Instructions

You must not use a calculator to answer any questions in this test.

Questions and answers
You will have 30 minutes to complete this test, plus your additional time allowance.

Work as quickly and as carefully as you can.

Put your answer on the line for each question.

All answers should be given as a single value.

For questions expressed as common fractions or mixed numbers, you should give your answers as common fractions or mixed numbers.

If you cannot do a question, go on to the next one. You can come back to it later if you have time.

If you finish before the end, go back and check your work.

Marks
In this test, long division and long multiplication questions are worth two marks each. You will be awarded two marks for a correct answer. You may get one mark for showing your method.

All other questions are worth one mark each.
1. $40 + 1000 = \underline{\phantom{0000}}$

2. $707 + 1818 = \underline{\phantom{0000}}$

3. $\frac{4}{6} + \frac{3}{6} = \underline{\phantom{0000}}$

4. $505 \div 1 = \underline{\phantom{0000}}$
5. \( 345 - 60 = \) _________

6. \( 2.7 + 3.014 = \) _________

7. _________ = 4500 + 600

8. \( 8 \times 33 = \) _________
9. \( 72 \div 9 = \) 

10. \( 167 \times 4 = \) 

11. \( 4912 - 824 = \) 

12. \( \frac{62}{100} - \frac{38}{100} = \)
13. \[ \underline{\text{_____________}} - 100 = 1059 \]

14. \[ 50 + (36 \div 6) = \underline{\text{__________}} \]

15. \[ \frac{4}{6} \times \frac{3}{5} = \underline{\text{__________}} \]
16. \[30 \times 40 = \underline{\text{_______}}\]

17. \[581 \div 7 = \underline{\text{_______}}\]

18. \[0.04 \div 10 = \underline{\text{_______}}\]
19. \[ 2345 \times 1000 = \] 

20. \[ 714 \div 17 = \] 

Show your method.
21. \( 9 - 3.45 = \) __________

22. \( 4781 \times 23 = \) __________

Show your method.
23. \[ \frac{3}{4} - \frac{3}{8} = \] 

24. \[ 418 \times 46 = \] 

Show your method.
25. \( 37.8 \times 14.671 = \) _________

26. \( \frac{1}{4} + \frac{1}{5} + \frac{1}{10} = \) _________

27. \( \frac{4}{5} \div 4 = \) _________

28. \( \frac{5}{8} \div 2 = \) _________
29. 45% of 460 = 

30. \(2\frac{1}{3} + \frac{5}{6} = \) 

31. 7% of 500 = 
32. \( \frac{2}{6} - \frac{1}{8} = \) __________

33. \( 0.9 \times 200 = \) __________

34. \( 15\% \times 1000 = \) __________
35. $1\frac{1}{2} \times 57 = \underline{\hspace{2cm}}$

36. $2242 \div 59 = \underline{\hspace{2cm}}$

Show your method.

END OF TEST
2017 national curriculum tests

Key stage 2

Mathematics

Administering the modified large print (MLP) version of the key stage 2 mathematics test Paper 1: arithmetic

WEDNESDAY 10 MAY 2017

CONFIDENTIAL: This pack must be kept secure and unopened until the start of the test on Wednesday 10 May 2017. Early opening, up to 1 hour before the test starts, is permissible only if access to the contents is needed to make adaptations to meet individual pupils’ needs. Please ensure you have read and understood the 2017 modified test administration guidance before opening this pack.

Pack contents:
- An overview of the MLP key stage 2 mathematics test Paper 1: arithmetic (overleaf)
- 1 copy of the MLP Paper 1: arithmetic

For test administration
It is important to brief pupils fully at the start of each test. You should use this guide to introduce each test.

**What to say at the start of the test**

**Paper 1: arithmetic**

This is the key stage 2 mathematics Paper 1: arithmetic. If pupils are allowed to mark their paper in any way, you should explain that this is the only marking that will be allowed.

