

2018 national curriculum tests

# Key stage 1

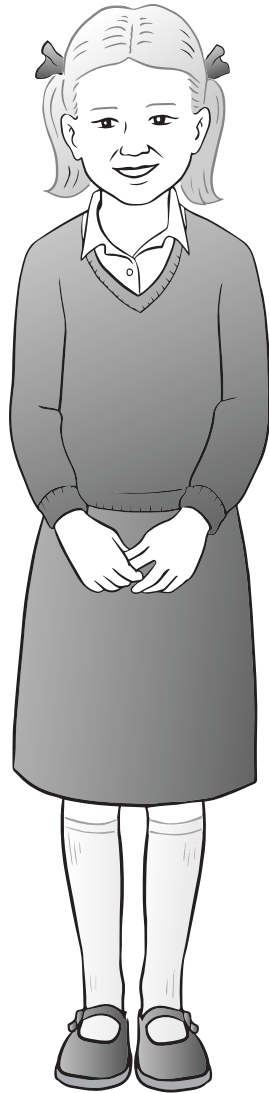
## Mathematics

### Paper 2: reasoning

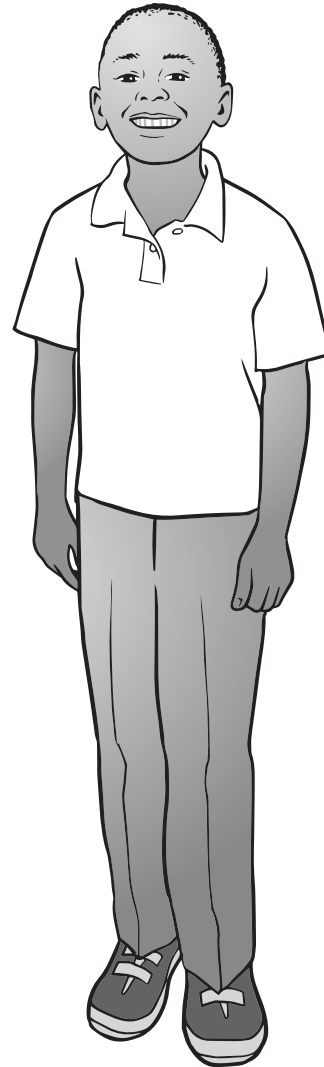
|             |  |
|-------------|--|
| First name  |  |
| Middle name |  |
| Last name   |  |

Total marks

|  |
|--|
|  |
|--|



**Amy**



**Ajay**

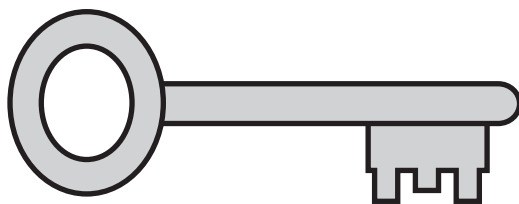
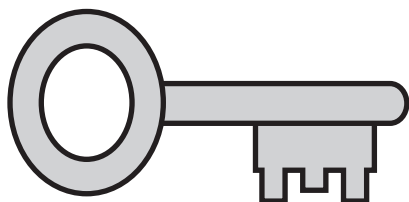
Sam

