

# **Transcript of the Braille Version**

2018 national curriculum tests

Key stage 2

Mathematics

Braille

Paper 1: arithmetic

**[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, symbol or word.

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.]**

.....

**[braille page 3]**

1.  $39 + 673 = \underline{\hspace{2cm}}$

.....

2.  $\frac{9}{11} - \frac{4}{11} = \underline{\hspace{2cm}}$

.....

3.  $2 \times 45 = \underline{\hspace{2cm}}$

.....

4.  $838 \div 1 = \underline{\hspace{2cm}}$

.....

5.  $99 \div 11 = \underline{\hspace{2cm}}$

.....

6.  $5 \times 4 \times 10 = \underline{\hspace{2cm}}$

.....

7.  $7064 - 502 = \underline{\hspace{2cm}}$

.....

8.  $6^2 + 10 = \underline{\hspace{2cm}}$

.....

9.  $56.38 + 24.7 = \underline{\hspace{2cm}}$

.....

**[braille page 4]**

10. \_\_\_\_\_ - 10 = 298

.....

11.  $270 \div 3 =$  \_\_\_\_\_

.....

12.  $5400 \div 9 =$  \_\_\_\_\_

.....

13.  $60 \div 15 =$  \_\_\_\_\_

.....

14. \_\_\_\_\_ =  $5776 - 855$

.....

15.  $3\ 050\ 020 = 3\ 000\ 000 +$  \_\_\_\_\_  $+ 20$

.....

16.  $10 - 5.4 =$  \_\_\_\_\_

.....

17.  $\frac{5}{7} + \frac{3}{21} =$  \_\_\_\_\_

.....

18.  $0.1 \div 100 =$  \_\_\_\_\_

.....

**[braille page 5]**

19.  $\frac{3}{4}$  of 1000 = \_\_\_\_\_

.....

20. Work out  
 $785 \times 23$   
Show your method.

.....

21. 20% of 1200 = \_\_\_\_\_

.....

22. Work out  
 $645 \div 43$   
Show your method.

.....

23.  $0.5 \times 28 =$  \_\_\_\_\_

.....

24.  $\frac{1}{2} + \frac{1}{5} =$  \_\_\_\_\_

.....

25.  $1\frac{3}{4} + \frac{3}{4} =$  \_\_\_\_\_

.....

**[braille page 6]**

26.  $6 - 5.738 = \underline{\hspace{2cm}}$

.....

27.  $3.9 \times 30 = \underline{\hspace{2cm}}$

.....

28.  $1\frac{1}{15} - \frac{2}{5} = \underline{\hspace{2cm}}$

.....

29. Work out  
 $5413 \times 86$   
Show your method.

.....

30. 99% of 200 =  $\underline{\hspace{2cm}}$

.....

31.  $\frac{1}{4} \div 2 = \underline{\hspace{2cm}}$

.....

32.  $9^2 - 36 \div 9 = \underline{\hspace{2cm}}$

.....

33.  $1\frac{1}{2} \times 40 = \underline{\hspace{2cm}}$

.....

**[braille page 7]**

34. 28% of 650 =  $\underline{\hspace{2cm}}$

.....

35.  $4\frac{2}{3} - 1\frac{6}{7} = \underline{\hspace{2cm}}$

.....

36. Work out  
 $8827 \div 97$   
Show your method.

.....  
End of test

**Braille transcript**

Print version product code: STA/18/7973/BTp ISBN 978-1-78644-692-3

Electronic PDF version product code: STA/18/7973/BTp ISBN 978-1-78644-802-6

© Crown copyright 2018

2018 national curriculum tests

# Key stage 2

## Mathematics

Administering the braille version of  
Paper 1: arithmetic

**WEDNESDAY 16 MAY 2018**

**CONFIDENTIAL:** This pack must be kept secure and unopened until the start of the test on **Wednesday 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 2018 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
- 1 copy of the printed transcript of the braille version of the key stage 2 mathematics test Paper 1: arithmetic

**For test administration**

---

## 2018 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](http://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 16 May.

The scheduled day for the administration of Paper 3 is Thursday 17 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 braille, blue/black pen, dark pencil or word processor (i.e. the usual way they write in class)
- braille paper (if the pupil is brailleing 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 2018 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.

Check there are enough test 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 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 braille.*

*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 Friday 25 May.

Administering the braille version of Paper 1: arithmetic  
Print version product code: STA/18/8081/p ISBN: 978-1-78644-776-0  
Electronic version product code: STA/18/8081/e ISBN: 978-1-78644-812-5

© Crown copyright 2018

**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](http://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.

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



Standards  
& Testing  
Agency

**OGL**

# **Transcript of the Braille Version**

2018 national curriculum tests

Key stage 2

Mathematics

Braille

Paper 2: reasoning

**[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, symbol or word.

.....

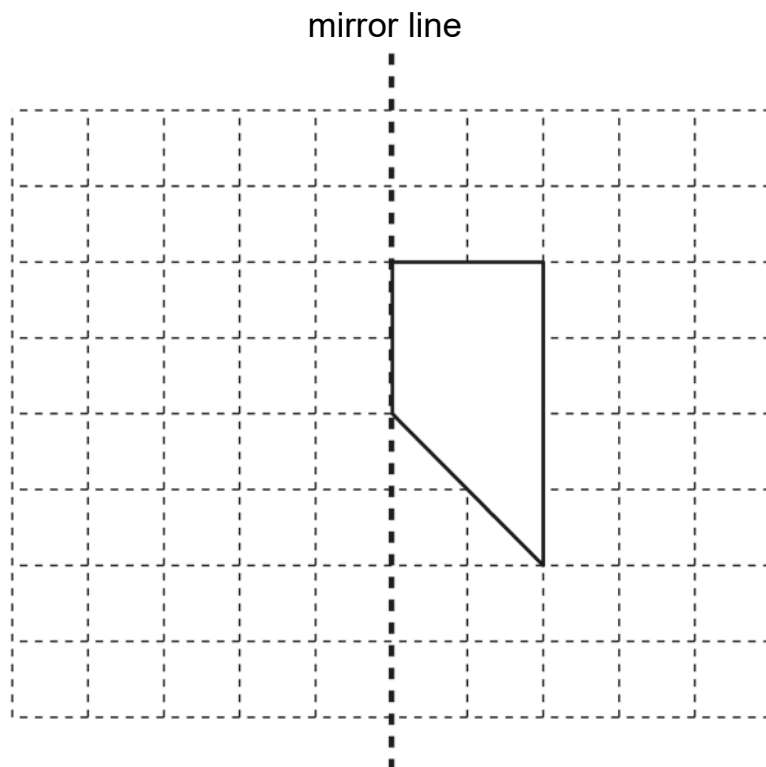
## **Test administration guidance**

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

If you are acting as a scribe for a brailist, 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, facing page 3]**

Diagram for question 2



**[braille page 3]**

1. Stefan completes the calculation below.

$$95 - 67 = 28$$

Write an addition calculation he could use to check his answer.

