## 2024 national curriculum tests

## Key stage 1

## Mathematics

Paper 2: reasoning

| First name |  |
| :--- | :--- |
| Middle name |  |
| Last name |  |



Page 2 of $\mathbf{3 2}$

## Practice question




## August

| Sun | Mon | Tues | Wed | Thurs | Fri | Sat |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 1 | 2 | 3 |
| 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 | 31 |

Page 4 of 32



5

## 2 <br> 4 <br> 5 <br> 6 <br> 7

6 Kemi draws around a face of a cylinder.
Tick the shape she has drawn.


7 This table shows the different colours of horses on a farm.

| Horse colour | Number of horses |
| :---: | :---: |
| black | 2 |
| brown | 0 |
| grey | 4 |
| white | 7 |

Use the table to complete the graph below.

One is done for you.


8
There are $\mathbf{1 6}$ ducks on the pond.
5 ducks fly away.
How many ducks stay on the pond? ducks

9 Write the missing numbers in this pattern.


10 Here is a shape pattern.

Shade the last two boxes to complete the pattern.


11 Sam has 90 marbles.

He gives 50 marbles to Ben.

How many marbles does Sam have left?


12 In each box, tick the coin that has the greatest value.
One is done for you.


13 Write a number in each empty circle so that all three numbers total 14


14 Tick two purses with the same amount of money.


Page 15 of 32

15 Ajay has some marbles.

He puts $\mathbf{1 0}$ marbles into each bag. He has 8 left over.


How many marbles does Ajay have altogether?


16 Complete the number sentence below.

$$
5 \times 5
$$

17 Ajay had 18 strawberries.

He picked some more.

Ajay now has $\mathbf{2 4}$ strawberries.

How many more strawberries did he pick?


18 One calculation does not equal 17

Cross it out.

$8+9$


3-20
$\underbrace{\infty}_{1 \text { mark }}$

19 A ride has 8 cars.


There are $\mathbf{5}$ seats in each car.

Complete the number sentence to show the total number of seats on the ride.


20 The diagram below shows number bonds that make 20

Write the missing numbers to complete the diagram.

One is done for you.

| 20 |  |
| :---: | :---: |
| 6 | 14 |
| 9 |  |
| 12 |  |

21 This number pattern increases by $\mathbf{1 0}$ each time.

$$
\begin{array}{llll}
7 & 17 & 27 & 37
\end{array}
$$

Circle all the numbers below that will be in the pattern.

## 57

66

## 75 <br> 97

22 Stickers are sold in packs of 5

Kemi has $\mathbf{3 0}$ stickers altogether.

How many packs does Kemi have?


23 Amy has 45p.


A badge costs 10p.

What is the total number of badges that Amy can buy with 45 p?


24 How much juice is in this measuring jug?


25 Tick all the calculations that total $\mathbf{1 0 0}$

## $50+50$

## $80+30$

## $75+15$

$35+65$

26 Three of the shapes below have a line of symmetry.

Tick the three shapes.


27 Tick all the squares that have half shaded.


28 Only one number sentence is correct.

Circle it.

$$
\begin{aligned}
& \frac{1}{4}=\frac{1}{2} \\
& \frac{2}{4}=\frac{1}{3} \\
& \frac{3}{4}=\frac{1}{2} \\
& \frac{2}{4}=\frac{1}{2}
\end{aligned}
$$

29 Complete the number sentence.

One is done for you.
$\frac{1}{4}$ of $8=2$ $\frac{3}{4}$ of $8=\square$

30 Sita only puts $\mathbf{5 p}$ coins in a bag.

There is a total of $\mathbf{£ 1}$ in the bag.

How many 5 p coins are in the bag?


31 There are $\mathbf{3 0}$ animals on a farm.
$\frac{1}{2}$ of the animals are cows.


9 are sheep.


The rest are horses.


How many of the animals are horses?


2 marks

32 Here is a balance.


The mass of the $\square$ is 15 kg .

What is the mass of one $\square$ ?


33 Sita buys a drink that costs 65p.

She pays with four 20p coins.
How much change does Sita get?


## End of test

[BLANK PAGE]
Please do not write on this page.

## Standards \& Testing Agency

2024 key stage 1 mathematics
Paper 2: reasoning
Print version product code: STA/24/8808/p ISBN: 978-1-83507-004-8
Electronic PDF version product code: STA/24/8808/e ISBN: 978-1-83507-023-9

## For more copies

Additional printed copies of this booklet are not available. It can be downloaded from https://www.primaryassessmentgateway.education.gov.uk during May 2024, or afterwards from https://www.gov.uk/government/collections/national-curriculum-assessments-practice-materials.
© Crown copyright 2024
Re-use of Crown copyright in test materials
With the exception of third-party copyright content, the 2024 key stage 1 test materials are Crown copyright. 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 2024 national curriculum assessments and licensed under Open Government Licence v3.0' and where possible provide a link to the licence.

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

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 teaching purposes: https://www.gov.uk/guidance/exceptions-to-copyright. However, if not expressly permitted under the CDPA, you must obtain permission from the relevant copyright owners, listed in the ' 2024 key stage 1 tests copyright report', for re-use of any third-party copyright content which we have identified in the test materials. Alternatively, you should remove the unlicensed third-party copyright content and/or replace it with appropriately licensed material.

If you have any queries regarding these test materials, contact the national curriculum assessments helpline on 03003033013 or email assessments@education.gov.uk.