Ben

Sita

Kemi

**Practice question**



1

20    2    2



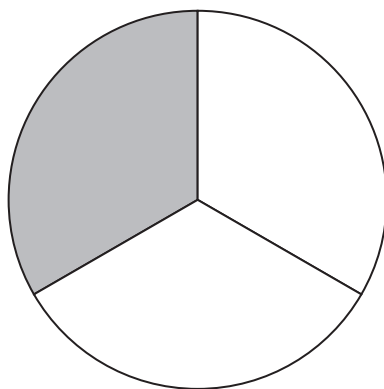
1 mark

2



1 mark

3



$$\frac{1}{2}$$

☐

$$\frac{1}{4}$$

☐

$$\frac{1}{3}$$

☐

$$\frac{3}{4}$$

☐

1 mark

4

13



|         |
|---------|
| marbles |
|---------|

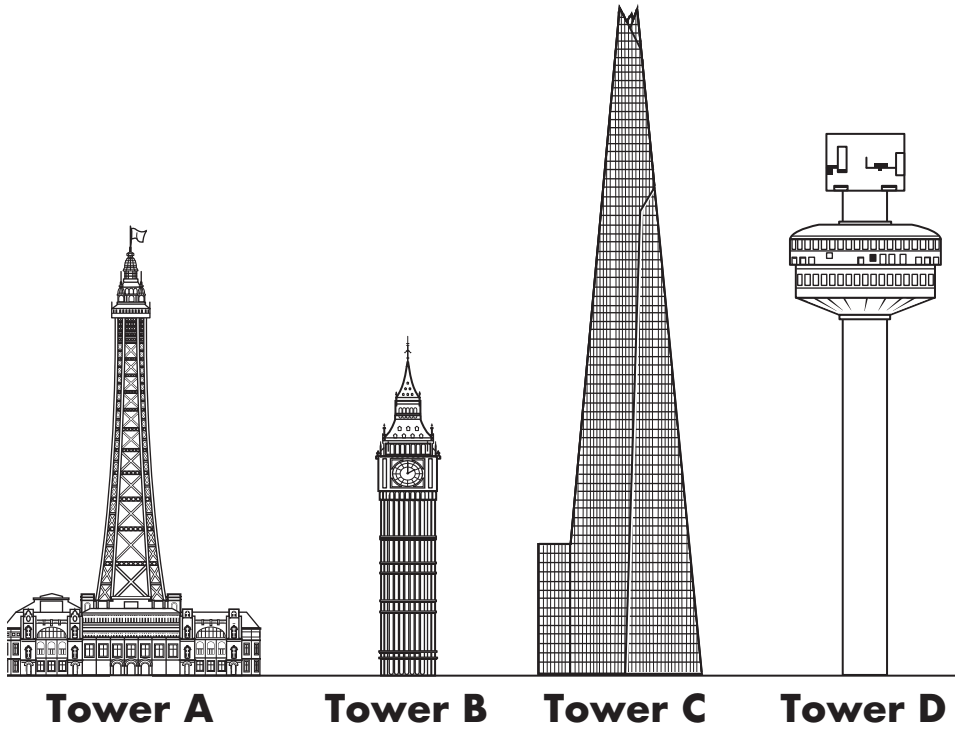
  
1 mark

5

$$\square \times \square = 25$$



1 mark



Put the four towers in order from **tallest** to **shortest**.

One is done for you.



**tallest**



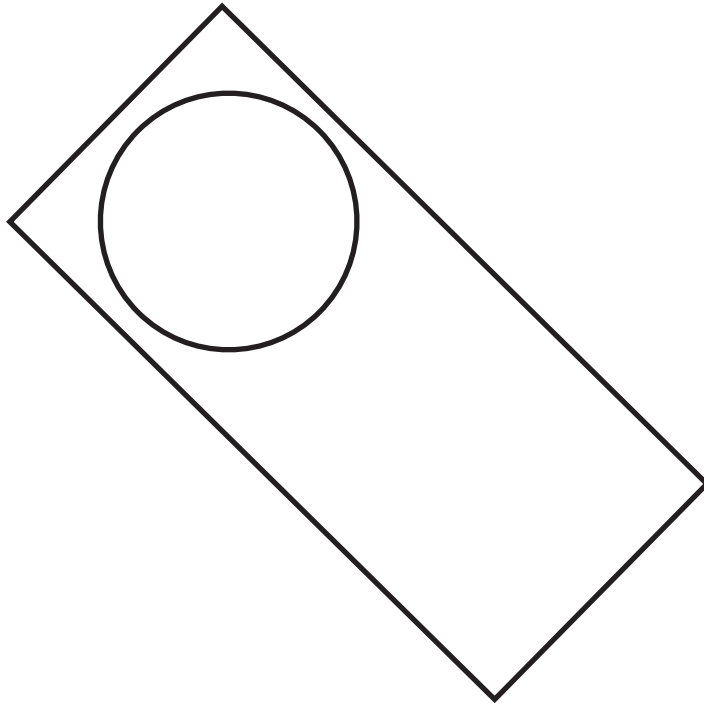
**shortest**



1 mark



7



Tick the names of the **two** shapes in this picture.

