# **Transcription of the Braille Version**

2019 national curriculum tests Key stage 2 Mathematics Braille Paper 1: arithmetic

# **Transcription of the Braille Version**

## [braille page 1]

On your paper write:

Your first name Your last name Your date of birth Your school name

#### Instructions

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

You have 30 minutes for this test, plus your additional time allowance.

Work as quickly and as carefully as you can.

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.

\_ has been used in some questions to indicate a missing number.

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.

## [braille page 2]

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.

#### [Note to test administrator

Please write the school DfE number on the pupil's braille script.]

.....

<b>[brai</b> 1.	<b>lle page 3]</b> = 6000 + 90
2.	= 8275 + 82
3.	826 = 800 + + 6
4.	+ 5 = 341
5.	9 × 41 =
6.	5.87 + 3.123 =
7.	180 ÷ 3 =
8.	120 ÷ 12 =
9.	213 × 0 =

<b>[brai</b> 10.	lle page 4] 91 ÷ 7 =
11.	= 87 - 65
12.	602 = 594
13.	1210 ÷ 11 =
14.	25.34 × 10 =
15.	60 ÷ (30 – 24) =
16.	3 <sup>3</sup> =
17.	101 × 1000 =
18.	20% of 3000 =

<b>[brail</b> 19.	<b>le page 5]</b> 7 - 2.25 =
20.	0.9 ÷ 100 =
21.	9 - 1.9 =
22.	$1\frac{3}{7} - \frac{4}{7} = $
23.	Work out 836 × 27 Show your method.
24.	$\frac{1}{5} + \frac{3}{4}$
25.	Work out 888 ÷ 37 Show your method.
•••••	

<b>[brail</b> 26.	le page 6] $1\frac{1}{5} + 2\frac{1}{10} = $
27.	35% of 320 =
28.	$\frac{8}{9} - \frac{1}{4} = $
29.	51% of 900 =
30.	Work out 3468 × 62 Show your method.
31.	$\frac{2}{3} \div 3 = $
32.	$2\frac{1}{2} - \frac{3}{4} = $
<b>[brail</b> 33.	<b>le page 7]</b> 36% of 450 =
34.	$1\frac{3}{4} \times 10 = $
35.	$\frac{5}{6} \times 540 = $
36.	Work out 8051 ÷ 83 Show your method.

# END OF TEST

Blank page

# Braille transcript

Print version product code: STA/19/8216/BTpISBN 978-1-78957-091-5Electronic PDF version product code: STA/19/8216/BTeISBN 978-1-78957-103-5© Crown copyright 2019ISBN 978-1-78957-103-5

2019 national curriculum tests

# Key stage 2

# **Mathematics**

Administering the braille version of Paper 1: arithmetic

# WEDNESDAY 15 MAY 2019

**CONFIDENTIAL:** This pack must be kept secure and unopened until the start of the test on **Wednesday 15 May**.

Early opening, up to 1 hour before the test starts, is only allowed if access to the contents is needed to make adaptations to meet individual pupils' needs. Early opening of more than 1 hour is only allowed if permission has been granted by STA.

Please ensure you have read and understood the 2019 modified test administration guidance before opening this pack.

# Pack contents:

- Test administration instructions for the braille version of the key stage 2 mathematics test Paper 1: arithmetic (overleaf)
- 1 copy of the braille tactile version of the key stage 2 mathematics test Paper 1: arithmetic
- I copy of the printed transcript of the braille version of the key stage 2 mathematics test Paper 1: arithmetic

# For test administration

#### 2019 Key stage 2 mathematics test

The following information explains how to administer the braille version of the key stage 2 mathematics test Paper 1: arithmetic. Modified test administration guidance is available at www.gov.uk/sta. 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.

#### Format

The key stage 2 mathematics test consists of 3 papers. The papers must be administered in order. Pupils can have a break between Papers 1 and 2.

The scheduled day for the administration of Papers 1 and 2 is Wednesday 15 May. The scheduled day for the administration of Paper 3 is Thursday 16 May.

Paper 1: arithmetic consists of a single test booklet in braille.

There is a printed transcript of the braille booklet to help test administrators.

Pupils will have 30 minutes to complete the test, plus up to 100% additional time.

You must refer to the printed transcript rather than the standard test questions when administering this test.

#### Equipment

Each pupil will need the equipment specified below:

- a suitable way of recording their answers, such as a brailler, blue/black pen, dark pencil or word processor (i.e. the usual way they write in class)
- braille paper (if the pupil is brailling their responses)
- ruler.

Pupils may use the following equipment, if this is normal classroom practice:

• technical or electronic vision aids, including low-vision aids such as closed-circuit television or JOCR scanners.

Pupils are **not** allowed:

- calculators
- other mathematical equipment, such as angle measurers or mirrors.

#### Assistance

- 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.
- If a pupil requests it, you may read a question to the pupil on a one-to-one basis.
- If reading to a pupil, you may 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.

The example below illustrates how to deal with a common situation:

- Q. Do I need to multiply when I calculate 95% of 240?
- **A.** I can't tell you, but think hard and try to remember. We can talk about it after the test.

#### **Guidance for specific questions**

No additional guidance is needed to administer the braille version of Paper 1: arithmetic.

#### Before the test begins

Make sure you have the printed transcript of the braille booklet.

Review the list of pupils with any particular individual needs and consider whether they may need rest breaks or other access arrangements.

Ensure you know how to administer any access arrangements correctly. Please refer to the 2019 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 write the correct name on their test paper.

#### What to do at the start of the test

Check that seating is appropriately spaced.

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

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

Ensure each pupil who needs it has a braille copy of mathematics Paper 1: arithmetic.

Ensure the following is written on the cover of the pupil's paper (or on every page of braille paper used if this is how the pupil is answering): pupil's name provided during pupil registration, your school's name and DfE number.

Tell the pupils the duration of the test.

#### How to introduce the test

It is important to brief pupils fully at the start of each test. You should use this script to introduce Paper 1: arithmetic.

This is the key stage 2 mathematics Paper 1: arithmetic.

*Open your test to page 1. I will read the instructions to you.* (Read the instructions for braille pages 1 and 2 from the transcript to the pupils.)

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

You have up to 60 minutes to complete the test. This includes your additional time allowance.

Work as quickly and as carefully as you can.

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.

\_\_\_\_ has been used in some questions to indicate a missing number.

If you cannot answer 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.

Now turn to page 2.

