

2023 national curriculum tests

Key stage 1

Mathematics

Paper 2: reasoning

First name	
Middle name	
Last name	

Total marks	
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Ajay



Amy



Ben



Kemi



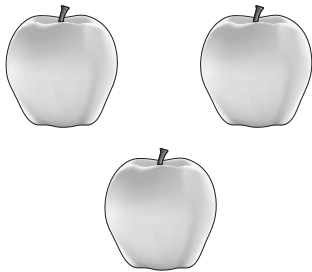
Sam



Sita

Practice question

Sita

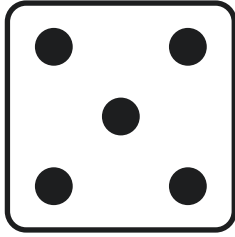


Amy



apples

1



5

3

2

7

1 mark

2

6

2

8

3

Two empty rectangular boxes side-by-side for the answer.



1 mark

3



1 mark

4

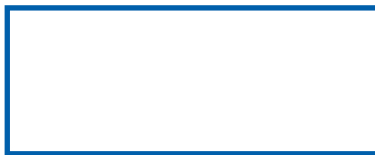


oranges



1 mark

5



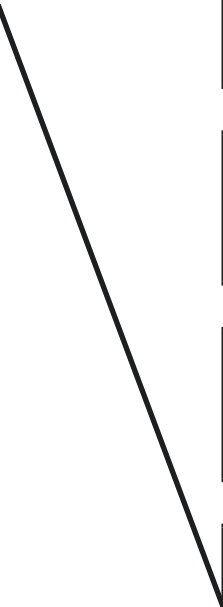
1 mark

6

Match the words to the correct numerals.

One is done for you.

ninety-nine	16
sixteen	60
forty-three	43
	99
	34



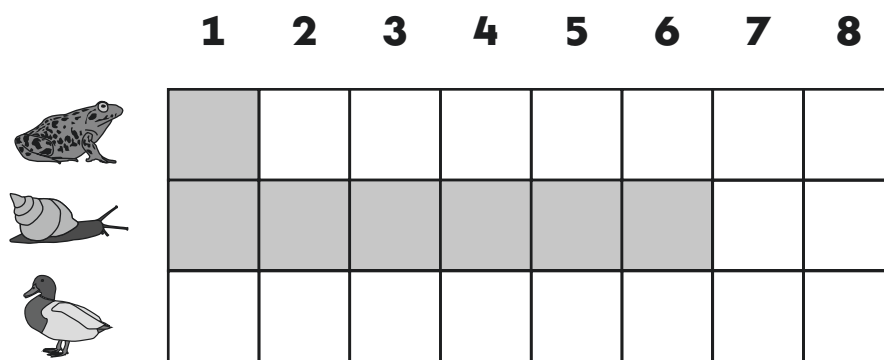
1 mark

7

This block diagram shows how many animals are in a pond.

There are **4 ducks** in the pond. 

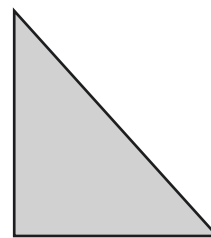
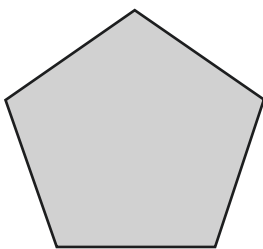
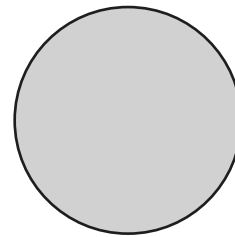
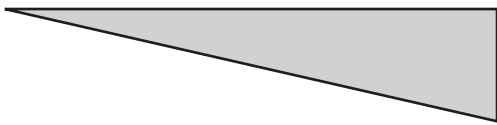
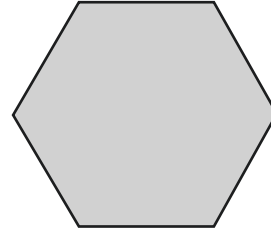
Complete the block chart.



