalised.*
Wara jkollok il-ħin biex twieġeb kull mistoqsija. M'intix se tiflef marki jekk tagħmel xi 'working' fuq il-karta.
 - *If you make a mistake, cross out the wrong answer and write the correct answer next to it.*
Jekk tieħu żball f'xi risposta, aqtagħha u iktib ir-risposta t-tajba ħdejha.
 - *You will not be allowed to ask questions once the test starts.*
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 spicċa; poġġi l-bajrow fuq il-mejda.

MENTAL PAPER

'For this group of questions, you have 5 seconds to work out each answer and write it down.'

'Għal dawn il-mistoqsijiet li ġejjin, għandek 5 sekondi biex taħseb u tikteb kull risposta.'

| | |
|---|--|
| 1 | Look at the numbers on your sheet. Tick (✓) the odd number . |
| 2 | Write nine thousand, two hundred in figures . |
| 3 | The faces of a cube are all squares . Tick (✓) the correct answer on your sheet. |
| 4 | How many weeks are there in one year ? Tick (✓) the correct answer on your sheet. |
| 5 | Write the next square number . one, four, nine, sixteen, ... |

'For the next group of questions, you have 10 seconds to work out each answer and write it down.'

'Għal dawn il-mistoqsijiet li ġejjin, għandek 10 sekondi biex taħseb u tikteb kull risposta.'

| | |
|----|---|
| 6 | Add one point five and one point six. |
| 7 | Subtract three hundred and seventy five from five hundred. |
| 8 | What is four point five multiplied by two? |
| 9 | Round three hundred and sixty six to the nearest ten. |
| 10 | Write three quarters as a decimal number. |
| 11 | How many millilitres in seven point four two litres? |
| 12 | Is the triangle on your sheet equilateral? |
| 13 | Look at the numbers on your sheet. Tick (✓) the multiples of nine. |
| 14 | Look at the angles on your sheet. Tick (✓) the smallest angle. |
| 15 | How many halves make three and a half? |

'For this group of questions, you have 20 seconds to work out each answer and write it down.'

'Għal dawn il-mistoqsijiet li ġejjin, għandek 20 sekonda biex taħseb u tikteb kull risposta.'

| | |
|----|---|
| 16 | Halve two hundred, then halve the result again. |
| 17 | Luke wakes up at twenty minutes to seven . He leaves home for work thirty minutes later . Tick (✓) the clock on your sheet that shows the time Luke leaves home for work . |
| 18 | How many hours is it from nine pm today to six am tomorrow ? |
| 19 | Work out the perimeter of the rectangle on your sheet. |
| 20 | One carton of milk costs forty three cent . How much do eleven of the same cartons of milk cost? |

END OF MENTAL PAPER

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Educational Assessment Unit

Annual Examinations for Primary Schools 2015

| | | |
|---------------|---------------------------------|-------------------------|
| 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.
- You may write down any information you think is useful whilst the teacher is reading.
- You will then have time to work your answer. Any working on your answer sheet will not be penalised.
- 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 questions once the test starts.
- This paper carries a total of 20 marks.

MENTAL PAPER ANSWER SHEET

| | |
|----|---|
| 1. | 4 <input type="checkbox"/> 6 <input type="checkbox"/> 21 <input type="checkbox"/> |
|----|---|

| | |
|----|--|
| 2. | |
|----|--|

| | |
|----|---|
| 3. | Yes <input type="checkbox"/> No <input type="checkbox"/> Not always <input type="checkbox"/> |
|----|---|

| | |
|----|--|
| 4. | 7 <input type="checkbox"/> 12 <input type="checkbox"/> 52 <input type="checkbox"/> |
|----|--|

| | |
|----|--|
| 5. | |
|----|--|

| | |
|----|--|
| 6. | |
|----|--|

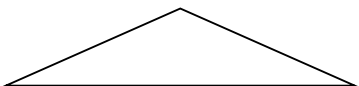
| | |
|----|--|
| 7. | |
|----|--|

| | |
|----|--|
| 8. | |
|----|--|


| | |
|----|--|
| 9. | |
|----|--|

| | |
|-----|--|
| 10. | |
|-----|--|

| | |
|-----|-----------|
| 11. | <i>ml</i> |
|-----|-----------|

| | |
|-----|---|
| 12. |  Yes <input type="checkbox"/> No <input type="checkbox"/> |
|-----|---|

13. 9 16 18

14. 
2 $\frac{1}{2}$ right angles
45°


15.