In this test, long division and long multiplication questions are worth **2 marks** each. You will be awarded 2 marks for a correct answer. You may get 1 mark for showing your method. All other questions are worth **1 mark** each.

If you want to change your answer, put a line through the response you don't want the marker to read or use a series of 'for' signs (full 6 dot cells) with your brailler.

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 to answer any of the test questions.

You must not talk to each other.

Do you have any questions?

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

You may now start 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, a group of pupils or for the whole cohort:

• test papers are incorrectly collated or the dots have been printed incorrectly

- an incorrect test has been administered
- a fire alarm goes off
- a pupil is unwell
- · a pupil needs to leave the room
- a pupil is caught cheating.

If you need to stop the test:

- make a note of the time
- make sure the pupils are kept under test conditions and that they are supervised
- if the pupils have to leave the room, ensure they do not talk about the test
- speak to your test co-ordinator or a senior member of staff for advice about 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 end of the test

If you need to make a transcript of a test script, complete it with the individual pupil at the end of the test under test conditions. Particular care should be taken to ensure accurate transcriptions are made and the pupil's answers are not corrected or amended. Pupils' brailled answers should not be transcribed onto the standard version of the test.

Ensure you inform your senior member of staff/test co-ordinator if you have made a transcript, or if a pupil has used a scribe, word processor or other electronic or technical device. This is so they can complete the appropriate online notification.

Make sure you have collected every test paper. Return them immediately to the senior member of staff who is responsible for collating the tests.

Do not look at, review or amend pupils' answers in any way (unless it is necessary to make a transcript). If you tamper with or make changes to pupils' answers, it will be considered maladministration and results could be annulled.

Do not keep or photocopy test scripts for any reason.

All test materials, including printed transcripts and any unused test papers, must be stored securely until Monday 3 June.

Administering the braille version of Paper 1: arithmetic Print version product code: STA/19/8257/p ISBN: 978-1-78957-184-4 Electronic version product code: STA/19/8257/e ISBN: 978-1-78957-194-3 Standards & Testing Agency

© Crown copyright 2019

#### Re-use of Crown copyright in test materials

Subject to the exceptions listed below, the test materials on this website are Crown copyright and you may re-use them (not including logos) free of charge in any format or medium in accordance with the terms of the Open Government Licence v3.0 which can be found on the National Archives website and accessed via the following link: www.nationalarchives.gov.uk/doc/open-government-licence. When you use this information under the Open Government Licence v3.0, you should include the following attribution: 'Contains material developed by the Standards and Testing Agency for 2019 national curriculum assessments and licensed under Open Government Licence v3.0' and where possible provide a link to the licence.



Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.

# **Transcription of the Braille Version**

2019 national curriculum tests Key stage 2 Mathematics Braille Paper 2: reasoning

## **Transcription of the Braille Version**

[braille page 1]

On your paper write:

Your first name Your last name Your date of birth Your school name

Instructions

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.

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.

The questions are on different types of paper and diagrams are on opposite pages. Make sure you read everything carefully.

\_\_\_\_\_ has been used in some questions to indicate a missing number.

.....

# Test administration guidance

Note to test administrator

Please write the school DfE number on the pupil's braille script.

If you are acting as a scribe for a braillist, write the pupil's answers on a sheet of plain or lined paper and attach the braille diagrams showing the pupil's work.

[braille page 2]1. Write the missing numbers in the three multiplications below.

	a) 4 × 8 =
	b) 3 × = 21
	c) 8 × = 56
2.	Write the number that is 1000 less than 9072
<b>[brai</b> ] 3.	Ile page 3] Look at the four numbers below. They are labelled P Q R S P 1 009 909 Q 1 023 065 R 1 009 099 S 1 230 650 Put these numbers in order starting with the largest. Write the letter of each number. largest smallest

# Test administration guidance

1. Encourage the pupil to write a) before the answer to part a, b) before the answer to part b, and c) before the answer to part c.

# [braille page 4, facing page 5] Diagram for question 4



# [braille page 5]

- 4. You have a cut-out shape for this question. Look at the diagram on the opposite page. A shape is drawn on a square grid. Reflect the shape in the mirror line. Use the separate copy of the diagram. Use a ruler.
- 5. Look at the sequence below. The numbers **increase** by 45 each time. \_\_\_\_\_ 155 200 245 \_\_\_\_\_ Write the missing numbers.
- 6. 0.3 ÷ \_\_\_\_ = 0.03 Write the missing number to make this division correct.

#### Test administration guidance

4. Provide the pupil with the cut-out shape for this question. Separate copies of the diagram are provided on thermoform and plastic film. Teachers may mount the separate diagram on a board so that the pupil can use pins and bands or other tactile aids, or the coordinates can be marked on a film copy of the diagram.

Teachers should then transcribe the pupil's work on the spare copy of the diagram.

No tactile aids (i.e. 'blobs', bluetack, wikkisticks) should be sent with the pupil's braille script.

# [braille page 6, facing page 7] Diagram for question 7



# [braille page 7]

7.	Look at the number scale on the opposite page. It measures litres.						
	Write the number of litres the arrow is pointing to.						
8.	In the sequence below, the rule to get the next number is Multiply by 2 and then add 3 Some numbers in the sequence are shown below. 25 53 Write the missing numbers.						
9.	Jack chose a number. He multiplied the number by 7 Then he added 85 His answer was 953 What number did Jack choose? Show your method.						
<b>[brail</b> 10.	<b>le page 8]</b> A theme park sells tickets online. Each ticket costs £24 There is a £3 charge for buying tickets. Look at the four calculations below. They are labelled P Q R S P number of tickets × 3 + 24 Q number of tickets × 24 + 3 R number of tickets + 3 × 24 S number of tickets + 24 × 3 Write the letter of the calculation that works out the total cost in pounds.						

.

**Test administration guidance** Ensure the pupil finds the diagram on the facing page. 7.

11. Amina is shopping.

She says that she would like to buy one-quarter of a kilogram of cheese.

```
a) Write one-quarter as a decimal.
```

\_\_\_\_ kg

b) The cheese costs £1.35Amina pays with a £2 coin.How much change should Amina get?

# [braille page 9]

12. Look at the three symbols below.

< > =

Write the missing symbol from each of the two statements below so that they are correct.