\_\_\_\_\_ + \_\_\_\_\_ = \_\_\_\_\_

.....

2. You have a shape for this question.  
Look at the diagram on the opposite page.

It shows a shape on a grid.

Complete the design so that it is symmetrical about the mirror line.

Use the separate copy of the diagram.

Use a ruler.

.....

## Test administration guidance

2. 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 4, facing page 5]**

Diagram for question 3



**[braille page 5]**

3. Look at the line on the opposite page.  
Mark the point that is 6.5 centimetres from A  
Use the separate copy of the diagram.
- .....

4. a)  $\frac{3}{4} = \frac{9}{\quad}$

Write the missing number.

b)  $\frac{3}{4} = \frac{\quad}{24}$

Write the missing number.

.....

**[braille page 6]**

5. The table below shows the temperatures in four cities at midnight and at midday.

City	At midnight	At midday
Paris .....	-4°C .....	-2°C
Oslo .....	-13°C .....	-7°C
Rome .....	3°C .....	10°C
Warsaw ...	-6°C .....	2°C

.....

- a) At midnight, how many degrees colder was Paris than Rome?  
\_\_\_\_\_ degrees

- b) Which city was 6 degrees colder at midnight than at midday?
- .....

### **Test administration guidance**

3. 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.

4. Encourage the pupil to write a) before the answer to part a and b) before the answer to part b.
5. Encourage the pupil to write a) before the answer to part a and b) before the answer to part b.

**[braille page 7]**

6. Look at the sequence of four numbers below.

303 604

302 604

301 604

300 604

The numbers in this sequence decrease by the same amount each time.

What is the next number in the sequence?

.....

7. Look at the five numbers below.

0.25

0.75

$\frac{25}{100}$

100

0.5

$\frac{2}{5}$

5

Write the two numbers that are equivalent to  $\frac{1}{4}$

.....

## **Test administration guidance**

There is no specific guidance for questions 6 and 7.

**[braille page 8]**

8. Ken buys 3 large boxes and 2 small boxes of chocolates.

Each large box has 48 chocolates.

Each small box has 24 chocolates.

How many chocolates did Ken buy altogether?

Show your method.

\_\_\_\_\_ chocolates

.....

9. The list below shows the years in which the Cricket World Cup was held since 1992:

1992

1996

1999

2003

2007

2011

2015

Adam says that the Cricket World Cup has been held every four years since 1992

Adam is not correct.

Explain how you know.

.....

## **Test administration guidance**

There is no specific guidance for questions 8 and 9.

**[braille page 9]**

10. Look at the three symbols below.

$>$   $=$   $<$

Write the correct symbol that should be put in the space to make each of the four statements below correct.

a)  $11 \times 12$  \_\_\_\_\_  $15 \times 10$

b)  $90 \div 30$  \_\_\_\_\_  $60 \div 20$

c)  $120 \div 4$  \_\_\_\_\_  $160 \div 8$

d)  $30 \times 8$  \_\_\_\_\_  $100 \times 10$

.....

11. You have a model of a 3-D shape for this question.

a) How many faces does it have?

b) How many vertices does it have?

c) How many edges does it have?

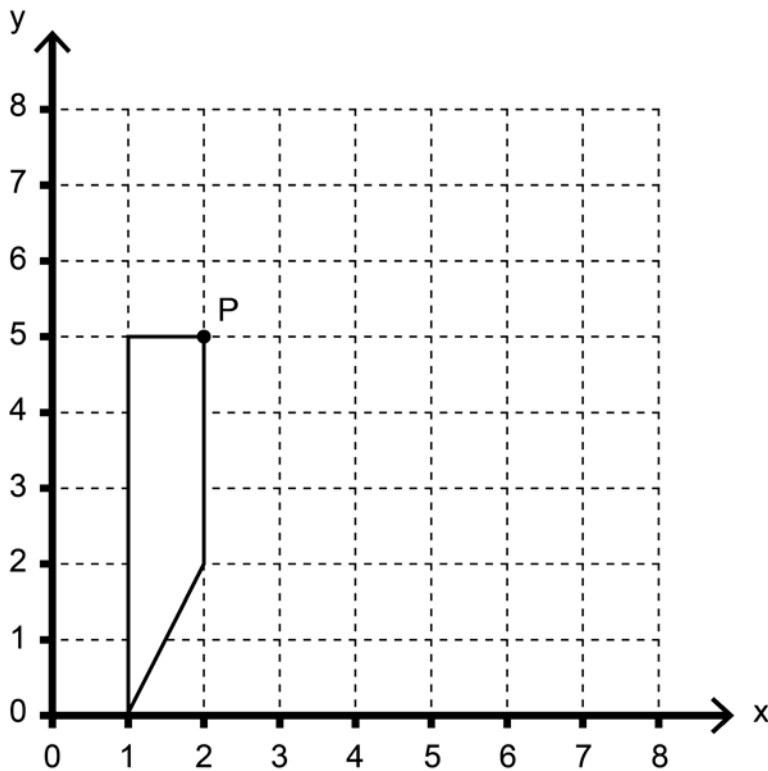
.....

### **Test administration guidance**

10. 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 the answer to part d.
11. Provide the pupil with the solid shape for the question.

**[braille page 10, facing page 11]**

Diagram for question 12



**[braille page 11]**

12. Look at the diagram on the opposite page.  
A shape is drawn on a grid.  
P is the point (2, 5)  
The shape is translated so that point P moves to (6, 7)  
Draw the shape in its new position.  
Use the separate copy of the diagram.  
Use a ruler.
- .....

13. Look at the list of five improper fractions below.

- $\frac{67}{8}$
- $\frac{48}{8}$
- $\frac{62}{8}$
- $\frac{55}{8}$
- $\frac{76}{8}$

Write the fraction from the list that is equivalent to  $6\frac{7}{8}$

.....

## **Test administration guidance**

12. Teachers may mount the separate diagram on a board so that the pupil can use pins and bands 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 12]**

14. Look at the three fractions below.

$$\frac{6}{5} \quad \frac{3}{5} \quad \frac{3}{4}$$

Write these fractions in order, starting with the smallest.

smallest \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

.....

15. A box contains trays of melons.

There are 15 melons in a tray.

There are 3 trays in a box.

A supermarket sells 40 boxes of melons.

How many melons does the supermarket sell?

Show your method.

\_\_\_\_\_ melons

.....

**[braille page 13]**

16. Adam wants to use a mental method to calculate

$$182 - 97$$

He starts from 182

Four methods that Adam could use are shown below.

They are labelled P Q R and S

P add 3 then subtract 90

Q subtract 100 then add 3

R subtract 7 then subtract 90

S subtract 3 then subtract 100

Write the letters of the methods that are correct.