- **Equipment**
  - a black pen or dark pencil
  - a ruler
  - a calculator
  - a eraser
  - a pencil
  - a compasses
  - a protractor

- **Instructions**
  - you must not use a calculator to answer any questions in this test.
  - you will have 30 minutes to complete this test, plus your additional time.
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2017 national curriculum tests
Key stage 2
MATHEMATICS
Modified large print
Paper 2: reasoning

First name ___________________________________________

Middle name ________________________________________

Last name ___________________________________________

Date of birth  Day _____ Month _____ Year ______

School name _________________________________________

DfE number _________________________________________

Note for marking:
This paper should be marked using the MODIFIED LARGE PRINT amendments to the mark schemes – MLP.
Instructions

You must not use a calculator to answer any questions in this test.

Questions and answers
You have 40 minutes to complete this test, plus your additional time allowance.

Follow the instructions for each question.

Work as quickly and as carefully as you can.

If you need to do working out, you can use any space on the page.

Some questions say ‘Show your method.’
For these questions you may get a mark for showing your method.

If you cannot do a question, go on to the next one.
You can come back to it later, if you have time.

If you finish before the end, go back and check your work.
1. William asks the children in Year 2 and Year 6 if they walk to school.

<table>
<thead>
<tr>
<th>Number of children</th>
<th>Year 2</th>
<th>Year 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>50</td>
<td>70</td>
</tr>
<tr>
<td>1</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>2</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>3</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>4</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

walk to school

don’t walk to school
a) Altogether, how many children don’t walk to school?

________________________

b) How many more Year 6 children than Year 2 children walk to school?

________________________
2. Look at the five numbers below.

9700  907  9007  970  9070

Write the number that is 10 times greater than nine hundred and seven.

3. In this question △ and □ stand for two different numbers.

9 \times △ = 63

Write the value of △

△ = ________________

□ \times 8 = 48

Write the value of □

□ = ________________
4. The table below shows the heights of three mountains.

<table>
<thead>
<tr>
<th>Mountain</th>
<th>Height in metres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mount Everest</td>
<td>8848</td>
</tr>
<tr>
<td>Mount Kilimanjaro</td>
<td>5895</td>
</tr>
<tr>
<td>Ben Nevis</td>
<td>1344</td>
</tr>
</tbody>
</table>

How much higher is Mount Everest than the combined height of the other two mountains?

Show your method.

_____________ m
5. Complete the table below with the missing numbers.

One row has been done for you.

Write your answers in the boxes.

<table>
<thead>
<tr>
<th>Number</th>
<th>1000 more</th>
</tr>
</thead>
<tbody>
<tr>
<td>3500</td>
<td>4500</td>
</tr>
<tr>
<td>85</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9099</td>
</tr>
<tr>
<td></td>
<td>15 250</td>
</tr>
</tbody>
</table>

6. Look at the four numbers below.

1·9   0·96   1·253   0·328

Write these numbers in order of size, starting with the smallest.

smallest
7. Write the missing numbers in the boxes below.

   60 months = [ ] years
   72 hours = [ ] days
   84 days = [ ] weeks

8. At the start of June, there were 1793 toy cars in the shop.

   During June,

   8728 more toy cars were delivered
   9473 toy cars were sold.

   How many toy cars were left in the shop at the end of June?

   Show your method.
9. Look at the four shapes below.

They are labelled P Q R and S

Write the letters of the two shapes that have $\frac{3}{4}$ shaded.

_________________ and ___________________
10. Round 84 516 to the nearest 10

Round 84 516 to the nearest 100

Round 84 516 to the nearest 1000
11. The rule below shows the time it takes to cook a chicken.

\[ \text{Cooking time} = 20 \text{ minutes plus an extra 40 minutes for each kilogram} \]

a) How many minutes will it take to cook a 3 kg chicken?

____________________ minutes

b) What is the mass of a chicken that takes 100 minutes to cook?

____________________ kg
12. You have a hexagonal prism for this question.

a) How many faces does it have?

____________________

b) How many vertices does it have?

____________________
13. Ally and Jack buy some stickers.

Ally buys a pack of 12 stickers for £10.49

Jack buys 12 single stickers for 99p each.

How much more does Jack pay than Ally?

Show your method.

£ ______________

For every 3 seeds Amina planted, only 2 seeds grew.

Altogether 12 seeds grew.

How many seeds did Amina plant?

__________

15. The year below is written in Roman numerals.

MMVI

Write the year in figures.

__________
16. How many degrees are there in one and a half turns?
17. Look at the diagram below.

The vertices of a quadrilateral have the coordinates below.