.....

a) 
$$\frac{7}{10}$$
 \_\_\_\_\_ 0.07  
b)  $\frac{23}{1000}$  \_\_\_\_\_ 0.23

**[braille page 10, facing page 11]** Diagram for question 13





## [braille page 11]

13. Look at the sketch of a triangle on the opposite page.
It is not drawn to scale.
Draw the full-size triangle accurately.
Use an angle measurer (protractor) and a ruler.
Use the diagram on a separate sheet.
One line has been drawn for you.

14. a) Write 39 476 rounded to the nearest 10 000

b) Write 39 476 rounded to the nearest 1000

c) Write 39 476 rounded to the nearest 100

.....

#### Test administration guidance

- 11. Encourage the pupil to write a) before the answer to part a and b) before the answer to part b.
- 13. Teachers may mount the separate diagram on a board so that the pupil can use pins and bands.

The child will need an appropriate angle measurer and ruler.

Teachers should then transcribe the pupil's work on the spare copy of the diagram.

No tactile aids (i.e. 'blobs', bluetack, wikkisticks) should be sent with the pupil's braille script.

14. Encourage the pupil to write a) before the answer to part a, b) before the answer to part b, and c) before the answer to part c.

## [braille page 12]

15. Amina asked 60 children to choose their favourite flavour of jelly. Her results are shown in the table below.

Number of children
12
8
15
25
60

What percentage of the 60 children chose orange?

16.  $6 + 2 \times 2 - \_ = 6$ Write the missing number.

# [braille page 13, facing page 14] Diagram for question 17

regular hexagon

square





# [braille page 14]

17. Look at the two shapes on the opposite page. They are not actual size. The two shapes have the same perimeter. The length of each side of the hexagon is 8 centimetres. Calculate the area of the square. Show your method.

18. Look at the three numbers below.95 89 87

a) Write the prime number.

b) Explain how you know the other numbers are **not** prime.

.....

# Test administration guidance

- 17. Ensure the pupil finds the diagram on the facing page.
- 18. Encourage the pupil to write a) before the answer to part a and b) before the answer to part b.

# [braille page 15]

- 19.	A machine pours 250 millilitres of juice every 4 seconds.
	How many litres of juice does the machine pour every minute?
	Show your method.
	litres

20. Look at the five fractions below. 1 20 20 40 1 5 3 15 2 100 Write the fractions that are equal to 20%

#### ..... [braille page 16, facing page 17] Diagram for question 21

# [braille page 17]

Look at the diagram on the opposite page. 21.

Adam has this rectangular piece of card. It is marked with grid lines. Adam makes one straight cut along the grid lines.

The cut divides the rectangle into 2 shapes:

1 square and 1 rectangle.

Using the spare copy of the diagram, draw one line that shows where Adam could have made his cut.

Use a ruler.

.....

#### Test administration guidance

21. Separate copies of the diagram are provided on thermoform and plastic film. A tactile ruler will be needed for this question. Teachers may mount the separate diagram on a board so that the pupil can use pins or other tactile aids.

Teachers should then transcribe the pupil's work on the spare copy of the diagram.

No tactile aids (i.e. 'blobs', bluetack, wikkisticks) should be sent with the pupil's braille script.

## [braille page 18]

22. The table below shows the maximum temperature for five days.

Day	Temperature °C
Monday	8.1
Tuesday	9.3
Wednesday	11.9
Thursday	11.8
Friday	12.4
-	

a) For what fraction of the five days was the maximum temperature below 10°C?

b) What was the mean maximum temperature, to one decimal place? Show your method.

\_\_\_\_°Č

.....

#### [braille page 19]

23. Amina makes a cuboid using centimetre cubes. Her cuboid has length 6 cm width 3 cm height 4 cm Stefan makes a cuboid that is 5 cm longer 5 cm wider 5 cm taller than Amina's cuboid. What is the difference between the number of cubes in Amina's and Stefan's cuboids? Show your method. \_\_\_\_\_ cubes

.....

END OF TEST

Test administration guidance22. Encourage the pupil to write a) before the answer to part a and b) before the answer to part b.



# Diagram and film copies for question 4

Diagram and film copies for question 13

8 cm

# Diagram and film copies for question 21


Blank page

Braille transcript Print version product code: STA/19/8217/BTp

ISBN 978-1-78957-092-2

Electronic PDF version product code: STA/19/8217/BTe ISBN 978-1-78957-104-2

© Crown copyright 2019

2019 national curriculum tests

# Key stage 2

# **Mathematics**

Administering the braille version of Paper 2: reasoning

# WEDNESDAY 15 MAY 2019

**CONFIDENTIAL:** This pack must be kept secure and unopened until the start of the test on **Wednesday 15 May**.

Early opening, up to 1 hour before the test starts, is only allowed if access to the contents is needed to make adaptations to meet individual pupils' needs. Early opening of more than 1 hour is only allowed if permission has been granted by STA.

Please ensure you have read and understood the 2019 modified test administration guidance before opening this pack.

# Pack contents:

- Administration instructions for the braille version of the key stage 2 mathematics test Paper 2: reasoning (overleaf)
- I copy of the braille tactile version of the key stage 2 mathematics test Paper 2: reasoning
- I copy of the printed transcript of the braille version of the key stage 2 mathematics test Paper 2: reasoning
- 1 model pack

# For test administration

#### 2019 Key stage 2 mathematics test

The following information explains how to administer the braille version of the key stage 2 mathematics test Paper 2: reasoning. Modified test administration guidance is available at www.gov.uk/sta. 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.

#### Format

The key stage 2 mathematics test consists of 3 papers. The papers must be administered in order. Pupils can have a break between Papers 1 and 2.

The scheduled day for the administration of Papers 1 and 2 is Wednesday 15 May. The scheduled day for the administration of Paper 3 is Thursday 16 May.

Paper 2: reasoning consists of a single test booklet in braille.

There are copies of diagrams at the back of the booklet for use with **questions 4**, **13** and **21**.

There is a printed transcript of the braille booklet to help test administrators.

Pupils will have 40 minutes to complete the test, plus up to 100% additional time.

You must refer to the printed transcript rather than the standard test questions when administering this test.

#### Equipment

Each pupil will need the equipment specified below:

- a suitable way of recording their answers, such as a brailler, blue/black pen, dark pencil or word processor (i.e. the usual way they write in class)
- braille paper (if the pupil is brailling their responses)
- a suitable tactile ruler to measure centimetres
- a suitable tactile protractor or angle measurer.

Pupils may use the following, if this is normal classroom practice:

- pins and bands to help record responses on diagrams
- stylus and floppy mat to help with drawing on plastic film
- technical or electronic vision aids, including low-vision aids such as closed-circuit television or JOCR scanners.