.....

17. There are 28 pupils in a class.

The teacher has 8 litres of orange juice.

She pours 225 millilitres of orange juice for every pupil.

How much orange juice is left over?

Show your method.

.....

## **Test administration guidance**

There is no specific guidance for questions 14 – 17.

**[braille page 14]**

18. Last year, Jacob went to four concerts.  
Three of his tickets cost £5 each.  
The other ticket cost £7  
What was the mean cost of the tickets?  
Show your method.  
£ \_\_\_\_\_
- 

19. Layla wants to estimate the answer to the calculation below.

$$3\frac{9}{10} - 2\frac{1}{8} + 1\frac{4}{5}$$

Look at the four calculations below.

They are labelled P Q R and S

P  $3 - 2 + 2$

Q  $4 - 2 + 1$

R  $4 - 2 + 2$

S  $3 - 2 + 1$

Write the letter of the calculation that is the best estimate.

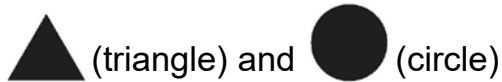
---

**[braille page 15]**

20. The length of an alligator can be estimated by  
measuring the distance from its eyes to its nose  
then multiplying that distance by 12  
The distance from eyes to nose for one alligator is 17.5 cm  
The distance from eyes to nose for another alligator is 15 cm  
What is the difference in the estimated lengths of these two alligators?  
Show your method.  
\_\_\_\_\_ cm
- 

**[braille page 16]**

21. In this question



stand for two different numbers.

$$2 \triangle + 3 \bigcirc = 147$$

$$\triangle + 3 \bigcirc = 111$$

Calculate the value of each shape.

triangle = \_\_\_\_\_

circle = \_\_\_\_\_

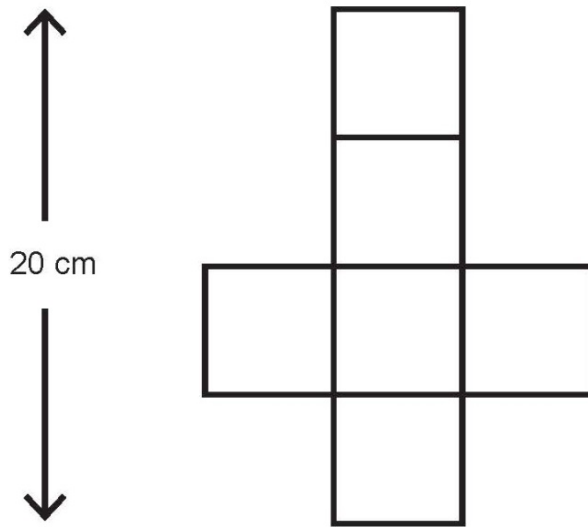
---

## **Test administration guidance**

There is no specific guidance for questions 18 – 21.

**[braille page 17, facing page 18]**

Diagram for question 22



**[braille page 18]**

22. Look at the diagram on the opposite page.

It is not actual size.

It shows the net of a cube.

The net is 20 cm long.

What is the volume of the cube?

\_\_\_\_\_ cm<sup>3</sup>

23. The length of a day on Earth is

24 hours.

The length of a day on Mercury is

$58\frac{2}{3}$  times the length of a day on Earth.

What is the length of a day on Mercury, in hours?

Show your method.

\_\_\_\_\_ hours

.....  
End of test

## **Test administration guidance**

22. Ensure the pupil finds the diagram on the facing page.

Diagram and film copies for question 2

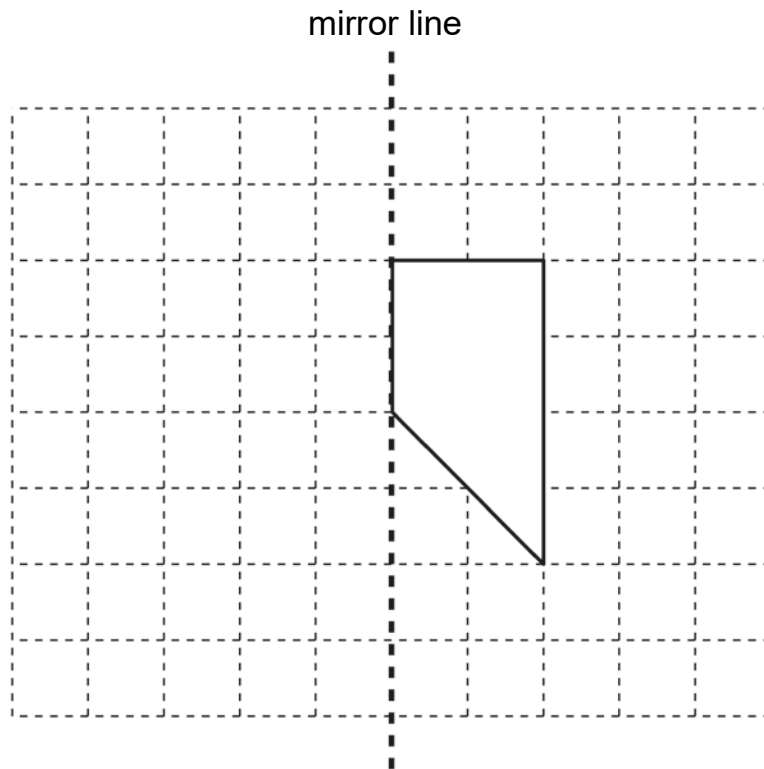
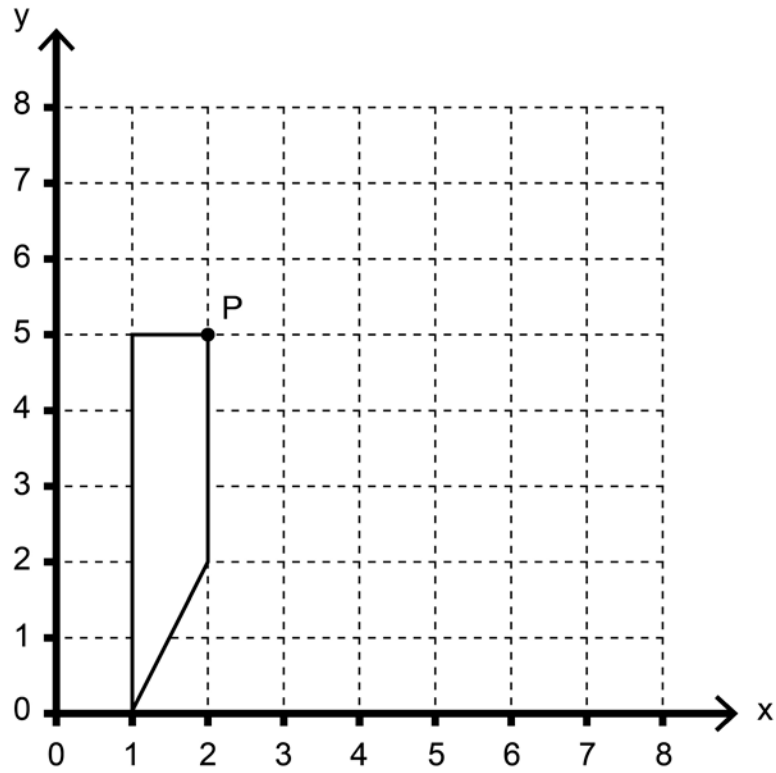