16. → →

17. 



18. hours

| | |
|-----|---|
| 19. | <div style="text-align: center;"><p>9 cm</p><p>2 cm</p><p>_____ cm</p></div> |
|-----|---|

| | |
|-----|---|
| 20. | € |
|-----|---|



Annual Examinations for Primary Schools 2015


Year 5

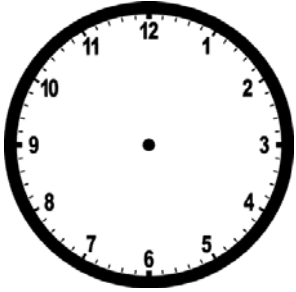
MATHEMATICS

Time: 1h 15min

Name: _____ Class: _____

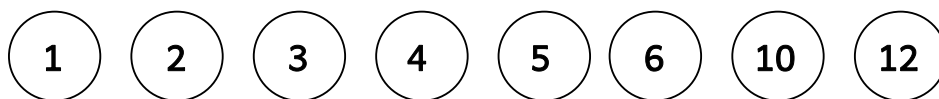
1. Work out.

| | |
|-----|---|
| (a) | <input type="text"/> + 35 = 100 |
| (b) | 1000 - 214 = <input type="text"/> |
| (c) | Add these. <div><input type="text"/> 3000 <input type="text"/> 700 <input type="text"/> 4</div> <div><input type="text"/></div> |
| (d) | How many minutes in 3 hours ? <div><input type="text"/> minutes</div> |
| (e) | How many 20-cent coins to make €1.40 ? <div><input type="text"/> </div> |
| (f) | (i) <input type="text"/> ÷ 7 = 2 r 1 (ii) <input type="text"/> ÷ 8 = 9 |

| | |
|-----|---|
| (g) | <p>Draw the hands on the clock face to show 4:30 (half past 4) .</p>  |
| (h) | <p>$19 + 33 + \boxed{} = 80$</p> |
| (i) | <p>Write these fractions in order starting from the smallest.</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; text-align: center;">$\frac{3}{4}$</div> <div style="border: 1px solid black; padding: 5px; text-align: center;">$\frac{1}{3}$</div> <div style="border: 1px solid black; padding: 5px; text-align: center;">$\frac{1}{2}$</div> <div style="border: 1px solid black; padding: 5px; text-align: center;">$\frac{1}{4}$</div> </div> <p style="text-align: center; margin-top: 20px;"> $\underline{\hspace{2cm}}$, $\underline{\hspace{2cm}}$, $\underline{\hspace{2cm}}$, $\underline{\hspace{2cm}}$ smallest largest </p> |
| (j) | <p>Which two square numbers add up to 34?</p> <div style="display: flex; align-items: center; justify-content: center; margin-top: 10px;"> <div style="border: 1px solid black; width: 40px; height: 30px; margin: 0 10px;"></div> <div style="margin: 0 10px;">+</div> <div style="border: 1px solid black; width: 40px; height: 30px; margin: 0 10px;"></div> <div style="margin: 0 10px;">=</div> <div style="margin: 0 10px;">34</div> </div> |

2. Below is a **Carroll diagram**.

Put these numbers in the Carroll diagram.

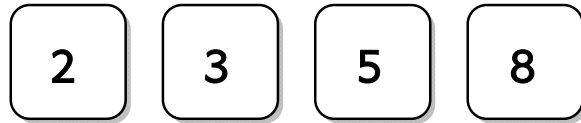


| | multiple of 2 | not a multiple of 2 |
|---------------------|---------------|---------------------|
| multiple of 3 | | |
| not a multiple of 3 | | |


Name: _____ Class: _____


3. Use the number cards below to make 3-digit numbers that round to the **nearest ten** shown.


Note: Each number card can be used more than once.