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.

#### Assistance

- 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 reviews an answer again.
- If the pupil requests it, you may read a question to the pupil on a one-to-one basis.
- If reading to a pupil, you may 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.
- 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 examples below illustrate how to deal with some common situations:

**Q.** What does 'quadrilateral' 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.

• You must not explain any subject-specific terminology. If any other word in a question is unfamiliar, you may explain it or show them objects to help them understand.

#### **Guidance for specific questions**

There is a shape supplied for **question 4**. Make sure that this is to hand when the pupil reaches this question.

For **question 7**, part of the scale is not labelled. This is intentional. This is part of the demand of the question.

#### Before the test begins

Make sure you have the printed transcript of the braille booklet.

Have the shape needed for question 4.

Detach the copies of the diagrams from the back of the booklet so they are to hand when the pupils get to **questions 4, 13 and 21**.

Review the list of pupils with any particular individual needs and consider whether they may need rest breaks or other access arrangements.

Ensure you know how to administer any access arrangements correctly. Please refer to the 2019 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 write the correct name on their test paper.

#### What to do at the start of the test

Check that seating is appropriately spaced.

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

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

Ensure each pupil who needs it has a braille copy of mathematics Paper 2: reasoning. Ensure the following is written on the cover of the pupil's paper (or on every page of braille paper used if this is how the pupil is answering): pupil's name provided during pupil registration, your school's name and DfE number.

Tell the pupils the duration of the test.

#### How to introduce the test

It is important to brief pupils fully at the start of each test. You should use this script to introduce Paper 2: reasoning.

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

*Open your test booklet to page 1. I will read the instructions to you.* (Read the instructions from braille page 1 of the transcript of the test paper to the pupils.)

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

You have up to 80 minutes to complete this test. This includes your additional time allowance.

Follow the instructions for each question.

Work as quickly and carefully as you can.

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.

The questions are on different types of paper and diagrams are on opposite pages. Make sure you read everything carefully.

\_\_\_\_ has been used in some questions to indicate a missing number.

If you want to change your answer, put a line through the answer you don't want the marker to read or use a series of 'for' signs (full 6 dot cells) with your brailler.

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.

Do you have any questions?

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

You may now start 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, a group of pupils or for the whole cohort:

• test papers are incorrectly collated or the dots have been printed incorrectly

- an incorrect test has been administered
- a fire alarm goes off
- a pupil is unwell
- · a pupil needs to leave the room
- a pupil is caught cheating.

If you need to stop the test:

- make a note of the time
- make sure the pupils are kept under test conditions and that they are supervised
- if the pupils have to leave the room, ensure they do not talk about the test
- speak to your test co-ordinator or a senior member of staff for advice about 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 end of the test

If you need to make a transcript of a test script, complete it with the individual pupil at the end of the test under test conditions. Particular care should be taken to ensure accurate transcriptions are made and the pupil's answers are not corrected or amended. Pupils' brailled answers should not be transcribed onto the standard version of the test.

Ensure you inform your senior member of staff/test co-ordinator if you have made a transcript, or if a pupil has used a scribe, word processor or other electronic or technical device. This is so they can complete the appropriate online notification.

Make sure you have collected every test paper. Return them immediately to the senior member of staff who is responsible for collating the tests.

Do not look at, review or amend pupils' answers in any way (unless it is necessary to make a transcript). If you tamper with or make changes to pupils' answers, it will be considered maladministration and results could be annulled.

Do not keep or photocopy test scripts for any reason.

All test materials, including printed transcripts and any unused test papers, must be stored securely until Monday 3 June.

Administering the braille version of Paper 2: reasoning Print version product code: STA/19/8258/p ISBN: 978-1-78957-185-1 Electronic version product code: STA/19/8258/e ISBN: 978-1-78957-195-0 Standards & Testing Agency

© Crown copyright 2019

#### **Re-use of Crown copyright in test materials**

Subject to the exceptions listed below, the test materials on this website are Crown copyright and you may re-use them (not including logos) free of charge in any format or medium in accordance with the terms of the Open Government Licence v3.0 which can be found on the National Archives website and accessed via the following link: www.nationalarchives.gov.uk/doc/open-government-licence. When you use this information under the Open Government Licence v3.0, you should include the following attribution: 'Contains material developed by the Standards and Testing Agency for 2019 national curriculum assessments and licensed under Open Government Licence v3.0' and where possible provide a link to the licence.



Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.
## **Transcription of the Braille Version**

2019 national curriculum tests Key stage 2 Mathematics Braille Paper 3: reasoning

#### **Transcription of the Braille Version**

[braille page 1]

On your paper write:

Your first name Your last name Your date of birth Your school name

Instructions

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.

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.

The questions are on different types of paper and diagrams are on opposite pages. Make sure you read everything carefully.

\_\_\_\_\_ has been used in some questions to indicate a missing number.

.....

#### Test administration guidance

Note to test administrator

Please write the school DfE number on the pupil's braille script.

If you are acting as a scribe for a braillist, write the pupil's answers on a sheet of plain or lined paper and attach the braille diagrams showing the pupil's work.

#### [braille page 2]

 The original price of a car is £8999
 In a sale there is £1100 off the original price. What is the sale price of the car?
 £

.....

2. Look at the number below. 3 576 219

a) Which digit is in the ten thousands place?

b) Round 3 576 219 to the nearest million.

[braille page 3] 3. Dev had £10 He gave some money away. p is the amount of money, in pounds, that Dev gave away. Look at the five expressions below. 10 + p 10 + p 10 + p p - 10 10 - p  $p \times 10$ Write the expression that shows how much money Dev has left.

.....

- 4. Look at the four masses below.
  - 1.25 kg 0.99 kg 1.025 kg 0.009 kg Write the masses in order, starting with the lightest. lightest \_\_\_\_\_

\_\_\_\_\_

#### [braille page 4]

5. In this question **.:** stands for a missing digit. Look at the addition below.

.:.: .:2.: + .:2 = 200 .:.

Copy and complete the addition to make it correct.

.....

#### Test administration guidance

- 2. Encourage the pupil to write a) before the answer to part a and b) before the answer to part b.
- 5. In this question the 'visible space' symbol .: and the numeric passage indicators .: and .: have been used.

6. John buys one toy car and one pack of stickers. The toy car costs £1.49 The pack of stickers costs £1.64 He pays with a £10 note. How much change does John get? Show your method.

