

Transcription of the Braille Version

2017 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

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.

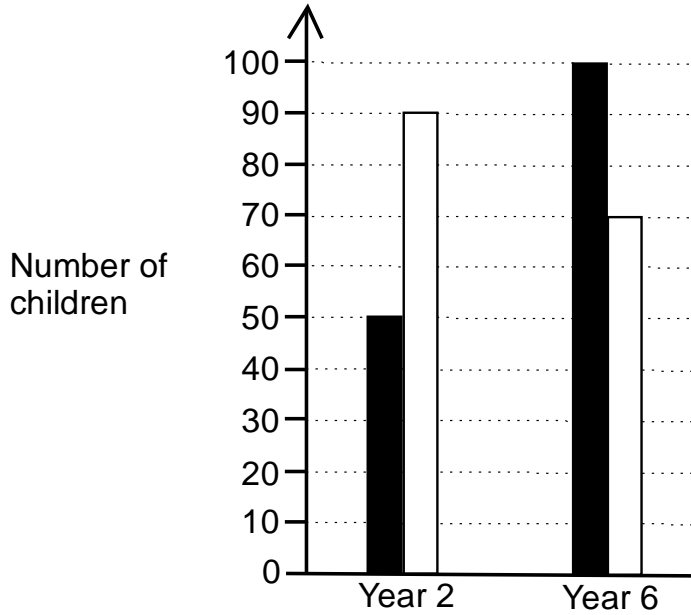
[braille page 2, facing page 3]

Diagram for question 1

Key:

■ walk to school

□ don't walk to school



[braille page 3]

1. William asks the children in Year 2 and Year 6 if they walk to school. The graph on the opposite page shows the results.

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

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

.....

2. Look at the five numbers below.

9700 907 9007 970 9070

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

.....

3. a) $9 \times \underline{\quad} = 63$

Write the missing number.

b) $\underline{\quad} \times 8 = 48$

Write the missing number.

.....

Test administration guidance

1. Ensure the pupil finds the graph on the facing page.
Encourage the pupil to braille a) before the answer to part a and b) before the answer to part b.
3. Encourage the pupil to braille a) before the answer to part a and b) before the answer to part b.

[braille page 4]

4. The table below shows the heights of three mountains.

Mountain	Height in metres
Mount Everest	8848
Mount Kilimanjaro	5895
Ben Nevis	1344

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

Show your method.

_____ m

[braille page 5]

5. Look at the table below.

Number	1000 more
3500	4500
85	p
q	9099
r	15250

Complete the table by writing the values of p q and r

p = _____

q = _____

r = _____

6. Look at the four numbers below.

1.9 0.96 1.253 0.328

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

smallest _____

[braille page 6]

7. a) 60 months = _____ years

Write the missing number.

b) 72 hours = _____ days

Write the missing number.

c) 84 days = _____ weeks

Write the missing number.

Test administration guidance

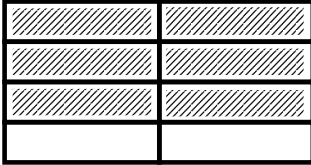
7. Encourage the pupil to braille a) before the answer to part a, b) before the answer to part b, and c) before the answer to part c.

8. At the start of June, there were 1793 toy cars in the shop.
 During June,
 8728 more toy cars were delivered
 9473 toy cars were sold.
 How many toy cars were left in the shop at the end of June?
 Show your method.

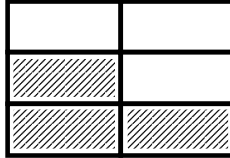
[braille page 7, facing page 8]

Diagram for question 9

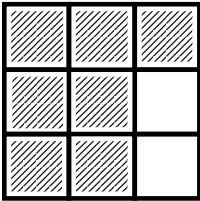
P



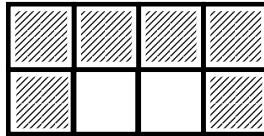
Q



R



S



[braille page 8]

9. Look at the four shapes on the opposite page.
 They are labelled P Q R and S
 Write the letters of the TWO shapes that have $\frac{3}{4}$ shaded.

10. a) Round 84516 to the nearest 10
 b) Round 84516 to the nearest 100
 c) Round 84516 to the nearest 1000

Test administration guidance

9. Ensure the pupil finds the four shapes on the facing page.
10. 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.

[braille page 9]

11. The rule below shows the time it takes to cook a chicken.

Cooking time = 20 minutes plus an extra 40 minutes for each kilogram

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

_____ minutes

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

_____ kg

.....