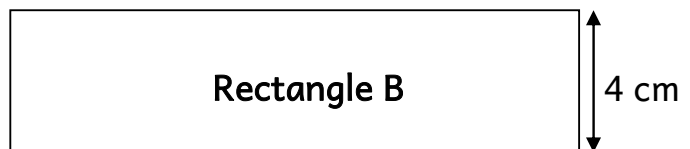
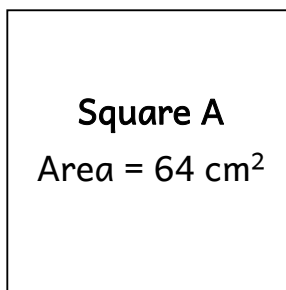
(a)  → 250

(b)  → 360

(c)  → 530

(d)  → 840

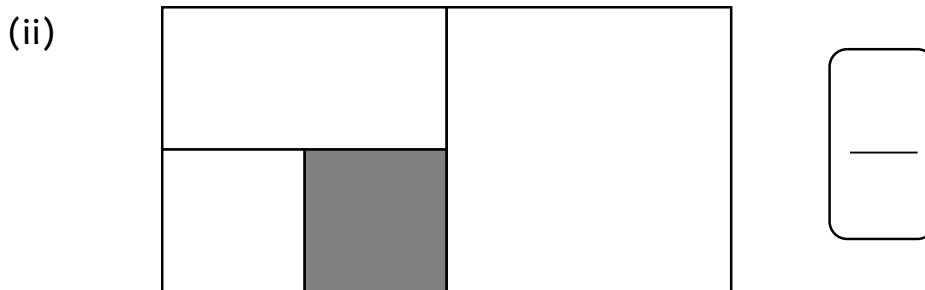
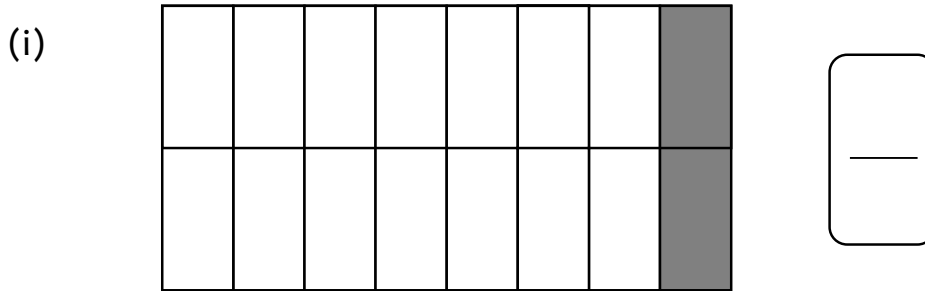
-
4. **Square A** and **Rectangle B** have the **same area**.
What is the **length** of **Rectangle B**?



The length of Rectangle B is _____ cm.

Name: _____ Class: _____

5a) What fraction is **shaded**?



5b) Maria has some sweets.

She gives **4 sweets** to her brother and has **12 sweets left**.

What **fraction of the sweets** does Maria give to her brother?

You can show your
working here

Tick (✓) the correct answer.

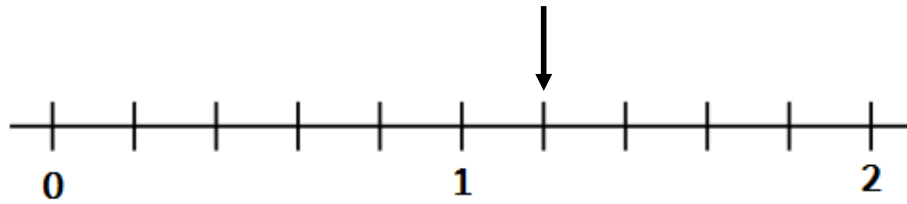
(i) $\frac{1}{3}$ ☐

(ii) $\frac{1}{4}$ ☐

(iii) $\frac{1}{12}$ ☐

(iv) $\frac{3}{4}$ ☐

6a) Look carefully at the number line below.



(i) What **decimal number** does the arrow show?

(ii) What **fraction** does the arrow show?

6b) Read **all** the clues to work out the number.

- (i) The digit **4** is in the **tenths** place.
- (ii) The **value** of the digit **6** is **600**.
- (iii) The digit in the **units place** is the **smallest odd number**.
- (iv) The digits in the **tens place** is **double** the digit in the **units place**.

The number is

7. **4 boys** have a **total** of **€17**.
They **share** it **equally**.
How much do they get **each**?



€

8. Look carefully at the calendar.

| 2015 AUGUST | | | | | | |
|-------------|-----------|-----------|-----------|-----------|-----------|-----------|
| SUNDAY | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | SATURDAY |
| | | | | | | 1 |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 23 | 24 | 25 | 26 | 27 | 28 | |
| | | | | | | |

(a) Complete the calendar above for August 2015.