1 mark

8

Tick the **two** shapes with the same number of sides.








1 mark

9

Each object looks like a **cuboid**, **cone** or **cylinder**.

Complete the table.

One is done for you.

Object	Cuboid	Cone	Cylinder
			✓
			
			
			
			



1 mark

10

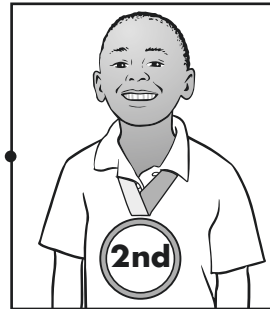
Four children run a race.

The medals show their finishing position.

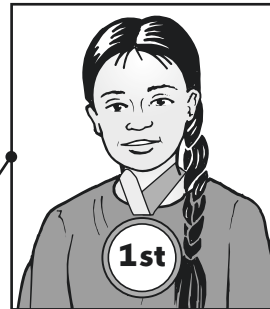
Match each time to the child's position.

One is done for you.

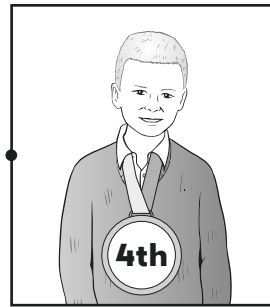
11 minutes



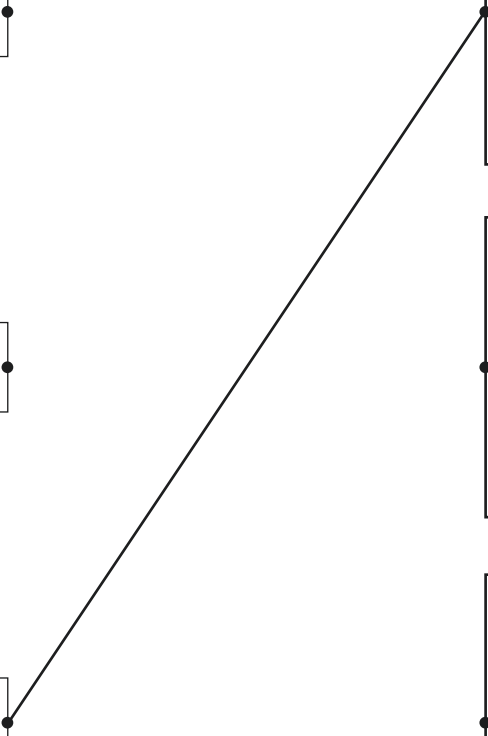
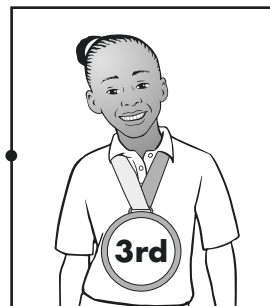
15 minutes



13 minutes

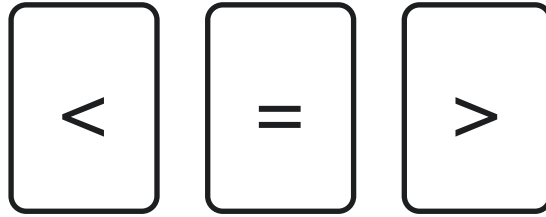


10 minutes



11

Look at these signs.