(1, 4) (4, 2) (2, -3) (-3, 4)

One side of the quadrilateral has been drawn on the grid.

Complete the quadrilateral.

Use a ruler.
18. A cat sleeps for 12 hours each day.

50% of its life is spent asleep.

A koala sleeps for 18 hours each day.

What percentage of the koala’s life is spent asleep?

_____________%
19. Amina posts three large letters.

The postage costs the same for each letter.

She pays with a £20 note.

Her change is £14.96

What is the cost of posting one letter?

Show your method.

£___________
20. Adam says that $0.25$ is smaller than $\frac{2}{5}$

Explain why he is correct.

21. On a map, $1 \text{ cm}$ represents $20 \text{ km}$

The distance between two cities is $250 \text{ km}$

On the map, what is the distance between the two cities?

Show your method.

______________ cm
22. Look at the diagram below.

Two triangles are shown on a square grid.

The triangles are similar and right–angled.

Write the ratio of side $p$ to side $q$

$p : q = \blank : \blank$
23. Look at the circle below.

In the circle \( \frac{1}{4} \) and \( \frac{1}{6} \) are shaded.

What fraction of the whole circle is **not** shaded?

Show your method.
Re-use of Crown copyright and Crown information in test materials
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2017 national curriculum tests

Key stage 2

Mathematics

Administering the modified large print (MLP) version of the key stage 2 mathematics test Paper 2: reasoning

WEDNESDAY 10 MAY 2017

CONFIDENTIAL: This pack must be kept secure and unopened until the start of the test on Wednesday 10 May 2017. Early opening, up to 1 hour before the test starts, is permissible only if access to the contents is needed to make adaptations to meet individual pupils’ needs. Please ensure you have read and understood the 2017 modified test administration guidance before opening this pack.

Pack contents:
- An overview of the MLP key stage 2 mathematics test Paper 2: reasoning (overleaf)
- 1 copy of the MLP Paper 2: reasoning
- 1 model pack

For test administration
What to say at the start of the test

The test consists of 3 papers. The papers must be administered in order. Pupils can have a break between the papers. However, test packs for each test must not be opened until the pupils are in the test room ready to complete the test.

Guidance for specific questions

Before the test begins
Open the pack containing the model ready for use in question 12.

How to deal with issues during the test

1. If you have to use a rubber, make sure you rub out your answer completely before the pupil reaches this question.

What to do at the end of the test

If any everyday context or words related to a question are unfamiliar to a pupil, you may show them related objects or pictures, or describe the related context.

Guidance for specific questions

2. There is a model supplied for question 12. Make sure that it is to hand for when the pupil reaches this question.

How to deal with issues during the test

3. It is important that the pupils’ names on their tests match the names on the test attendance register. Check with your test co-ordinator whether any pupil in your group is known by a different name in school, or has changed their name since pupil registration. This is so you can ensure the pupil writes the correct name on their test paper.

What to do at the end of the test

4. Check that seating is appropriately spaced and that no pupil can see another pupil’s test paper.

What to do at the end of the test

5. If a pupil requests it, a question may be read to the pupil on a one-to-one basis. If reading to a pupil, you can only read words and numbers but not mathematical symbols. This is to ensure pupils are not given an unfair advantage by having the function inadvertently explained by reading its name.

What to do at the end of the test

6. A pupil may use the following equipment, if this is normal classroom practice, provided they only give word-for-word translations:

What to do at the end of the test

7. Pupils may use the following equipment, if this is normal classroom practice, provided they only give word-for-word translations:

What to do at the end of the test

8. If you have time.

What to do at the end of the test

9. You must ensure nothing you say or do during a test could be interpreted as giving pupils an advantage, e.g. indicating an answer is correct or incorrect, or suggesting the pupil looks at an answer again.

What to do at the end of the test

10. If a pupil requests it, a question may be read to the pupil on a one-to-one basis. If reading to a pupil, you can only read words and numbers but not mathematical symbols. This is to ensure pupils are not given an unfair advantage by having the function inadvertently explained by reading its name.

What to do at the end of the test

11. At a pupil’s request, you may point to parts of the test paper such as charts, diagrams, statements and equations, but you must not explain the information or help the pupil by interpreting it.