(b) Tick (✓) the two statements that are true.

| | |
|---|--|
| In 2015, August 10 th is a Monday. | |
| There are 4 Saturdays in August 2015. | |
| In 2015, July 31 st is a Friday. | |
| In 2015, September 2 nd is a Friday. | |

(c) Ella is invited to a party on the 23rd August 2015.

The party will start at **quarter to 5** and finish at **quarter past 7** in the afternoon.

How long, in minutes, is the party?

_____ minutes

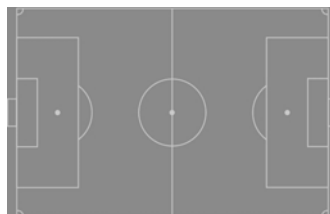
9. a) Tick (✓) **area** which is the **best estimate**.

(i) The **area** of **a stamp**.



- 2 mm² ☐
- 2 cm² ☐
- 2 m² ☐

(ii) The **area** of **a football ground**.

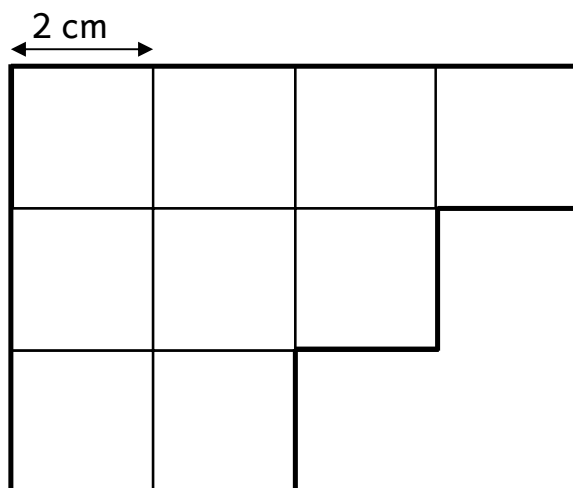


- 7140 cm² ☐
- 7140 m² ☐
- 7140 km² ☐

(b) Look carefully at this shape.

All squares making up this shape are of the **same size**.

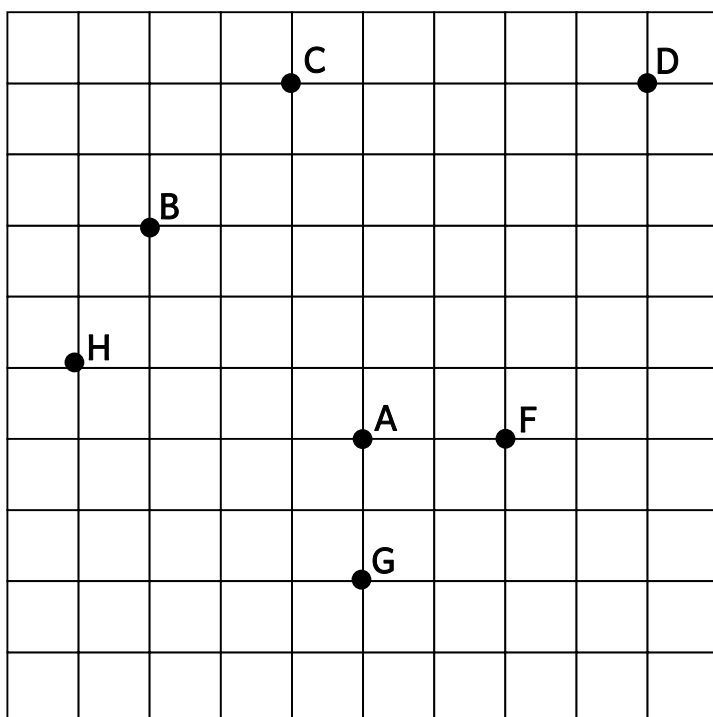
Work out the **perimeter** of this shape.



You can show your
working here

_____ cm

10. Look carefully at the diagram below.



(a) Which **direction** is:

(i) **Point D** from **Point C**?

(ii) **Point F** from **Point G**?

(iii) **Point G** from **Point A**?

(iv) **Point A** from **Point F**?