Diagram and film copies for question 3



Diagram and film copies for question 12



**Braille transcript**

Print version product code: STA/18/7974/BTp ISBN 978-1-78644-693-0

Electronic PDF version product code: STA/18/7974/BTp ISBN 978-1-78644-803-3

© Crown copyright 2018

2018 national curriculum tests

# Key stage 2

## Mathematics

Administering the braille version of  
Paper 2: reasoning

**WEDNESDAY 16 MAY 2018**

**CONFIDENTIAL:** This pack must be kept secure and unopened until the start of the test on **Wednesday 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 2018 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)
- 1 copy of the braille tactile version of the key stage 2 mathematics test  
Paper 2: reasoning
- 1 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**

## 2018 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](http://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 16 May.

The scheduled day for the administration of Paper 3 is Thursday 17 May.

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

There are copies of 2 diagrams at the back of the booklet for use with questions 2, 3 and 12.

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 braille, blue/black pen, dark pencil or word processor (i.e. the usual way they write in class)
- braille paper (if the pupil is brailleing 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

**Q2.** There is a shape for this question.

**Q11.** There is a model that should be provided to pupils for this question.

---

### Before the test begins

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

Have the shape needed for question 2 and the model needed for question 11 to hand.

Detach the copies of the diagrams from the back of the booklet so they are to hand when the pupils get to questions 2, 3 and 12.

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 2018 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.

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 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 braille.*

*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 Friday 25 May.

Administering the braille version of Paper 2: reasoning  
Print version product code: STA/18/8082/p ISBN: 978-1-78644-777-7  
Electronic version product code: STA/18/8082/e ISBN: 978-1-78644-813-2

© Crown copyright 2018

**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](http://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.

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



Standards  
& Testing  
Agency

**OGL**

# **Transcript of the Braille Version**

2018 national curriculum tests

Key stage 2

Mathematics

Braille

Paper 3: reasoning

**[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, symbol or word.

.....

## **Test administration guidance**

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

If you are acting as a scribe for a brailist, 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. Look at the sequence below.

\_\_\_\_\_ 42 49 \_\_\_\_\_ 63 \_\_\_\_\_

The numbers in this sequence increase by the same amount each time.  
Write the missing numbers.

.....

2. Adam chooses the colours for a new team shirt.

The shirt has two colours.

There are four colours to choose from: yellow, blue, white and red.

There are six different combinations.

The shirt could be

yellow and blue

yellow and white

yellow and red

blue and white

Write the two missing combinations.

\_\_\_\_\_ and \_\_\_\_\_

\_\_\_\_\_ and \_\_\_\_\_

.....

**[braille page 3]**

3. Look at the four digits below.

2 3 4 7

Layla uses each digit once to make a four-digit number.

She places

4 in the tens column

2 so that it has a higher value than any of the other digits.

She places the remaining two digits so that 7 has the higher value.

Write the four digits to show Layla's number.

.....

4. In this question \_ stands for a missing digit.

$532\_ + 748 = \_069$

Write the two missing digits to make the addition correct.

.....

5. Look at the five numbers below.

2 3 6 9 12

Write the numbers that are common factors of both 12 and 18

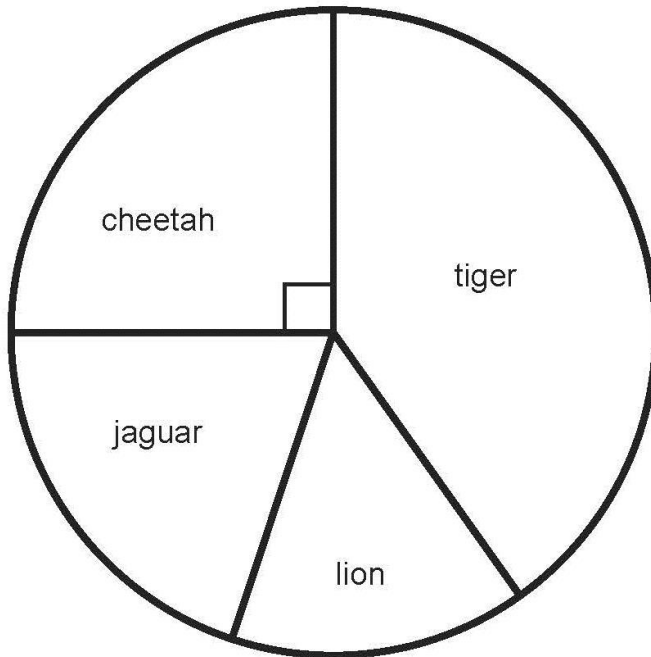
.....

## Test administration guidance

4. You may explain to the pupil that in this question \_ stands for a missing digit.  
So 45\_9 would be brailled #45\_9  
If the missing digit is at the front of a number, e.g. \_459, this would be brailled as #\_459

**[braille page 4, facing page 5]**

Diagram for question 6



**[braille page 5]**

6. Look at the chart on the opposite page.  
It shows the number of different types of big cat in a zoo.  
There are 20 big cats in the zoo altogether.  
Look at the four statements about the chart, below.  
They are labelled P Q R and S  
P There are more cheetahs than jaguars.  
Q The total number of lions and tigers is 10  
R One-quarter of the big cats are cheetahs.  
S There are more than 5 jaguars.  
Write the letters of the statements that are true.
- .....

7. A farmer is packing eggs.  
Each box holds six eggs.  
The farmer has 980 eggs to pack.
- a) How many boxes can the farmer fill using 980 eggs?  
\_\_\_\_ full boxes
- b) How many eggs will be left over?  
\_\_\_\_ left over
- .....

### **Test administration guidance**

6. Ensure the pupil finds the diagram on the facing page.
7. Encourage the pupil to braille a) before the answer to part a and b) before the answer to part b.

**[braille page 6]**

8. Jack has £400  
He spends 35% of his money on a new bike.  
How much does Jack spend on his new bike?  
£\_\_\_\_\_

.....