[braille page 5]

The list below shows the masses of eight kittens.
 305 g 375 g 310 g 255 g
 275 g 410 g 360 g 345 g

a) What is the difference in mass between the heaviest kitten and the lightest kitten?

\_\_\_\_ g

b) How many kittens have a mass between 250 g and 299 g?

c) How many kittens have a mass between 300 g and 349 g?

d) How many kittens have a mass between 350 g and 399 g?

.....

8. Ken is playing a game. He has 4289 points. Then he scores another 355 points. Ken's target is 6000 points. How many **more** points does Ken need to reach his target? Show your method.

[braille page 6, facing page 7] Diagram for question 9

Number of satellites in 2016



#### [braille page 7]

9. The pictogram on the opposite page shows the number of satellites above the Earth in 2016.

Each circle represents 1000 satellites.

How many satellites were above the Earth in 2016?

.....

#### Test administration guidance

- 7. Encourage the pupil to write a) before the answer to part a, b) before the answer to part b, c) before the answer to part c, and d) before part the answer to part d.
- 9. Ensure the pupil finds the diagram on the facing page.

## [braille page 8, facing page 9]

Diagram for question 10



#### [braille page 9]

 Look at the grid on the opposite page. Three points P Q and R are joined by two lines. Lara plots another point S on the grid at (−1, 2) She joins the points to make a quadrilateral PQRS.

a) Mark point S on the grid.

b) Lara then translates the quadrilateral 4 squares to the right. Write the new coordinates of the point P.

(\_\_\_\_\_, \_\_\_\_)

#### [braille page 10]

- 11. In this question you may use each number more than once.Look at the list of four numbers below.3 4 5 6
  - a) Write the prime numbers from the list.
  - b) Write the factors of 12 from the list.

c) Write the factors of 15 from the list.

#### Test administration guidance

10. Separate copies of the diagram are provided on thermoform and plastic film. Teachers may mount the separate diagram on a board so that the pupil can use pins or other tactile aids.

Teachers should then transcribe the pupil's work on the spare copy of the diagram.

No tactile aids (i.e. 'blobs', bluetack, wikkisticks) should be sent with the pupil's braille transcript.

11. Encourage the pupil to write a) before the answer to part a, b) before the answer to part b and c) before the answer to part c.

12.	Amina's bed is 190 cm in length and 91 cm in width. She is making a one-tenth scale model of the bed. What are the length and width of Amina's model? length = cm width = cm
[brail 13. obtus	<b>le page 11]</b> Kirsty says that when you double the size of an acute angle, you always get an e angle. Explain why Kirsty is <b>not</b> correct.
14.	How many days are there in September, October and November altogether?
15.	The International Space Station orbits the Earth at a height of 250 miles. What is the height of the International Space Station in kilometres? Use 8 kilometres equals 5 miles. km
<b>[brail</b> 16.	<b>le page 12]</b> Potatoes cost £1.50 per kg. Carrots cost £1.80 per kg.
	Jack buys $1\frac{1}{2}$ kg of potatoes and $\frac{1}{2}$ kg of carrots.
	Work out how much change he gets from £5 Show your method. £
17.	Look at the equation below. x + 2y = 20
	x and y are whole numbers less than 10 What could x and y be?
	x = y =
 18.	Look at the five fractions below.
	$\frac{1}{2}$
	2
	° <u>3</u>
	4 7
	16
	$\frac{24}{32}$
	Write the fractions that are less than $\frac{5}{8}$

Test administration guidanceThere is no specific guidance for questions 13 - 18.

#### [braille page 13]

19. Layla makes jewellery to sell at a school fair. Each bracelet has 53 beads. She makes 68 bracelets. Each necklace has 105 beads. She makes 34 necklaces. How many beads does Layla use altogether? Show your method. \_\_\_\_ beads ..... Adam is making booklets. 20. Each booklet must have 34 sheets of paper. He has 2 packets of paper. There are 500 sheets of paper in each packet. How many complete booklets can Adam make from 2 packets of paper? Show your method. \_\_\_\_ booklets .....

[braille page 14, facing page 15] Diagram for question 21



#### [braille page 15]

21. Look at the diagram on the opposite page. It is not to scale. ABDE is a rectangle on coordinate axes. The sides of the rectangle are parallel to the axes. The coordinates of A are (25, 30) The coordinates of C are (40, 22) Point C is the centre of the rectangle. Work out the coordinates of B and D. B is (\_\_\_\_, \_\_\_) D is (\_\_\_\_, \_\_\_)

Test administration guidance21. Ensure the pupil finds the diagram on the facing page.

## [braille page 16, facing page 17]

Diagram for question 22



#### [braille page 17]

22. Look at the diagram on the opposite page.

It is not actual size.

Three identical rectangles are arranged to make a larger rectangle.

The width of the larger rectangle is 7 cm.

Calculate the length of the larger rectangle.

\_\_\_\_ cm

.....

**Test administration guidance** There is no specific guidance for question 22.

#### [braille page 18, facing page 19]

Diagram for question 23



#### [braille page 19]

23. Look at the diagram on the opposite page.

It is not to scale.

The distance from point P to point R is 800 metres.

The distance from point P to point Q is 4 times the distance from point Q to point R. Olivia says that it is 600 metres from point P to point Q.

Explain why Olivia is **not** correct.

.....

## END OF TEST

#### Diagram and film copies for question 10



**Test administration guidance** There is no specific guidance for question 23.

Blank page

Blank page

## Braille transcript

Print version product code: STA/19/8218/BTpISBN 978-1-78957-093-9Electronic PDF version product code: STA/19/8218/BTeISBN 978-1-78957-105-9© Crown copyright 2019ISBN 978-1-78957-105-9

2019 national curriculum tests

# Key stage 2

# **Mathematics**

Administering the braille version of Paper 3: reasoning

# **THURSDAY 16 MAY 2019**

**CONFIDENTIAL:** This pack must be kept secure and unopened until the start of the test on **Thursday 16 May**.

Early opening, up to 1 hour before the test starts, is only allowed if access to the contents is needed to make adaptations to meet individual pupils' needs. Early opening of more than 1 hour is only allowed if permission has been granted by STA.

Please ensure you have read and understood the 2019 modified test administration guidance before opening this pack.