What to do at the end of the test

12. The following examples illustrate how to deal with some common situations.

What to do at the end of the test

13. Q. What does ‘quadrilateral’ or ‘>’ or ‘<’ mean?

What to do at the end of the test

14. A. I can’t tell you, but think hard and try to remember. We can talk about it after the test.

What to do at the end of the test

15. Q. What is 0.6?

What to do at the end of the test

16. A. That’s nought point six.
2017 national curriculum tests
Key stage 2
MATHEMATICS
Modified large print
Paper 3: reasoning

First name ____________________________
Middle name ____________________________
Last name ____________________________
Date of birth Day _____ Month _____ Year _____
School name ____________________________
DfE number ____________________________

Note for marking:
This paper should be marked using the MODIFIED LARGE PRINT amendments to the mark schemes – MLP.
Instructions

You must not use a calculator to answer any questions in this test.

Questions and answers
You have 40 minutes to complete this test, plus your additional time allowance.

Follow the instructions for each question.

Work as quickly and as carefully as you can.

If you need to do working out, you can use any space on the page.

Some questions say ‘Show your method.’ For these questions you may get a mark for showing your method.

If you cannot do a question, go on to the next one. You can come back to it later, if you have time.

If you finish before the end, go back and check your work.
1. Write the missing number to make the division below correct.

\[ 75 \div ________ = 7.5 \]

2. A group of friends earns £80 by washing cars.

They share the money equally.

They get £16 each.

How many friends are in the group?
3. Chen uses the three digit cards shown below.

```
5  6  9
```

She makes a 2-digit number and a 1-digit number.
She multiplies them together.
Her answer is a multiple of 10

What could Chen’s multiplication be?

```
[ ]  [ ]  ×  [ ]
```
4. The graph below shows the temperature in °C from 7 am to 1 pm on a cold day.

Temperature in °C

Time of day
a) How many degrees warmer was it at 1 pm than at 7 am?

________________________ °C

b) At 2 pm the temperature was 4 degrees lower than at 1 pm.

What was the temperature at 2 pm?

________________________ °C
5. The children at Farmfield School are collecting money for charity. 

Their target is to collect £360 

So far they have collected £57.73 

How much more money do they need to reach their target?

£ ____________

6. The timetable below is for train journeys from London to Paris.

<table>
<thead>
<tr>
<th>Leaves London</th>
<th>Arrives Paris</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:01</td>
<td>15:22</td>
</tr>
<tr>
<td>12:25</td>
<td>15:56</td>
</tr>
<tr>
<td>14:01</td>
<td>17:26</td>
</tr>
<tr>
<td>14:31</td>
<td>17:53</td>
</tr>
<tr>
<td>15:31</td>
<td>18:53</td>
</tr>
</tbody>
</table>

William wants to travel to Paris by train. 
He needs to arrive in Paris by 5.30pm.

Tick the latest time that William can leave London.
7. Look at the diagram below.

A triangle is drawn on a coordinate grid.

The triangle is translated 7 right and 5 up.

Mark the new position of the point labelled P.
8. Write three factors of 30 that are not factors of 15

___________ and ___________ and ___________

9. Look at the morning timetable below for Chen’s class this week.

<table>
<thead>
<tr>
<th>Time</th>
<th>09:00 – 10:30</th>
<th>10:30 – 11:00</th>
<th>11:00 – 12:00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mon</td>
<td>Maths</td>
<td>Break</td>
<td>English</td>
</tr>
<tr>
<td>Tue</td>
<td>English</td>
<td>Break</td>
<td>Maths</td>
</tr>
<tr>
<td>Wed</td>
<td>Maths</td>
<td>Break</td>
<td>Science</td>
</tr>
<tr>
<td>Thu</td>
<td>English</td>
<td>Break</td>
<td>Maths</td>
</tr>
<tr>
<td>Fri</td>
<td>Maths</td>
<td>Break</td>
<td>English</td>
</tr>
</tbody>
</table>

What is the total number of hours for English on this timetable?

_______________ hours
10. A bottle contains 568 millilitres of milk.

   Jack pours out half a litre.

   How much milk is left?

11. A bicycle wheel has a diameter of 64 cm.

   What is the radius of the bicycle wheel?