9. The Angel of the North is a large statue in England.  
It is 20 metres tall and 54 metres wide.  
Ally makes a scale model of the Angel of the North.  
Her model is 40 centimetres tall.  
How wide is her model?  
\_\_\_\_\_ cm

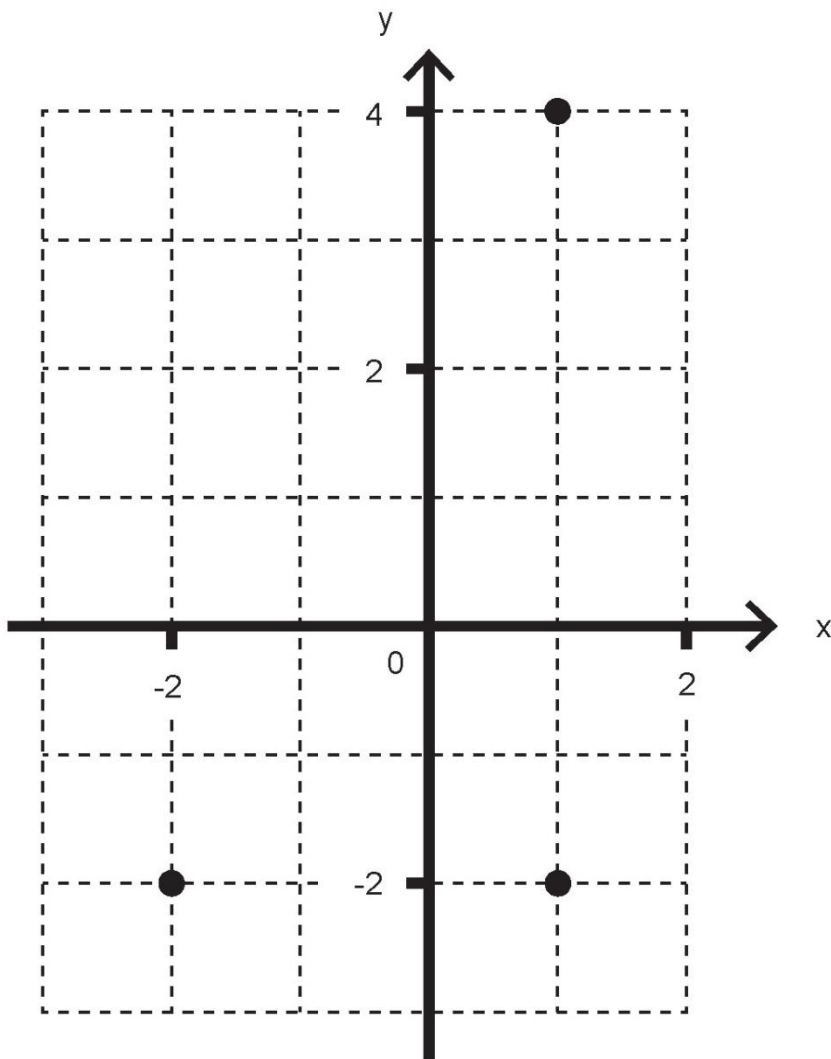
.....

## **Test administration guidance**

There is no specific guidance for questions 8 and 9.

**[braille page 7, facing page 8]**

Diagram for question 10



**[braille page 8]**

10. Look at the diagram on the opposite page.  
Layla draws a rectangle on this coordinate grid.  
Three of the vertices are marked.  
What are the coordinates of the missing vertex?  
You have a separate copy of the diagram.  
(\_\_\_\_, \_\_\_\_)

.....

11. Stefan has 600 millilitres of water in a bottle.  
He pours 130 ml into one jug.  
He pours 155 ml into another jug.  
How many millilitres of water are left in Stefan's bottle?  
Show your method.  
\_\_\_\_ ml

.....

## **Test administration guidance**

10. Teachers may mount the separate diagram on a board so that the pupil can use pins and bands.

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 9]**

12. The table below shows the areas of the United Kingdom and Jamaica.

Country	Area (square kilometres)
United Kingdom ....	240 000
Jamaica .....	10 000

.....  
The area of the United Kingdom is larger than the area of Jamaica.  
How many times larger is the United Kingdom?  
\_\_\_\_\_ times larger

.....  
13. A box contains 2.6 kg of washing powder.  
Jack uses 65 grams of powder for each wash.  
He uses all the powder.  
How many washes did Jack do?  
Show your method.  
\_\_\_\_\_ washes

**[braille page 10]**

.....  
14. Two of the angles in a triangle are  $70^\circ$  and  $40^\circ$   
Jack says that the triangle is equilateral.  
Explain why Jack is not correct.

.....  
15. A shop prints designs on T-shirts.  
They use the formula below to work out the price for printing a design.

$$\text{price} = 60\text{p} \times \text{number of colours} + \text{£}1.25$$

a) What is the price for printing a design that has 3 colours in it?  
£\_\_\_\_\_

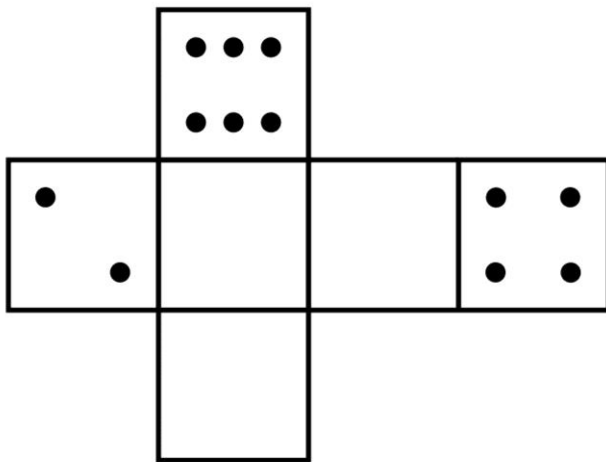
b) Amina has £5 to spend on printing a design.  
What is the greatest number of colours she can have in the design?  
Show your method.  
\_\_\_\_\_ colours

## **Test administration guidance**

15. Encourage the pupil to braille a) before the answer to part a and b) before the answer to part b.

**[braille page 11, facing page 12]**

Diagram for question 17



**[braille page 12]**

16. A book has 276 pages.

Amina has read  $\frac{1}{3}$  of the book.

How many pages are left for Amina to read?

Show your method.

\_\_\_\_\_ pages

.....

17. Look at the net of a dice on the opposite page.

On a dice, the sum of the dots on opposite faces is always 7

Draw dots on the three empty faces of the net so that it could fold up to make a dice.

Use the separate copy of the diagram.

.....

18. A vegetable garden is planted with potatoes, cabbages and carrots.

$\frac{2}{3}$  of the area is planted with potatoes.

$\frac{1}{4}$  of the area is planted with cabbages.

The remaining area is planted with carrots.

What fraction of the garden is planted with carrots?

Show your method.

.....

## **Test administration guidance**

17. Teachers may mount the separate copy of the 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.

**[braille page 13]**

19. Look at the multiplication below.

$$33630 = 354 \times 95$$

Use this multiplication to complete the three calculations below.

a)  $354 \times 9.5 = \underline{\hspace{2cm}}$

b)  $3540 \times 95 = \underline{\hspace{2cm}}$

c)  $3363 \div 95 = \underline{\hspace{2cm}}$

.....