Tick **two**.

triangle

☐

square

☐

rectangle

☐

circle

☐

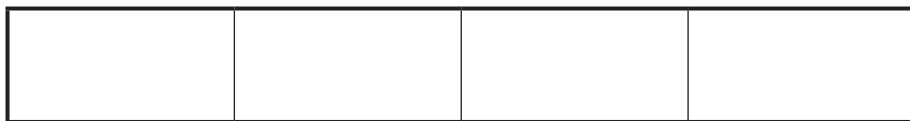
hexagon

☐

1 mark

8

Shade  $\frac{3}{4}$  of this shape.



1 mark

9

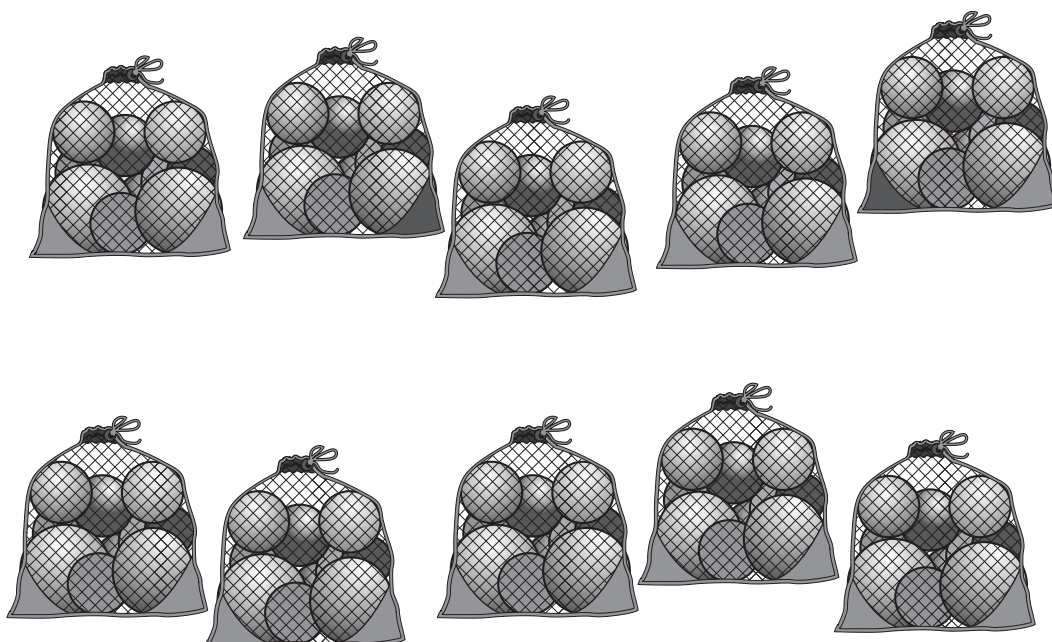
Put a tick below the **fourth black bead**.



1 mark

10

Sita puts **10** balls in each bag.



How many balls are in the bags **altogether**?

balls



1 mark

**11** Kemi goes to four clubs each week.

Which club lasts the **longest**?

Circle it.

**Swimming**

45 minutes

**Art**

2 hours

**Music**

75 minutes

**Drama**

1 hour



1 mark

**12** Ajay's plant was **11** centimetres tall.

It grows **7** centimetres taller.

How tall is the plant now?

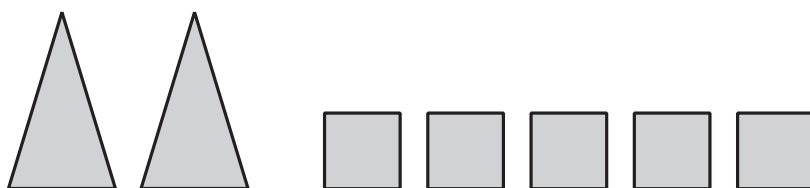


cm

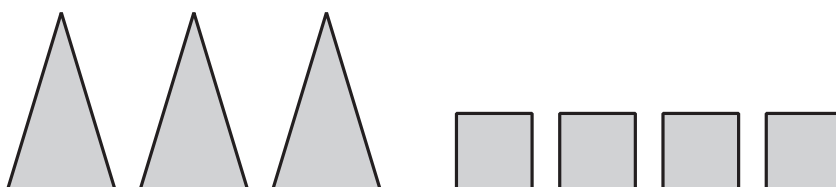
  
1 mark

13

Amy makes **25** using different shapes for tens and ones.