   ___________ cm
12. White balloons are sold in bags of 24

Red balloons are sold in bags of 12

Adam buys 6 bags of white balloons.

Chen buys 3 bags of red balloons.

Adam says that he has four times as many balloons as Chen.

Explain why Adam is correct.
13. Look at the four shapes below.

They are labelled P Q R and S

Write the letter of the **pentagon** with exactly four acute angles.

___________
14. 3 pineapples cost the same as 2 mangoes.

pineapple  pineapple  pineapple
mango    mango

One mango costs £1.35

How much does one pineapple cost?

Show your method.
15. Look at the four letters below.

O  E  L  Z

Tick the letter that has both parallel and perpendicular lines.

16. There are 2400 leaflets in a box.

William and Ally take 450 leaflets each.

Adam and Chen share the rest of the leaflets equally.

How many leaflets does Adam get?

Show your method.
17. In each box below, draw a ring around the number that is greater.

\[\frac{1}{2} \quad 1.2\]

\[\frac{1}{4} \quad 1.3\]

\[\frac{5}{100} \quad 1.4\]

\[\frac{3}{5} \quad 1.5\]
18. A square number and a prime number have a total of 22.

What are the two numbers?

\[ \text{square number} + \text{prime number} = 22 \]

19. Dev thinks of a whole number.

He multiplies it by 4.

He rounds his answer to the nearest 10.

The result is 50.

Write all the possible numbers that Dev could have started with.
20. A square tile measures **20 cm by 20 cm**.

Look at the drawing of the tile below.

It is not actual size.

Look at the rectangular tile below. It is not actual size.

The rectangular tile is **3 cm longer and 2 cm narrower** than the square tile.

What is the difference in area between the two tiles?

Show your method.

___________ cm²
21. The numbers in the sequence below increase by the same amount each time.

\[
\begin{array}{cccc}
\square & 1 & 1 \frac{5}{8} & 2 \frac{1}{4} & \square \\
\end{array}
\]

Write the missing numbers in the boxes.
22. Look at the diagram below.

It shows two sticks, made up of different lengths.

Each stick has the same total length.

The length \( W \) is the same on each stick.

\[
\begin{align*}
\text{\( \overleftarrow{w} \)} & \quad \text{34 cm} & \quad \text{\( \overrightarrow{w} \)} \\
\text{\( \overleftarrow{w} \)} & \quad \text{9 cm} & \quad \text{\( \overrightarrow{18 \text{ cm}} \)} & \quad \text{\( \overrightarrow{w} \)}
\end{align*}
\]

Calculate the length \( W \)

\[
\text{\( \overrightarrow{w} \)}
\]

\[
\text{\( \overrightarrow{w} \)}
\]
23. Look at the pattern of number pairs below.

<table>
<thead>
<tr>
<th>a</th>
<th>b</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>2</td>
<td>19</td>
</tr>
<tr>
<td>3</td>
<td>29</td>
</tr>
<tr>
<td>4</td>
<td>39</td>
</tr>
</tbody>
</table>

Complete the rule for the pattern.

\[ b = \Box \times a - \Box \]
24. The volume of a cuboid is $216\text{ cm}^3$

It is 4 cm high.

It is 6 cm wide.

What is its length?

Show your method.

____________________ cm
2017 key stage 2 mathematics
Paper 3: reasoning

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2017 national curriculum tests

Key stage 2

Mathematics

Administering the modified large print (MLP) version of the key stage 2 mathematics test

Paper 3: reasoning

THURSDAY 11 MAY 2017

CONFIDENTIAL: This pack must be kept secure and unopened until the start of the test on Thursday 11 May 2017. Early opening, up to 1 hour before the test starts, is permissible only if access to the contents is needed to make adaptations to meet individual pupils’ needs.

Please ensure you have read and understood the 2017 modified test administration guidance before opening this pack.

Pack contents:

- An overview of the MLP key stage 2 mathematics test Paper 3: reasoning (overleaf)
- 1 copy of MLP Paper 3: reasoning

For test administration
2017 Key stage 2 mathematics test

The key stage 2 mathematics test consists of 3 papers. The papers must be administered in order. Pupils can have a break between the papers. However, test packs for each test must not be opened until the pupils are in the test room ready to complete the test.