Write the correct sign in each box.

$$21 \quad \boxed{\phantom{<}} \quad 12$$

$$48 \quad \boxed{\phantom{<}} \quad 64$$

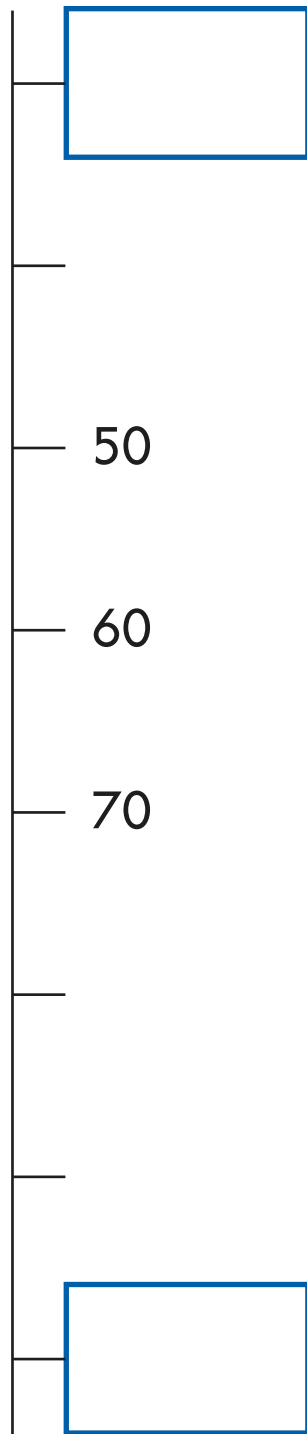
$$55 \quad \boxed{\phantom{<}} \quad 55$$



1 mark

12

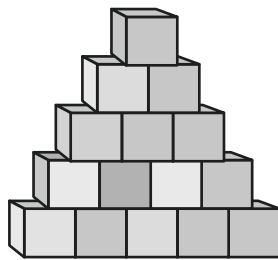
Write the correct number in each box on the number line.



1 mark

13 Ben wants to build a tower with **15** blocks.

He only has **9** blocks.



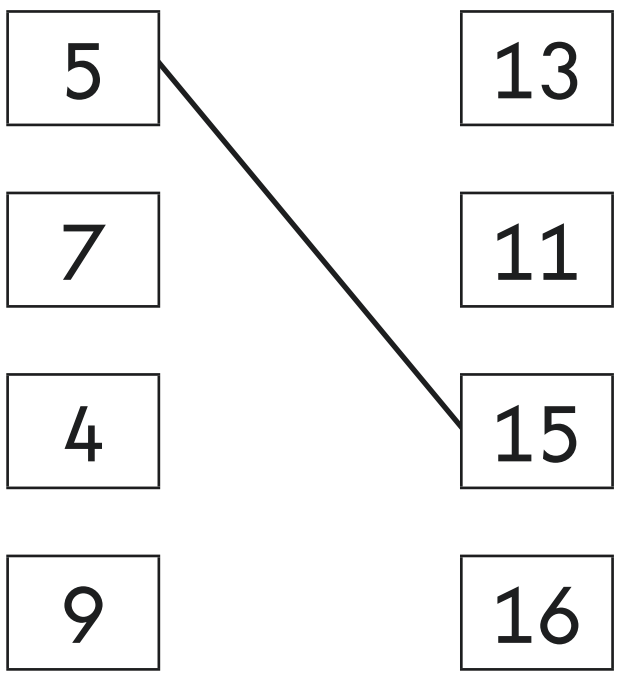
How many **more** blocks does Ben need?

blocks

○
1 mark

14 Match **all** the pairs of numbers that add to **20**

One is done for you.






○
1 mark

15

Ben draws a tally chart of the birds he sees in his garden.

Complete Ben's tally chart.

Bird	Tally of birds	Number of birds
robin 		3
blue tit 		
sparrow 		10

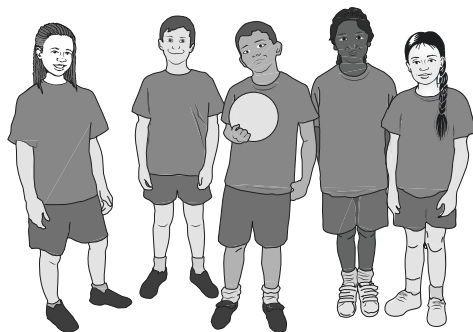


1 mark

16

6 teams play football.

Each team has 5 children.