## Pack contents:

- Administration instructions for the braille version of the key stage 2 mathematics test Paper 3: reasoning (overleaf)
- I copy of the braille tactile version of the key stage 2 mathematics test Paper 3: reasoning
- I copy of the printed transcript of the braille version of the key stage 2 mathematics test Paper 3: reasoning

## For test administration

#### 2019 Key stage 2 mathematics test

The following information explains how to administer the braille version of the key stage 2 mathematics test Paper 3: reasoning. Modified test administration guidance is available at www.gov.uk/sta. 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.

#### Format

The key stage 2 mathematics test consists of 3 papers. The papers must be administered in order.

The scheduled day for the administration of Paper 3 is Thursday 16 May.

Paper 3: reasoning consists of a single test booklet in braille.

There are copies of the diagram at the back of the booklet for use with **question 10**.

There is a printed transcript of the braille booklet to help test administrators.

Pupils will have 40 minutes to complete the test, plus up to 100% additional time.

You must refer to the printed transcript rather than the standard test questions when administering this test.

#### Equipment

Each pupil will need the equipment specified below:

- a suitable way of recording their answers, such as a brailler, blue/black pen, dark pencil or word processor (i.e. the usual way they write in class)
- braille paper (if the pupil is brailling their responses)
- a suitable tactile ruler to measure centimetres
- a suitable tactile protractor or angle measurer.

Pupils may use the following, if this is normal classroom practice:

- pins and bands to help record responses on diagrams
- stylus and floppy mat to help with drawing on plastic film
- technical or electronic vision aids, including low-vision aids such as closed-circuit television or JOCR scanners.

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.

#### Assistance

- 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 reviews an answer again.
- If the pupil requests it, you may read a question to the pupil on a one-to-one basis.
- If reading to a pupil, you may 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.
- 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 examples below illustrate how to deal with some common situations:

**Q.** What does 'quadrilateral' 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.
- You must not explain any subject-specific terminology. If any other word in a question is unfamiliar, you may explain it or show them objects to help them understand.

#### **Guidance for specific questions**

For **question 21**, there are no grid lines on the graph. This is intentional. This is part of the demand of the question.

#### Before the test begins

Make sure you have the printed transcript of the braille booklet.

Detach copies of the diagram from the back of the booklet so they are at hand when the pupil gets to **question 10**.

Review the list of pupils with any particular individual needs and consider whether they may need rest breaks or other access arrangements.

Ensure that you know how to administer any access arrangements correctly. Please refer to the 2019 key stage 2 access arrangements guidance.

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 write the correct name on their test paper.

Check there are enough administrators to maintain adequate supervision during the test. You should consider the possibility that at least one test administrator might need to leave the room with a pupil.

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

#### What to do at the start of the test

Check that seating is appropriately spaced.

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

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

Ensure each pupil who needs it has a braille copy of mathematics Paper 3: reasoning.

Ensure the following is written on the cover of the pupil's paper (or on every page of braille paper used if this is how the pupil is answering): pupil's name provided during pupil registration, your school's name and DfE number.

Tell the pupils the duration of the test.

#### How to introduce the test

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

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

*Open your test booklet to page 1. I will read the instructions to you.* (Read the instructions from braille page 1 of the transcript of the test paper to the pupils.)

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

You have up to 80 minutes to complete this test. This includes your additional time allowance.

Follow the instructions for each question.

Work as quickly and as carefully as you can.

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

If you cannot answer 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.

The questions are on different types of paper and diagrams are on opposite pages. Make sure you read everything carefully.

\_\_\_\_ has been used in some questions to indicate a missing number.

If you want to change your answer, put a line through the response you don't want the marker to read or use a series of 'for' signs (full 6 dot cells) with your brailler.

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.

Do you have any questions?

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

You may now start 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, a group of pupils or for the whole cohort:

• test papers are incorrectly collated or the dots have been printed incorrectly

- an incorrect test has been administered
- a fire alarm goes off
- a pupil is unwell
- · a pupil needs to leave the room
- a pupil is caught cheating.

If you need to stop the test:

- make a note of the time
- make sure the pupils are kept under test conditions and that they are supervised
- if the pupils have to leave the room, ensure they do not talk about the test
- speak to your test co-ordinator or a senior member of staff for advice about 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 end of the test

If you need to make a transcript of a test script, complete it with the individual pupil at the end of the test, under test conditions. Particular care should be taken to ensure accurate transcriptions are made and the pupil's answers are not corrected or amended. Pupils' brailled answers should not be transcribed onto the standard version of the test.

Ensure you inform your senior member of staff/test co-ordinator if you have made a transcript, or if a pupil has used a scribe, word processor or other electronic or technical device. This is so they can complete the appropriate online notification.

Make sure you have collected every test paper. Return them immediately to the senior member of staff who is responsible for collating the tests.

Do not look at, review or amend pupils' answers in any way (unless it is necessary to make a transcript). If you tamper with or make changes to pupils' answers, it will be considered maladministration and results could be annulled.

Do not keep or photocopy test scripts for any reason.

All test materials, including printed transcripts and any unused test papers, must be stored securely until Monday 3 June.

Administering the braille version of Paper 3: reasoning Print version product code: STA/19/8259/p ISBN: 978-1-78957-186-8 Electronic version product code: STA/19/8259/e ISBN: 978-1-78957-196-7 Standards & Testing Agency

© Crown copyright 2019

#### Re-use of Crown copyright in test materials

Subject to the exceptions listed below, the test materials on this website are Crown copyright and you may re-use them (not including logos) free of charge in any format or medium in accordance with the terms of the Open Government Licence v3.0 which can be found on the National Archives website and accessed via the following link: www.nationalarchives.gov.uk/doc/open-government-licence. When you use this information under the Open Government Licence v3.0, you should include the following attribution: 'Contains material developed by the Standards and Testing Agency for 2019 national curriculum assessments and licensed under Open Government Licence v3.0' and where possible provide a link to the licence.



Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.

2019 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:

Paper 1	23, 25, 30, 36
Paper 2	1, 3, 4, 13, 21
Paper 3	3, 9, 10a, 10b

## 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 children have missed any answer lines or spaces within the text, their answers may be elsewhere on the page. Any unambiguous indication of the correct answer should be credited, working within the parameters of the mark scheme.
- Questions that appear as horizontal tick boxes in the standard version of the test may have been changed to vertical in the MLP version, in order to make it easier for pupils to track across the page. The correct answer will be the same as in the standard mark schemes.
- Markers should contact their supervisors if they have any problems applying the mark scheme to MLP scripts, or with specific responses. All supervisors have contact details of markers who will provide specialist advice.