The scheduled day for the administration of Paper 3 is Thursday 11 May.

Paper 3: reasoning

The following information explains how to administer the modified large print (MLP) version of the key stage 2 mathematics test Paper 3: reasoning. There is information on GOV.UK about administering MLP tests to pupils. If you have any questions, you should check with your headteacher or key stage 2 test co-ordinator before you administer the test.

Please make sure you follow these instructions correctly to ensure the test is properly administered. Failure to administer the test correctly could result in a maladministration investigation at the school.

Format

This component of the test consists of a single MLP test paper. Pupils will have 40 minutes to complete the test, plus up to 100% additional time. You must not refer to the standard test questions when administering this test.

Equipment

Pupils will need the equipment specified below:

- a blue / black pen or dark pencil
- a sharp, dark pencil for mathematical drawing
- ruler (showing centimetres)
- mirror (papers 2 and 3 only)
- angle measurer or protractor (papers 2 and 3 only)
- rubber (optional). However, please encourage pupils to cross out any answers they may wish to change, instead of rubbing them out.

Pupils may use the following equipment, if this is normal classroom practice, provided they only give word-for-word translations:

- bilingual dictionaries or electronic translators
- bilingual word lists
- monolingual English electronic spell checkers.

Pupils are not allowed:

- calculators
- tracing paper.

Assistance

You must ensure that nothing you say or do during a test could be interpreted as giving pupils an advantage, e.g. indicating an answer is correct or incorrect, or suggesting the pupil looks at an answer again.

If a pupil requests it, a question may be read to the pupil on a one-to-one basis. If reading to a pupil, you can only read words and numbers but not mathematical symbols. This is to ensure pupils are not given an unfair advantage by having the information inadvertently explained by reading its name.

At a pupil's request, you may point to parts of the test paper such as charts, diagrams, statements and equations, but you must not explain the information or help the pupil by interpreting it.

The following examples illustrate how to deal with some common situations.

Q. What does 'quadrilateral' or 'or' or '<' mean?
A. I can't tell you, but think hard and try to remember. We can talk about it after the test.

Q. What is '0.6'?
A. That's nought point six.

Guidance for specific questions

There is no additional guidance needed to administer the MLP version of Paper 3: reasoning.

Before the test begins

Review the list of pupils with any particular individual needs, e.g. pupils who are allowed additional time or who may need a transcript made at the end of the test.

Ensure you know how to administer any access arrangements correctly. Please refer to the 2017 key stage 2 access arrangements guidance.

It is important that the pupils' names on their test papers match the names on the test attendance register. Check with your test co-ordinator whether any pupil in your group is known by a different name in school, or has changed their name since pupil registration. This is so you can ensure the pupil writes the correct name on their test paper.

Check there are enough administrators to maintain adequate supervision for the test. You should consider the possibility of at least one test administrator needing to leave the room with a pupil.

Ensure you understand how to deal with issues during the tests.

Write the school's name and DfE number on a board that is visible to all pupils. Leave space on the board to write the start and finish times of the test.

How to deal with issues during the test

It is impossible to plan for every scenario. Whatever action you take, pupil safety must always be your first consideration.

In the following circumstances, you will need to stop the test either for an individual pupil or for the whole cohort:

- test papers are incorrectly collated or the print is illegible
- an incorrect test has been administered
- a fire alarm goes off
- a pupil is unwell
- a pupil needs to leave the test room during the test
- a pupil is caught cheating.

If you need to stop the test:

- make a note of the time
- make sure pupils are kept under test conditions and that they are supervised
- if pupils have to leave the room, ensure they don't talk about the test
- speak to your test co-ordinator or a senior member of staff for advice on what to do next
- consider contacting the national curriculum assessments helpline on 0300 303 3013 for further advice.

You should brief your headteacher on how the incident was dealt with, once the test is over.

What to do at the start of the test

Check that seating is appropriately spaced and that no pupil can see another pupil's test paper.

Check that pupils don't have any materials or equipment that may give them extra help.

Check that pupils don't have mobile phones or other disruptive items.

Ensure each pupil who needs it has one MLP copy of mathematics Paper 3: reasoning.