Amy makes a new number.



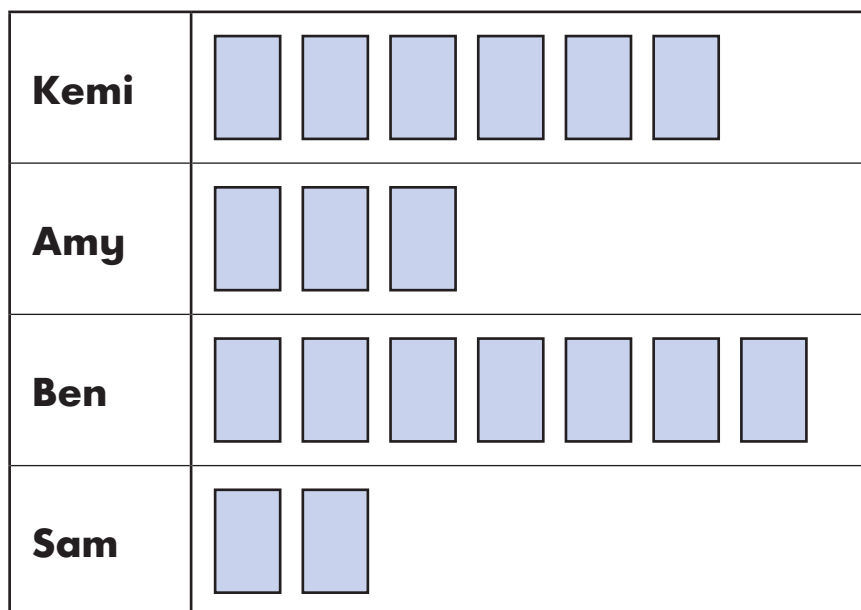
What is Amy's new number?



1 mark

14

The chart shows the number of stickers four children have.

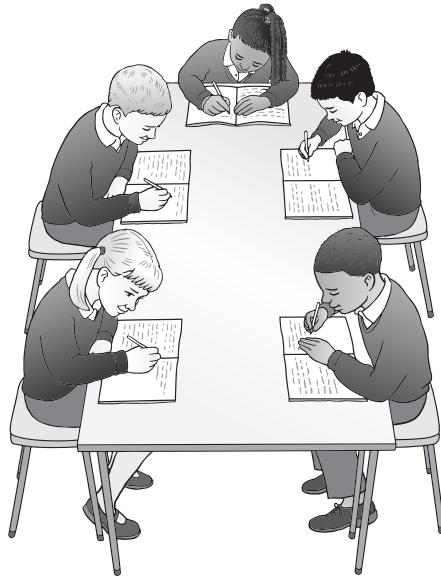


Kemi has more stickers than Sam.

How many **more**?



1 mark



A classroom has **6** tables.

Each table has **5** children sitting at it.

Complete the number sentence to show how many children there are **altogether**.

$$\square \times \square = \square \text{ children}$$

1 mark



16



A shopkeeper has **20** fish and **5** fish bowls.

He puts the same number of fish in each bowl.