20. In March, Ken collects 2 or 3 or 4 eggs each day from his hens.

In the first 20 days, Ken collects 57 eggs altogether.

There are 31 days in March.

What is the greatest number of eggs Ken can collect in March?

Show your method.

       eggs

.....

**[braille page 14]**

21. Jack finished a sponsored run in  
53 minutes 25 seconds.

a) Ally finished the run

3 minutes 50 seconds after Jack.

How long did Ally take?

       min        sec

b) Layla finished the run

8 minutes 45 seconds before Jack.

How long did Layla take?

       min        sec

.....  
End of test

### **Test administration guidance**

19. Encourage the pupil to braille a) before the answer to part a, b) before the answer to part b and c) before the answer to part c.
21. Encourage the pupil to braille a) before the answer to part a) and b) before the answer to part b.

Diagram for question 10

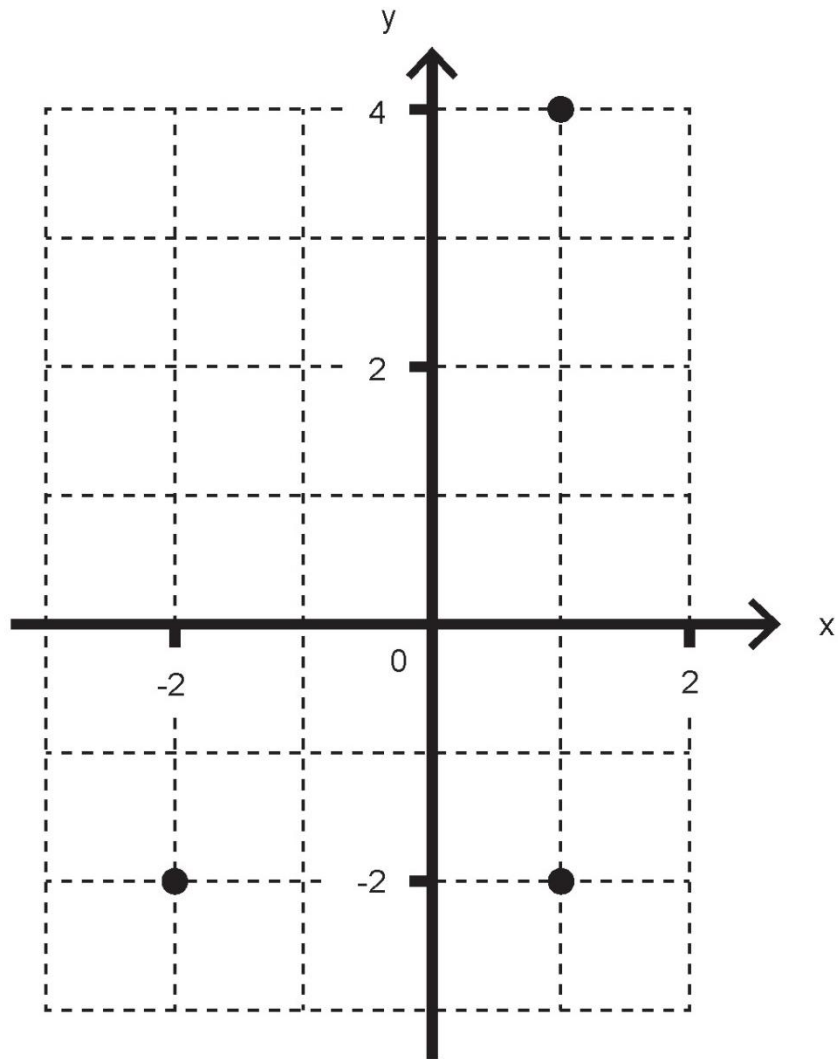
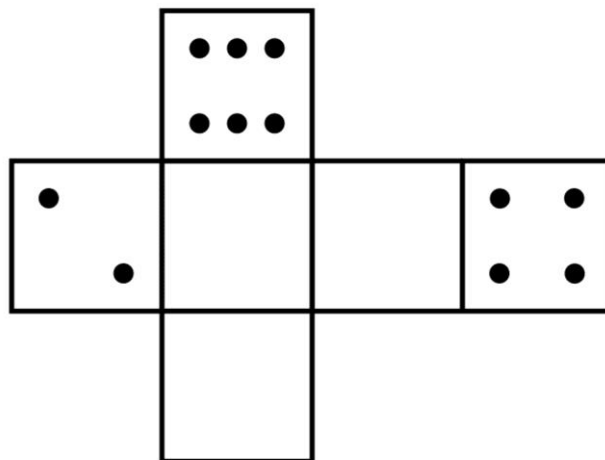


Diagram for question 17



Blank page

**Braille transcript**

Print version product code: STA/18/7975/BTp ISBN 978-1-78644-694-7

Electronic PDF version product code: STA/18/7975/BTp ISBN 978-1-78644-804-0

© Crown copyright 2018

2018 national curriculum tests

# Key stage 2

## Mathematics

Administering the braille version of  
Paper 3: reasoning

**THURSDAY 17 MAY 2018**

**CONFIDENTIAL:** This pack must be kept secure and unopened until the start of the test on **Thursday 17 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 2018 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)
- 1 copy of the braille tactile version of the key stage 2 mathematics test Paper 3: reasoning
- 1 copy of the printed transcript of the braille version of the key stage 2 mathematics test Paper 3: reasoning

**For test administration**

## 2018 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](http://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 17 May.

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

There are copies of diagrams at the back of the booklet for use with questions 10 and 17.

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 braille, blue/black pen, dark pencil or word processor (i.e. the usual way they write in class)
- braille paper (if the pupil is brailleing 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

No additional guidance is needed to administer the braille version of Paper 3: reasoning.

---

### Before the test begins

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

Detach the copies of the diagram from the back of the booklet so they are to hand when the pupils get to questions 10 and 17.

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 2018 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 braille.*

*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 Friday 25 May.