Write the start and finish times on a board so that all the pupils can see them.

If any everyday context or words related to a question are unfamiliar to a pupil, you may show them related objects or pictures, or describe the related context.

What to say at the start of the test

It is important to brief pupils fully at the start of each test. You should use this script to introduce mathematics Paper 3: reasoning.

This is the key stage 2 mathematics Paper 3: reasoning.

You will need a blue / black pen, a sharp, dark pencil, a ruler, a protractor and a mirror.

Write your name, school name and DfE number on the front of your mathematics test Paper 3: reasoning. If any pupil's name differs from the name provided during pupil registration, instruct the pupil to write both names on the paper.

Open your test paper to page 3. I will read the instructions to you. (Read the instructions on page 3 of the test paper to the pupils.)

You must not use a calculator to answer any questions in this test.

You have 40 minutes to complete this test, plus your additional time allowance.

Follow the instructions for each question.

Work as quickly and as carefully as you can.

If you need to do working out, you can use any space on the page.

Some questions say: 'Show your method.' For these questions you may get a mark for showing your method.

If you cannot do a question, go on to the next one. You can come back to it later if you have time.

Remember to check your work carefully. If you have any questions during the test, you should put your hand up and wait for someone to come to you. Remember, I can't help you answer any of the test questions.

You must not talk to each other.

Are there any questions you want to ask me now?

I will tell you when you have 5 minutes left. I will tell you when the test is over and to stop writing.

You may now start the test.

What to do at the end of the test

If any pupil needs a transcript, complete it with the pupil at the end of the test, under test conditions. Particular care should be taken to ensure accurate transcriptions are made and that pupils' answers are not corrected or amended.

Ensure you inform your senior member of staff / test co-ordinator if you have

- a pupil needs to leave the test room during the test
- an incorrect test has been administered
- pupils have to leave the room, ensure they don't talk about the test
- a pupil is caught cheating.

You must ensure that nothing you say or do during a test could be interpreted as giving pupils an advantage, e.g. indicating an answer is correct or incorrect, or suggesting the pupil looks at an answer again.

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2017 national curriculum tests
Key stage 2

Mathematics
Amendments to the mark schemes (AMS)

Modified large print (MLP)
Introduction

This guidance details the amendments made to the mark schemes for questions which have been adapted, or replaced, in the modified large print (MLP) version of the key stage 2 mathematics test materials.

This guidance must be used in conjunction with the standard version of the key stage 2 mathematics mark schemes. Refer to the standard mark schemes when marking the MLP test papers unless an alternative is given in this guidance.

Amendments to the mark scheme

Amendments to the standard test mark schemes are only provided where amendments to a question are such that the question cannot be marked using the standard test mark scheme.

Amendments to the mark schemes are not provided where the only change has been to further divide the question into subsections or where the layout of the question is different.

The mark schemes have been amended in some respects for the following questions:

<table>
<thead>
<tr>
<th>Paper 1</th>
<th>20, 22, 24 and 36.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper 2</td>
<td>1, 3, 6, 9, 12 and 17.</td>
</tr>
<tr>
<td>Paper 3</td>
<td>4, 6, 7, 13, 15 and 24.</td>
</tr>
</tbody>
</table>
General guidance to be applied throughout the MLP papers

- You should make every effort to understand what the pupil has written in an answer, without reading into the answer anything that the pupil did not intend.

- Some pupils with visual impairment find it difficult to get their answers across clearly. It may take you longer to read their answers. Apply the mark schemes, but be sympathetic to their difficulties.

- Pupils with visual impairment find it difficult to draw accurately. Often thick pens or pencils are used by these pupils. You should make every effort to be fair in marking these questions and take into account what appears to be the pupil’s intention.

- Unless otherwise indicated in this document, there should be an increased tolerance level for all drawing and measuring. In general, pupils will only be expected to measure lengths to the nearest 0.5cm and angles to the nearest 5°.

- If pupils have missed any answer lines within the text, their answers may be elsewhere on the page. Any unambiguous indication of the correct answer should be credited.

- Some MLP questions may be presented slightly differently to the standard version of the question, but the differences are sufficiently small that you should be able to apply the standard mark scheme. For example, tick boxes arranged horizontally in the standard version of the test may have been rearranged vertically.
Amendments to mark schemes for Paper 1: arithmetic

Please use the standard mark schemes to mark Paper 1: arithmetic.