#### **Content domain**

Please note that due to modifications to question 22a paper 2, the National Curriculum Reference (NCR) has changed for the MLP version of this question. The primary NCR for Q22a for MLP Paper 2 is 5S1. There is no mark scheme amendment for this question and it can be marked using the standard mark scheme.

## Amendments to mark schemes for Paper 1: arithmetic

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

For questions 23, 25, 30 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

Qu.	Requirement	Mark	Additional guidance
1	Award <b>ONE</b> mark for three correct numbers given in this order, as shown:		
	32		
	7		
	7		
3	Award <b>ONE</b> mark for the four numbers matched correctly, as shown:		1m Lines need not touch the numbers and ordinals, provided the intention is clear
	1 009 909 2 <sup>nd</sup>		<b>Do not</b> accept any number that has been
	1 023 065 3 <sup>rd</sup>		one ordinal.
	1 009 099 4 <sup>th</sup> smallest		

4	Diagram completed, as shown:	1m	Accept inaccuracies in drawing provided the intention is clear. Shape need not be shaded for the award of <b>ONE</b> mark.
13	<ul> <li>Award <b>TWO</b> marks for a completed triangle that has all three of the following points:</li> <li>an angle in the range of 30° to 40° inclusive for angle marked 35°</li> <li>an angle in the range of 85° to 95 inclusive for angle marked 90°</li> <li>the triangle has been drawn on an 8cm line (either on the given line or a line drawn), provided they have constructed both angles within the tolerance of the line 7.5cm to 8.5cm.</li> <li>If the answer is incorrect, award <b>ONE</b> mark for a completed triangle and two of the three points correct.</li> </ul>	Up to 2m	Accept drawings where any side has been extended past a vertex. When considering the point for a completed triangle, <b>do not</b> accept either: • a completed quadrilateral or another shape drawn <b>OR</b> • a curved line that is used to complete the shape <b>OR</b> • sides not meeting to form a vertex.

21	Rectangle divided, as shown:	1m	Accept inaccuracies in drawing provided the intention is clear.
	OR		

## Amendments to mark schemes for Paper 3: reasoning

Qu.	Requirement	Mark	Additional guidance
3	Award <b>ONE</b> mark for: 10 - p (written)	1m	Accept alternative unambiguous positive indication of the correct answer.
9	2500	1m	<b>Do not</b> accept $2000\frac{1}{2}$ <b>OR</b> $2\frac{1}{2}$ <b>OR</b> 2.5
10a	Point S is located correctly, as shown:	1m	Accept inaccuracies in drawing provided the intention is clear.
10b	(2,3)	1m	

# Standards & Testing Agency

2019 key stage 2 mathematics: amendments to mark schemes for MLPElectronic PDF version product code: STA/198625/eISBN: 978-1-78957-202-5

© Crown copyright 2019

#### Re-use of Crown Copyright and Crown information in test materials

Subject to the exceptions listed below, the test materials on this website are Crown copyright and you may re-use them (not including logos) free of charge in any format or medium in accordance with the terms of the Open Government Licence v3.0 which can be found on the National Archives website and accessed via the following link: www.nationalarchives.gov.uk/doc/open-government-licence. When you use this information under the Open Government Licence v3.0, you should include the following attribution: 'Contains material developed by the Standards and Testing Agency for 2018 national curriculum assessments and licensed under Open Government Licence v3.0' and where possible provide a link to the licence.

#### Exceptions- third-party copyright content in test materials

You must obtain permission from the relevant copyright owners, as listed in the '2019 key stage 2 tests copyright report', for reuse of any third-party copyright content which we have identified in the test materials, as listed below. Alternatively, you should remove the unlicensed third-party copyright content and/or replace it with appropriately licensed material.

#### Third-party content

These materials contain no third-party copyright content. If you have any queries regarding these test materials, contact the national curriculum assessments helpline on 0300 303 3013 or email assessments@education.gov.uk.

2019 national curriculum tests Key stage 2

Mathematics Amendments to the mark schemes (AMS)

Braille



#### Introduction

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

The standard version of the key stage 2 mathematics mark schemes, should be used in conjunction with the additional guidance in this document. Markers should refer to the standard mark schemes when marking the braille 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:

Paper 1	23, 25, 30, 36
Paper 2	1, 3 ,4, 10, 13, 21
Paper 3	3, 9, 10a, 10b, 11

#### General guidance to be applied throughout the braille 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°.
- Any unambiguous indication of the correct answer should be credited.
- Some braille questions are asked differently to the standard version, but the differences are sufficiently small that you should still be able to apply the standard mark scheme, for example, pupils are asked to write rather than circle the answer.

#### **Content domain**

Please note that due to modifications to question 22a paper 2, the National Curriculum Reference has changed for the braille version of this question. The primary NCR for Q22a for braille Paper 2 is 5S1. There is no mark scheme amendment for this question and it can be marked using the standard mark scheme.

## Amendments to mark schemes for Paper 1: arithmetic

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

For questions 23, 25, 30 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

Qu.	Requirement	Mark	Additional guidance
1	Award <b>ONE</b> mark for three correct numbers given in this order, as shown: 32 7 7	1m	
3	Award <b>ONE</b> mark for the four letters written in the correct order, as shown: S (written) Q (written) P (written) R (written)	1m	Accept alternative unambiguous positive indication of the correct answer.
4	Diagram completed, as shown:	1m	Accept inaccuracies in drawing provided the intention is clear. Shape need not be shaded for the award of <b>ONE</b> mark.
10	Q (written)	1m	Accept alternative unambiguous positive indication of the correct answer.
Qu.	Requirement	Mark	Additional guidance
-----	---	-------------	---
13	Award <b>TWO</b> marks for a completed triangle that has <b>all</b> three of the following points:	Up to 2m	Accept drawings where any side has been extended past a vertex.
	<ul> <li>an angle in the range of 30° to 40° inclusive for angle marked 35°</li> <li>an angle in the range of 85° to 95 inclusive for angle marked 90°</li> </ul>		When considering the point for a completed triangle, <b>do not</b> accept either:
	<ul> <li>the triangle has been drawn on an 8cm line (either on the given line or a line drawn), provided they</li> </ul>		<ul> <li>a completed quadrilateral or another shape drawn</li> </ul>
	have constructed both angles within the tolerance of the line		OR
	7.5cm to 8.5cm.		<ul> <li>a curved line that is used to complete the shape</li> </ul>
	If the answer is incorrect, award <b>ONE</b> mark for a completed triangle and two of the three points correct.		OR
			<ul> <li>sides not meeting to form a vertex.</li> </ul>
21	Rectangle divided, as shown:	1m	Accept inaccuracies in drawing provided the intention is clear.
	OR		