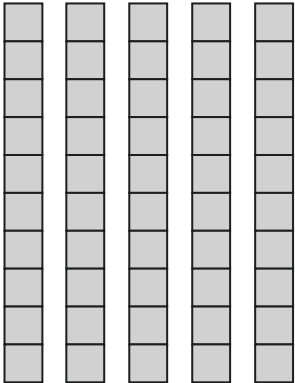
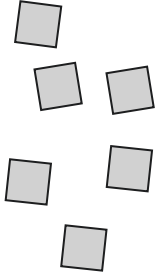
How many children play football **altogether**?

children



1 mark

17

tens	ones
	

Kemi uses tens and ones to show **56**

She adds **2 more tens**.

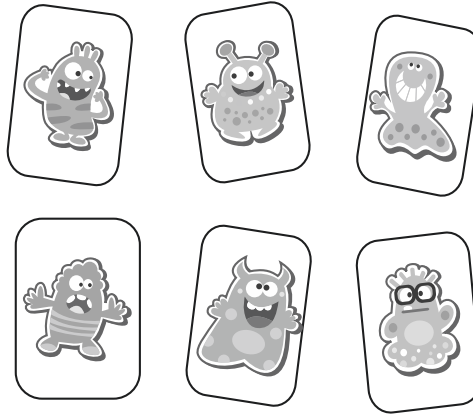
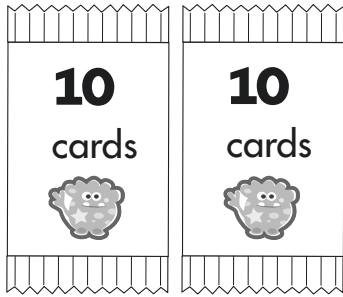
What is her **new** number?



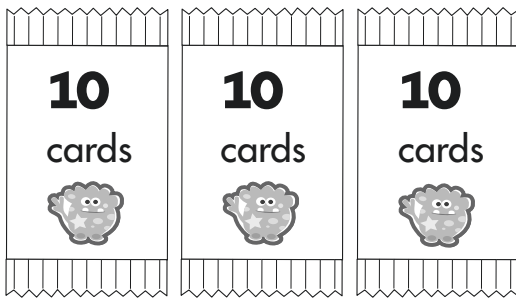
1 mark

18

Ben has **26** cards.



Sita has **32** cards.



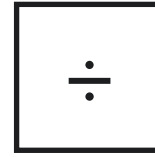
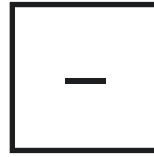
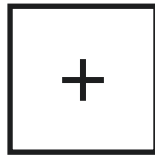
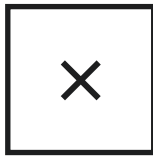
How many cards do Ben and Sita have **altogether**?

cards

1 mark

19

Look at these signs:



Write one sign in each box to make the number sentences correct.

One is done for you.

$$5 \boxed{\times} 4 = 20$$

$$8 \boxed{} 2 = 16$$

$$30 \boxed{} 10 = 3$$

$$7 \boxed{} 6 = 13$$



2 marks

20

Write the missing numbers to continue the number pattern.

$$7 + 3 = 10$$

$$17 + 3 = 20$$

$$\boxed{} + 3 = 30$$

$$\boxed{} + 3 = \boxed{}$$

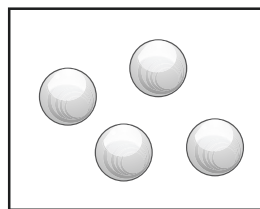
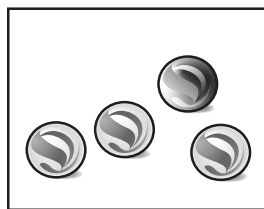
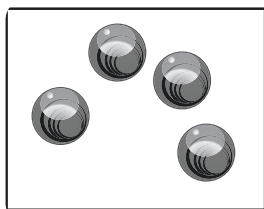
$$47 + 3 = 50$$



1 mark

21

These marbles are sorted into groups.