Administering the braille version of Paper 3: reasoning  
Print version product code: STA/18/8083/p ISBN: 978-1-78644-778-4  
Electronic version product code: STA/18/8083/e ISBN: 978-1-78644-814-9

© Crown copyright 2018

**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](http://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.

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



Standards  
& Testing  
Agency

**OGL**

2018 national curriculum tests  
Key stage 2

**Mathematics**  
**Amendments to the mark schemes (AMS)**

**Modified large print (MLP)**



Standards  
& Testing  
Agency

## 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	20, 22, 29 and 36
Paper 2	1, 2, 3, 11, 12 and 21
Paper 3	4, 5, 10, 11 and 17

## 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.

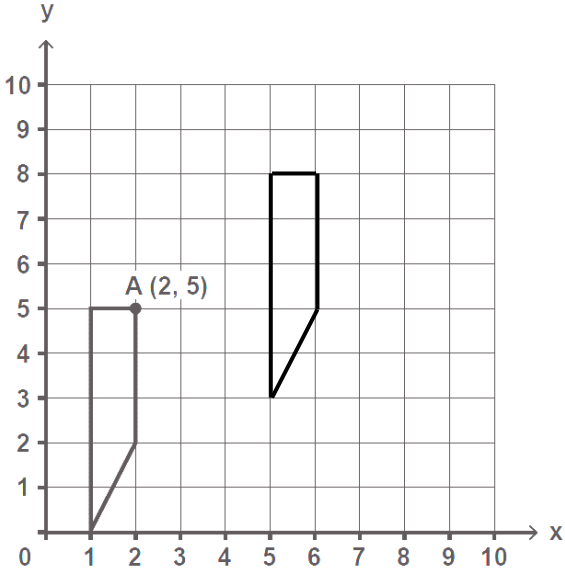
## Amendments to mark schemes for Paper 1: arithmetic



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

For questions 20, 22, 29 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	$28 + 67 = 95$ <b>OR</b> $67 + 28 = 95$	<b>1m</b>	All 6 numbers must be correct for the award of <b>ONE</b> mark.
2	Diagram completed as shown: 	<b>1m</b>	Accept inaccuracies in drawing provided the intention is clear.  Shape need not be shaded for the award of <b>ONE</b> mark.
3	A point on the line in the range 6.0 cm to 7.0 cm exclusive from A.	<b>1m</b>	

Qu.	Requirement	Mark	Additional guidance
11	<p>Award <b>TWO</b> marks for three numbers written as shown:</p> <p>5 5 8</p> <p>If the answer is incorrect, award <b>ONE</b> mark for two correct numbers, correctly placed.</p>	<p><b>Up to 2m</b></p>	
12	<p>Shape located correctly, as shown:</p> 	<p><b>1m</b></p>	<p>Accept inaccuracies in drawing provided the intention is clear.</p> <p>Shape need not be shaded for the award of <b>ONE</b> mark.</p>

21	 = 36   = 25	1m  1m	Award <b>ONE</b> mark for an answer of : <ul style="list-style-type: none"><li>• (111 – answer for triangle) ÷ 3</li></ul> <b>OR</b> <ul style="list-style-type: none"><li>• (147 – 2 x answer for triangle) ÷ 3</li></ul> Accept values correctly rounded or truncated to an integer if the answer for triangle is a non-integer.
----	--	--------------	--

## Amendments to mark schemes for Paper 3: reasoning

Qu.	Requirement	Mark	Additional guidance
4	<p>Award <b>TWO</b> marks for 1 <b>AND</b> 6 in this order.</p> <p>Award <b>ONE</b> mark for either number correct.</p>	<b>Up to 2m</b>	Accept $5321 + 748 = 6069$
5	<p>Award <b>TWO</b> marks for three correct numbers and no others as shown:</p> <p>2 3 6</p> <p>If the answer is incorrect, award <b>ONE</b> mark for:</p> <ul style="list-style-type: none"> <li>• only two numbers correct and no incorrect numbers written</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>• three numbers correct and one incorrect number written.</li> </ul>	<b>Up to 2m</b>	Accept in any order.

Qu.	Requirement	Mark	Additional guidance
10	$(-2, 4)$	1m	Do <b>not</b> accept $(2, 4)$
11	<p>315</p> <p>If the answer is incorrect, award <b>ONE</b> mark for evidence of appropriate method, e.g.</p> <ul style="list-style-type: none"> <li><math>130 + 155 = 285</math> <math>600 - 285 =</math></li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li><math>600 - 130 - 155 =</math></li> </ul>	Up to 2m	Answer need not be obtained for the award of <b>ONE</b> mark.
17	<p>Net completed as shown:</p>	1m	<p>Accept unconventional arrangements of the dots, provided the intended number is clear.</p> <p>Accept numbers instead of dots.</p>

**BLANK PAGE**

[This page is intentionally blank.]



Standards  
& Testing  
Agency

2018 key stage 2 mathematics: amendments to mark schemes for MLP  
Electronic PDF version product code: STA/18/8089/e ISBN: 978-1-78644-820-0

© Crown copyright and Crown information 2018

#### **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](http://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 '2018 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](mailto:assessments@education.gov.uk).

2018 national curriculum tests  
Key stage 2

**Mathematics**  
**Amendments to the mark schemes (AMS)**

**Braille**



Standards  
& Testing  
Agency

## 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	20, 22, 24 and 36.
Paper 2	1, 2, 3, 4, 7, 10, 11, 12, 16, 19 and 21
Paper 3	1, 4, 5, 6, 10, 11 and 17

## General guidance to be applied throughout the braille papers

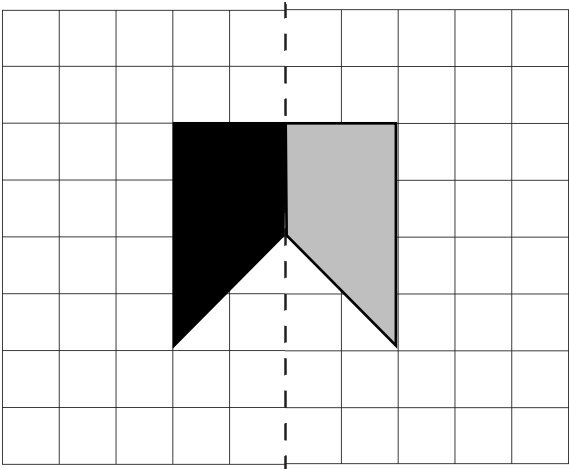
- You should make every effort to understand what the pupil has written in an answer, without reading into the answer anything that the pupil did not intend.
- Some pupils with visual impairment find it difficult to get their answers across clearly. It may take you longer to read their answers. Apply 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.