## Amendments to mark schemes for Paper 3: reasoning

Qu.	Requirement	Mark	Additional guidance
3	Award <b>ONE</b> mark for: 10 - p (written)	1m	Accept alternative unambiguous positive indication of the correct answer.
9	2500	1m	<b>Do not</b> accept $2000\frac{1}{2}$ <b>OR</b> $2\frac{1}{2}$ <b>OR</b> 2.5
10a	Point S is located correctly, as shown:	1m	Accept inaccuracies in drawing provided the intention is clear.
10b	(2,3)	1m	

11	Award <b>TWO</b> marks for all four given numbers placed correctly, as	Up to 2m	Accept the numbers in any order.
	a) 3 5		Ignore any additional numbers not
	b) $3 4 6$		given in the question.
	c) 3, 5		
	-,-,-		
	If the answer is incorrect, award <b>ONE</b> mark for three of the given numbers all placed correctly, e.g.		
	a) 3, 5		
	b) 3, 4		
	c) 3, 5		
	OR		
	a) 3, 5, 6		
	b) 3, 4, 6		
	c) 3, 5		
	OR		
	a) 3		
	b) 3, 4, 6		
	c) 3, 5		



2019 key stage 2 mathematics: amendments to mark schemes for braille Electronic PDF version product code: STA/198625/e ISBN: 978-1-78957-202-5

© Crown copyright 2019

#### Re-use of Crown Copyright and Crown information in test materials

Subject to the exceptions listed below, the test materials on this website are Crown copyright and you may re-use them (not including logos) free of charge in any format or medium in accordance with the terms of the Open Government Licence v3.0 which can be found on the National Archives website and accessed via the following link: www.nationalarchives.gov.uk/doc/open-government-licence. When you use this information under the Open Government Licence v3.0, you should include the following attribution: 'Contains material developed by the Standards and Testing Agency for 2019 national curriculum assessments and licensed under Open Government Licence v3.0' and where possible provide a link to the licence.

#### Exceptions- third-party copyright content in test materials

You must obtain permission from the relevant copyright owners, as listed in the '2019 key stage 2 tests copyright report', for re-use of any third-party copyright content which we have identified in the test materials, as listed below. Alternatively, you should remove the unlicensed third-party copyright content and/or replace it with appropriately licensed material.

#### Third-party content

These materials contain no third-party copyright content. If you have any queries regarding these test materials, contact the national curriculum assessments helpline on 0300 303 3013 or email assessments@education.gov.uk.



# 2019 copyright ownership: key stage 2 national curriculum tests

With the exception of the elements listed below, the 2019 key stage 2 test materials are Crown copyright and you may re-use them (not including logos) free of charge in any format or medium in accordance with the terms of the Open Government Licence v3.0 which can be found on the National Archives website and accessed via the following link: <u>www.nationalarchives.gov.uk/doc/open-government-licence</u>.

When you use this information under the Open Government Licence v3.0, you should include the following attribution: 'Contains material developed by the Standards and Testing Agency for 2019 national curriculum assessments and licensed under Open Government Licence v3.0' and where possible provide a link to the licence.

Schools and other educational establishments, as defined in the Copyright Designs and Patents Act 1988 (CDPA), may re-use the test materials in their entirety for educational purposes. However, if not expressly permitted under the CDPA, any other third party seeking to re-use the test materials should either replace the sections or illustrations listed below or seek permission from the copyright owners, as the Department for Education is not permitted to license the re-use of the listed material.

Text title	Page(s)	Description	Reference / Copyright owner
Cover	1, 2, 12	Green summer	Image source:
image		background	https://www.shutterstock.com/image-
			photo/summer-background-
			<u>579355120</u>
			Copyright: LilKar/Shutterstock.com
The Park	4-5	Reading text:	Taken from:
		The Park	The Accidental Prime Minister
			Author: Tom McLaughlin
			Copyright: Oxford University Press,
			2015

### Key stage 2 English reading test material

Fact	6-7	Reading text:	Adapted from:
Sheet:		Fact Sheet: About	<i>Bumblebee fact sheet</i> , Bumblebee
About		Bumblebees	Conservation Trust
Bumbleb			Source:
ees			http://bumblebeeconservation.org/ima
			ges/uploads/Resources/BBCT_Bumbl
			ebee Factsheet.pdf
			Copyright: The Bumblebee
			Conservation Trust
	1, 6	Image:	Image source:
		Bee on a flower	https://www.pexels.com/photo/beebum
			blebee-insect-macro-3780/
			Copyright: www.pexels.com
	6	Image:	Image source:
		Tomato plant	https://www.freeimages.com/photo/in-
			the-garden-1328551
			Copyright: Freeimages 2019
	7	Image:	Image source:
		Geranium	https://www.ingimage.com/imagedetail
			s/58221415_extInt0/ISS_0915_02272-
			Isignstock-Contributors-Close-up-of-
			pinkgeranium-with-drops-of-water.html
			Copyright: Image licensed by Ingram
			Image
	7	Image:	Image source:
		Lavender	https://www.ingimage.com/imagedetail
			s/66515883_extInt0/ISS_3483_03386-
			Isignstock-Contributors-Textured-
			backgroundof-lavender-flowers.html
			Copyright: Image licensed by Ingram
			Image
	7	Image:	Image source:
		Wild rose	https://www.ingimage.com/imagedetail
			s/53950406 extInt0/ISS 4644 03391-
			Isignstock-Contributors-white-wild-
			rose-Rose.html
			Copyright: Image licensed by Ingram
			Image

	7	Image:	Image source:
		A bee drinking	https://www.shutterstock.com/image-
		from a spoon	photo/help-bumblebee-
			1137563681?src=uOalwAHaoKSmtVu
			<u>I_BwXOw-1-6</u>
			Copyright: Sarah Biesinger
			/Shutterstock.com
Music	8-9	Reading text:	Taken from:
Box		Music Box	The Mark of the Dragonfly
			Author: Jaleigh Johnson
			Copyright: Jaleigh Johnson
			/Delacorte Press, 2014

## Key stage 2 mathematics and English grammar, punctuation and spelling tests

There is no third-party material in the key stage 2 mathematics and English grammar, punctuation and spelling tests.

© Crown copyright 2019