Circle **two** calculations that show the total number of marbles.

$$3 \times 3$$

$$3 \times 4$$

$$4 + 4 + 4$$

$$3 + 3 + 3$$



1 mark

22

Here is a calculation.

$$\frac{1}{4} \text{ of } 8 = \boxed{2}$$

Now complete the calculations below.

$$\frac{2}{4} \text{ of } 8 = \boxed{}$$

$$\frac{3}{4} \text{ of } 8 = \boxed{}$$



1 mark

23

This is Ben's money.



This is Sita's money.



How much **more** money does Ben have than Sita?

p



1 mark

24

Sam has some toy cars.

The picture shows $\frac{1}{2}$ of his cars.



How many toy cars does Sam have **altogether**?


cars



1 mark

25

Look at the two calculations.

Each  is worth the **same** number.

Write the answer to the second calculation.

$$\star + \star = \boxed{20}$$

$$\star \times \star = \boxed{}$$



1 mark

26

Sam buys a book for **£17**

He pays with **four £5** notes.



How much change does Sam get?

£



1 mark

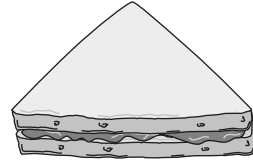
27

Amy makes **24** sandwiches for a party.

9 children come to the party.

Each child eats **2** sandwiches.

How many sandwiches are **left**?



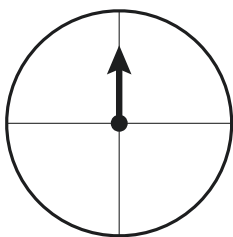
Show
your
working

sandwiches

2 marks

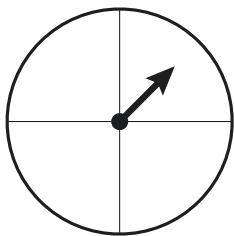
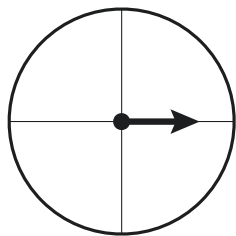
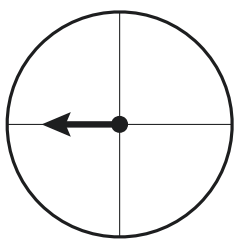
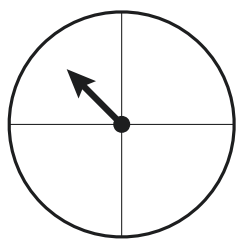
28

Here is a spinner.



The arrow moves a $\frac{1}{4}$ turn **anti-clockwise**.

Tick the new position of the arrow.



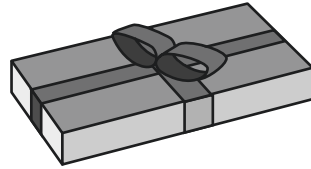
1 mark

29

Kemi sends a card, a gift and a letter.



card
32 g



gift
47 g



letter
? g

Altogether the card, gift and letter weigh **100** grams.

How much does the **letter** weigh?

Show
your
working

grams

2 marks

30

Write a digit in each box to complete this number sentence.

$$\begin{array}{|c|c|} \hline 3 & \square \\ \hline \end{array} + \begin{array}{|c|c|} \hline \square & 2 \\ \hline \end{array} = 50$$

1 mark

31

Sita solved this calculation.

$$16 - 4 = 12$$

Circle **all** of the calculations that show how Sita could check her answer.

$$16 + 4$$

$$4 + 12$$

$$4 + 16$$

$$12 + 4$$

1 mark

32

Here is part of a number pattern.

The numbers increase by **five** each time.

2 7 12 17 22

Write the next **even** number in the pattern.



1 mark

End of test

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2023 key stage 1 mathematics

Paper 2: reasoning

Print version product code: STA/23/8708/p ISBN: 978-1-78957-622-1

Electronic PDF version product code: STA/23/8708/e ISBN: 978-1-78957-642-9

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