For questions 20, 22, 24 and 36 the standard mark schemes expect a 'formal method' for long multiplication or long division. If the answer is incorrect, visually impaired pupils should be credited the method mark if they have used any appropriate method with no more than ONE arithmetic error; a formal method is not required. Working must be carried through to reach a final answer for the award of ONE mark.

Amendments to mark schemes for Paper 2: reasoning

<table>
<thead>
<tr>
<th>Qu.</th>
<th>Requirement</th>
<th>Mark</th>
<th>Additional guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>160</td>
<td>1m</td>
<td></td>
</tr>
<tr>
<td>1b</td>
<td>50</td>
<td>1m</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>△ = 7</td>
<td>1m</td>
<td>Both parts must be answered correctly for the award of ONE mark.</td>
</tr>
<tr>
<td></td>
<td>□ = 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Numbers in order as shown: 0.328 0.96 1.253 1.9</td>
<td></td>
<td>Ignore any additional numbers, provided the given numbers are correctly ordered.</td>
</tr>
<tr>
<td>9</td>
<td>P AND S</td>
<td>1m</td>
<td>Letters may be given in either order. Accept alternative unambiguous positive indications, e.g. shapes ticked.</td>
</tr>
<tr>
<td>12a</td>
<td>8</td>
<td>1m</td>
<td></td>
</tr>
<tr>
<td>12b</td>
<td>12</td>
<td>1m</td>
<td></td>
</tr>
</tbody>
</table>
Amendments to mark schemes for Paper 2: reasoning (continued)

<table>
<thead>
<tr>
<th>Qu.</th>
<th>Requirement</th>
<th>Mark</th>
<th>Additional guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>Quadrilateral completed as shown:</td>
<td>1m</td>
<td>Accept inaccuracies in drawing provided the intention is clear.</td>
</tr>
</tbody>
</table>

Amendments to mark schemes for Paper 3: reasoning

<table>
<thead>
<tr>
<th>Qu.</th>
<th>Requirement</th>
<th>Mark</th>
<th>Additional guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>4a</td>
<td>4</td>
<td>1m</td>
<td>Do not accept -4 or 4-</td>
</tr>
<tr>
<td>4b</td>
<td>-2</td>
<td>1m</td>
<td>Do not accept 2-</td>
</tr>
<tr>
<td>6</td>
<td>The correct time ticked as shown:</td>
<td>1m</td>
<td>Accept alternative unambiguous positive indications, e.g. 14:01 circled or underlined. Accept 17:26 ticked in addition to 14:01 provided no other time is ticked. <strong>Do not</strong> accept only the arrival time 17:26 ticked.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Leaves London</th>
<th>Arrives Paris</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:01</td>
<td>15:22</td>
</tr>
<tr>
<td>12:25</td>
<td>15:56</td>
</tr>
<tr>
<td>14:01</td>
<td>17:26</td>
</tr>
<tr>
<td>14:31</td>
<td>17:53</td>
</tr>
<tr>
<td>15:31</td>
<td>18:53</td>
</tr>
<tr>
<td>Qu.</td>
<td>Requirement</td>
</tr>
<tr>
<td>-----</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>7</td>
<td>Point (5, 1) marked</td>
</tr>
<tr>
<td>13</td>
<td>R</td>
</tr>
<tr>
<td>15</td>
<td>The correct letter ticked as shown: O E ✓ L Z</td>
</tr>
<tr>
<td>24</td>
<td>Award <strong>TWO</strong> marks for the correct answer of 9</td>
</tr>
</tbody>
</table>

If the answer is incorrect, award **ONE** mark for evidence of an appropriate method, e.g.
- \[216 = 4 \times 6 \times ?\]
- **OR**
  - \[216 ÷ 6 = 36\]
  - \[36 ÷ 4\]
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2017 key stage 2 mathematics: amendments to mark schemes - MLP

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<th>Page/question number</th>
<th>Description</th>
<th>Reference/copyright owner</th>
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<td>Cover illustration of trees and sky commissioned by STA. Crown copyright.</td>
</tr>
<tr>
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