12. You have a hexagonal prism for this question.

a) How many faces does it have?

b) How many vertices does it have?

.....

[braille page 10]

13. Ally and Jack buy some stickers.

Ally buys a pack of 12 stickers for £10.49

Jack buys 12 single stickers for 99p each.

How much more does Jack pay than Ally?

Show your method.

£ _____

.....

14. Amina planted some seeds.

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

Altogether 12 seeds grew.

How many seeds did Amina plant?

.....

15. The year below is written in Roman numerals.

MMVI

Write the year in figures.

.....

[braille page 11]

16. How many degrees are there in one and a half turns?

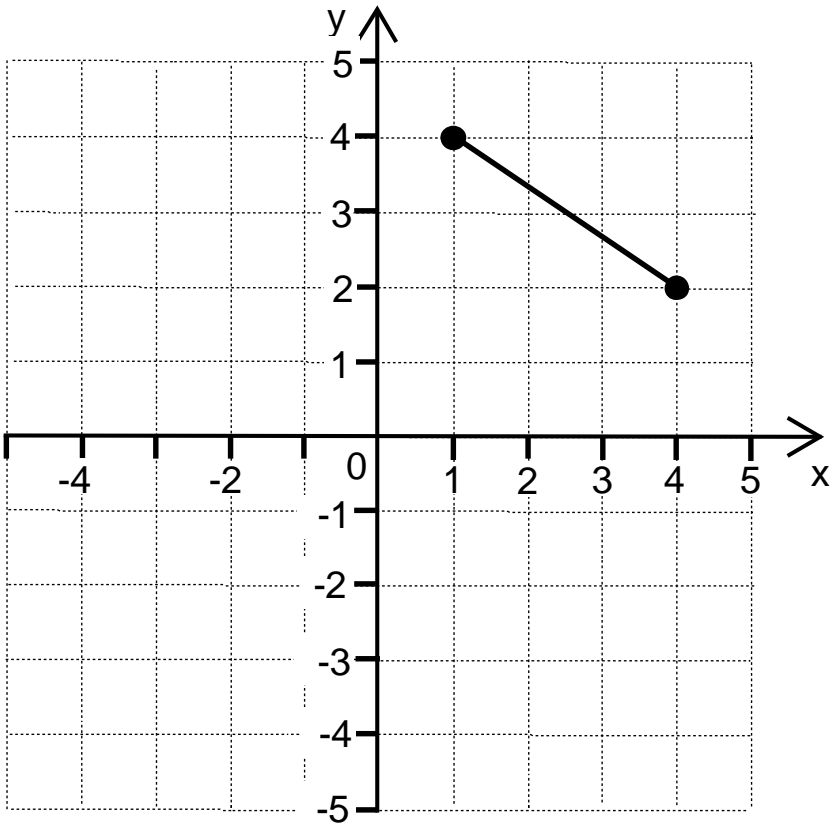
_____°

.....

Test administration guidance

11. Encourage the pupil to braille a) before the answer to part a and b) before the answer to part b.
12. Provide the pupil with the solid shape for this question.
Encourage the pupil to braille a) before the answer to part a and b) before the answer to part b.

[braille page 12, facing page 13]
Diagram for question 17



[braille page 13]

17. Look at the diagram on the opposite page.
It shows a line joining two points on a coordinate grid.
The vertices of a quadrilateral have these coordinates.
(1, 4) (4, 2) (2, -3) (-2, 4)
One side of the quadrilateral has been drawn on the grid.
Complete the quadrilateral.
Use the separate copy of the diagram.
Use a ruler.
-

18. A cat sleeps for 12 hours each day.
50% of its life is spent asleep.
A koala sleeps for 18 hours each day.
What percentage of the koala's life is spent asleep?
_____ %
-

Test administration guidance

17. 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 (ie 'blobs', bluetack, wikkisticks) should be sent with the pupil's braille script.

[braille page 14]

19. Amina posts three large letters.
The postage costs the same for each letter.
She pays with a £20 note.
Her change is £14.96
What is the cost of posting ONE letter?
Show your method.
£ _____

.....