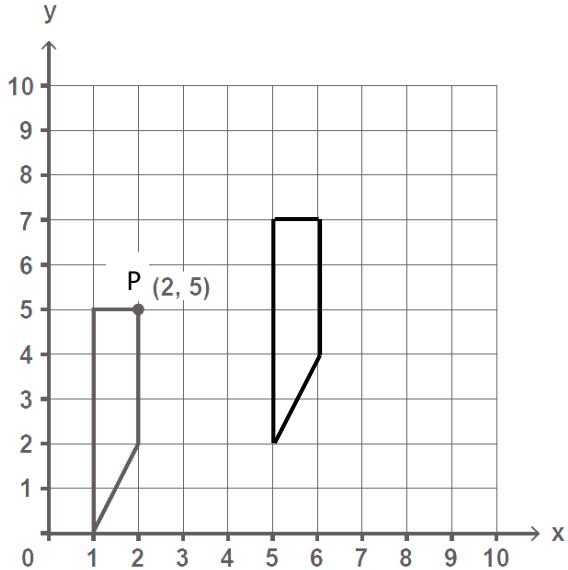
## Amendments to mark schemes for Paper 1: arithmetic

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

For questions 20, 22, 29 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	$28 + 67 = 95$ <b>OR</b> $67 + 28 = 95$	1m	All 6 numbers must be correct for the award of <b>ONE</b> mark.
2	Diagram completed as shown: 	1m	Accept inaccuracies in drawing provided the intention is clear.
3	Accept a mark on the line in the range 6.0 cm to 7.0 cm exclusive from A	1m	
4	a) 12 b) 18	1m	Both values must be correct for <b>ONE</b> mark.
7	0.25 <b>AND</b> $\frac{25}{100}$ written in any order.	1m	Both numbers must be given for the award of <b>ONE</b> mark. No additional numbers must be written.

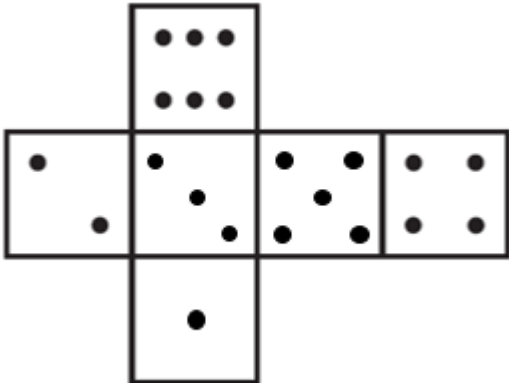
Qu.	Requirement	Mark	Additional guidance
10	a) < b) = c) > d) <	Up to 2m	All four symbols must be correct for the award of <b>TWO</b> marks.  Award <b>ONE</b> mark for any three symbols correct.
11	a) 5 b) 5 c) 8	Up to 2m	All three numbers must be correct for the award of <b>TWO</b> marks.  If the answer is incorrect, award <b>ONE</b> mark for two correct numbers, correctly placed.
12	Shape located correctly, as shown: 	1m	Accept inaccuracies in drawing provided the intention is clear.

16	<p>Q <b>AND</b> R in either order</p> <p>If the answer is incorrect, award <b>ONE</b> mark for:</p> <ul style="list-style-type: none"> <li>• only one correct letter written</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>• two correct letters written and one incorrect letter written</li> </ul>	Up to 2m	
19	R	1m	Accept $4 - 2 + 2$ written
21	<p>triangle = 36</p> <p>circle = 25</p>	<p>1m</p> <p>1m</p>	<p>Award <b>ONE</b> mark for an answer of:</p> <ul style="list-style-type: none"> <li>• <math>(111 - \text{answer for triangle}) \div 3</math></li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>• <math>(147 - 2 \times \text{answer for triangle}) \div 3</math></li> </ul> <p>Accept values correctly rounded or truncated to an integer if the answer for triangle is a non-integer.</p>

## Amendments to mark schemes for Paper 3: reasoning

Qu.	Requirement	Mark	Additional guidance
1	<p>Award <b>TWO</b> marks for three correct numbers in this order: 35 56 70</p> <p>If the answer is incorrect, award <b>ONE</b> mark for two numbers correctly placed.</p>	<b>Up to 2m</b>	
4	<p>Award <b>TWO</b> marks for 1 <b>AND</b> 6 in this order.</p> <p>Award <b>ONE</b> mark for either number correct.</p>	<b>Up to 2m</b>	Accept $5321 + 748 = 6069$ written.
5	<p>Award <b>TWO</b> marks for three correct numbers and no others as shown:</p> <p>2 3 6</p> <p>If the answer is incorrect, award <b>ONE</b> mark for:</p> <ul style="list-style-type: none"> <li>only two numbers correct and no incorrect numbers written</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>three numbers correct and one incorrect number written</li> </ul>	<b>Up to 2m</b>	Accept in any order.
6	<p>Award <b>TWO</b> marks for P <b>AND</b> R in either order and no other letters.</p> <p>If the answer is incorrect, award <b>ONE</b> mark for:</p> <ul style="list-style-type: none"> <li>only one correct letter written and none incorrect.</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>two correct letters written and one incorrect letter written.</li> </ul>	<b>Up to 2m</b>	

Qu.	Requirement	Mark	Additional guidance
10	(-2, 4)	1m	Do <b>not</b> accept (2- , 4)
11	<p>315</p> <p>If the answer is incorrect, award <b>ONE</b> mark for evidence of appropriate method, e.g.</p> <ul style="list-style-type: none"> <li>• <math>130 + 155 = 285</math></li> </ul> <p style="padding-left: 40px;"><math>600 - 285 =</math></p> <p><b>OR</b></p> <p><math>600 - 130 - 155 =</math></p>	Up to 2m	Answer need not be obtained for the award of <b>ONE</b> mark.

Qu.	Requirement	Mark	Additional guidance
17	<p>Net completed as shown:</p>  <p>The net consists of six squares arranged in a cross shape. The top square has 3 dots (top row of 3, bottom row of 2). The middle row has four squares: the first has 2 dots (top-left, bottom-right); the second has 5 dots (top-left, top-right, center, bottom-left, bottom-right); the third has 4 dots (top-left, top-right, bottom-left, bottom-right); the fourth has 6 dots (two columns of 3). The bottom square has 1 dot in the center.</p>	1m	<p>Accept unconventional arrangements of the dots, provided the intended number is clear.</p> <p>Accept numbers instead of dots.</p>



2018 key stage 2 mathematics: amendments to mark schemes for braille  
Electronic PDF version product code: STA/18/8089/e ISBN: 978-1-78644-820-0

© Crown copyright and Crown information 2018

**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](http://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 '2018 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](mailto:assessments@education.gov.uk).



## 2018 copyright ownership: key stage 2 national curriculum tests

With the exception of the elements listed below, the 2018 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:

[www.nationalarchives.gov.uk/doc/open-government-licence](http://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 public sector information licensed under the 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.

### Key stage 2 English reading test material

Test title	Paper / page	Description	Reference / copyright owner
KS2 English reading test	Reading booklet, pages 4-5	The Giant Panda Bear	<i>The Giant Panda Bear</i> produced for STA. Images of giant panda and bamboo © Clipart.com Image of bamboo forest (586084199) © blew_s shutterstock.com
	Reading booklet, page 6	Grannie	Taken from <i>The Works 4</i> , edited by Pie Corbett and Gaby Morgan, Macmillan Children's Books, 2005. Author: Vernon Scannell.
	Reading booklet, pages 8-10	Albion's Dream	Taken from <i>Albion's Dream</i> , Faber & Faber, 1992. Author: Roger Norman.

## **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 2018