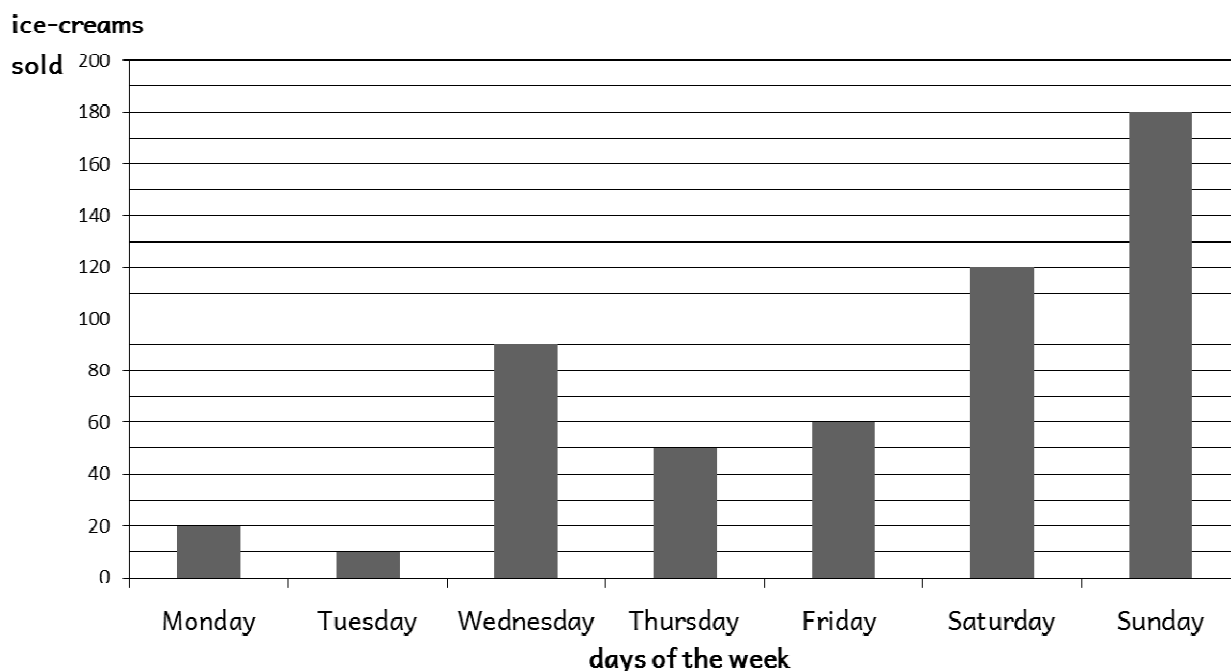
(b) Anna is at **Point B** and is looking **North**.

She turns $2\frac{1}{2}$ right angles anticlockwise.

Which **Point** is she facing?

Point

11. The block graph below shows the number of ice-creams sold in a week.



(a) How many ice-creams were sold on:

i) Monday? → ice-creams ii) Wednesday? → ice-creams

(b) The number of ice-creams sold on was double the number of ice-creams sold on .

(c) The ice-cream vendor gets €15 for every 10 ice-creams he sells.
On which day did he get €75?

You can show your working here

12a) Robert buys some apples.

He puts the apples in a basket.

The weight (mass) of **the empty basket** is 200 g.

The weight (mass) of **the basket and the apples** is 2 kg.

What is the weight (mass) of the **apples**?



You can show your
working here

_____ kg _____ g

(b) Sam and Diane also buy apples.

Sam buys **1 kg 50 g**.

Diane buys **150 g of apples more** than Sam.

What is the **total weight (mass) of apples** Sam and Diane buy
altogether?

You can show your
working here

_____ kg _____ g

13. Each of the three different shapes below represents an **EVEN** number.
What is the **value** of **each** shape?

$$\triangle + \bigcirc + \text{pentagon} = 20$$

$$\triangle = \bigcirc + \bigcirc$$

$$\bigcirc = \text{pentagon} + \text{pentagon} + \text{pentagon}$$

You can show your
working here

$$\triangle = \underline{\hspace{2cm}} \quad \bigcirc = \underline{\hspace{2cm}} \quad \text{pentagon} = \underline{\hspace{2cm}}$$

END OF PAPER

| | | | | | |
|---------------|------|---------|---------------|-------|-----------|
| Marks' Scheme | Nos. | 1 a - j | 10×2 | = | 20 |
| | | 2 - 7 | 6×4 | = | 24 |
| | | 8 - 13 | 6×6 | = | 36 |
| | | | | TOTAL | <u>80</u> |