20. Adam says that 0.25 is smaller than $\frac{2}{5}$
Explain why he is correct.

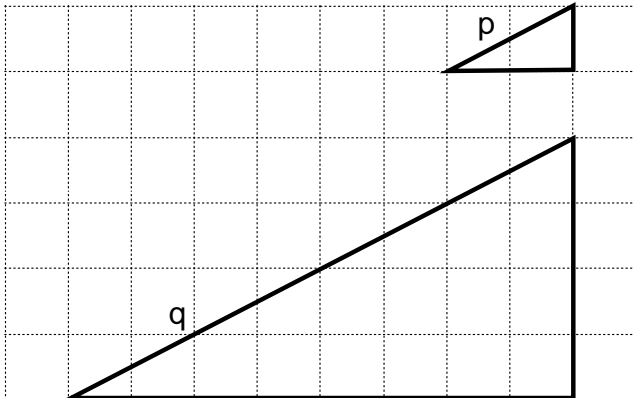
.....

21. On a map, 1 cm represents 20 km.
The distance between two cities is 250 km.
On the map, what is the distance between the two cities?
Show your method.
_____ cm

.....

[braille page 15, facing page 16]

Diagram for question 22



[braille page 16]

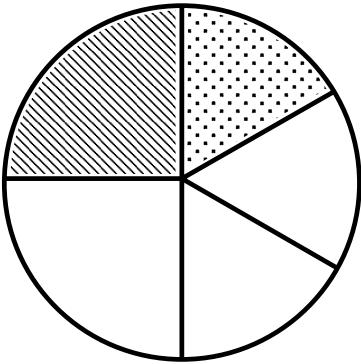
22. Look at the diagram on the opposite page.
Two triangles are shown on a square grid.
The triangles are similar and right-angled.
Write the ratio of side p to side q
p : q = _____ : _____

.....

Test administration guidance

22. Ensure the pupil finds the two shapes in the diagram on the facing page.

[braille page 17, facing page 18]
Diagram for question 23



[braille page 18]

23. Look at the circle on the opposite page.

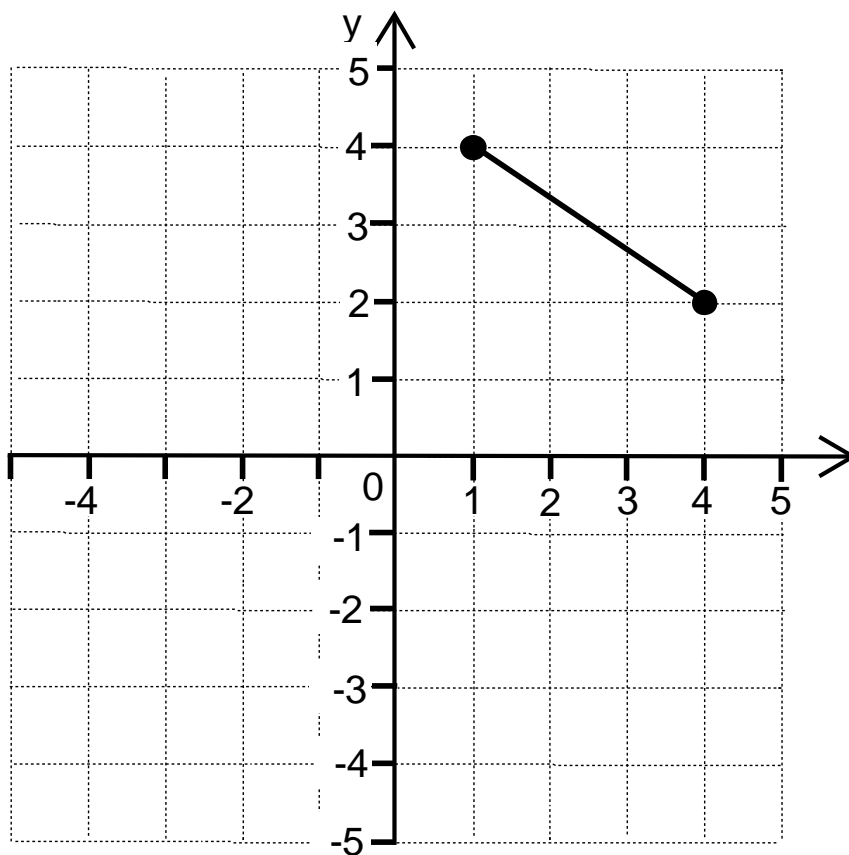
In the circle, $\frac{1}{4}$ and $\frac{1}{6}$ are shaded.

What fraction of the whole circle is NOT shaded?

Show your method.

END OF TEST

One brailon copy and film copies of diagram for question 17



Test administration guidance

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

Blank page

Blank page