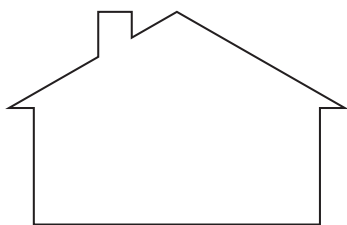
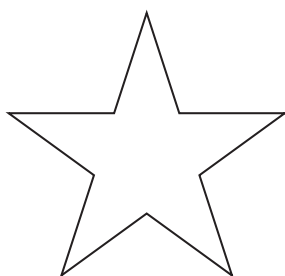
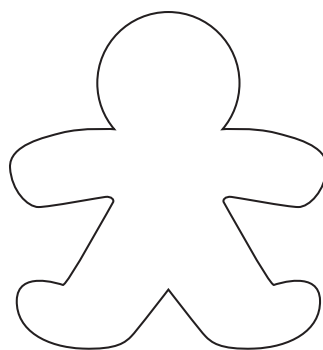
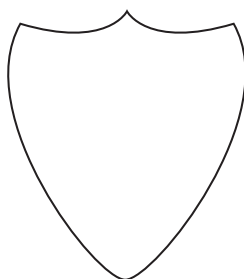
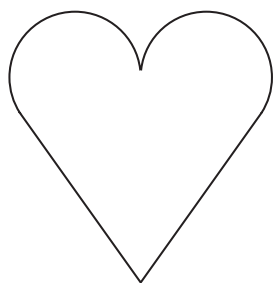
How many fish go in each bowl?

fish

  
1 mark

17

Tick the shape that does **not** have a line of symmetry.



1 mark

18 Ajay has **20p** in 2p coins.

How many 2p coins does Ajay have?



coins



1 mark

5

40

8

Use only these numbers to make a **different** number sentence each time.

One is done for you.

$$\boxed{5} \times \boxed{8} = \boxed{40}$$

$$\boxed{\phantom{00}} \times \boxed{\phantom{00}} = \boxed{\phantom{00}}$$

$$\boxed{\phantom{00}} \div \boxed{\phantom{00}} = \boxed{\phantom{00}}$$

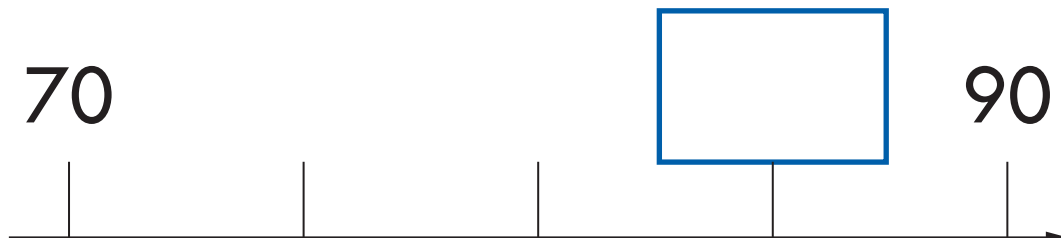


1 mark

20

Here is part of a number line.

Write the correct number in the box.

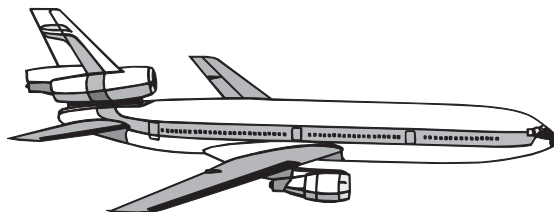


1 mark

21

One plane lands every minute.

How many planes land in **1 hour**?



planes



1 mark

22

Use four **different** number cards to complete the number sentences below.

|   |    |    |    |    |    |
|---|----|----|----|----|----|
| 5 | 15 | 25 | 35 | 45 | 55 |
|---|----|----|----|----|----|

$$\square + \square = 60$$

$$\square + \square = 60$$



2 marks

23

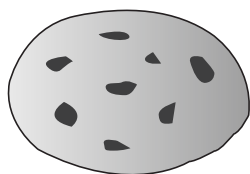
Sam has 55p.

Ben has 10p less than Sam.

Tick the coins that **Ben** has.



1 mark



biscuits  
**20p** each



cakes  
**25p** each

Sam buys **3** biscuits and **1** cake.

How much does Sam spend **altogether**?

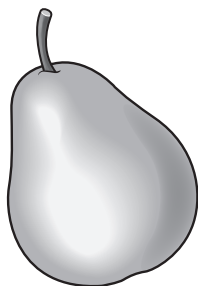
Show  
your  
working

p



2 marks





35p

Amy buys **one** pear for 35p.

She pays with a 50p coin.



How much change does Amy get?

p



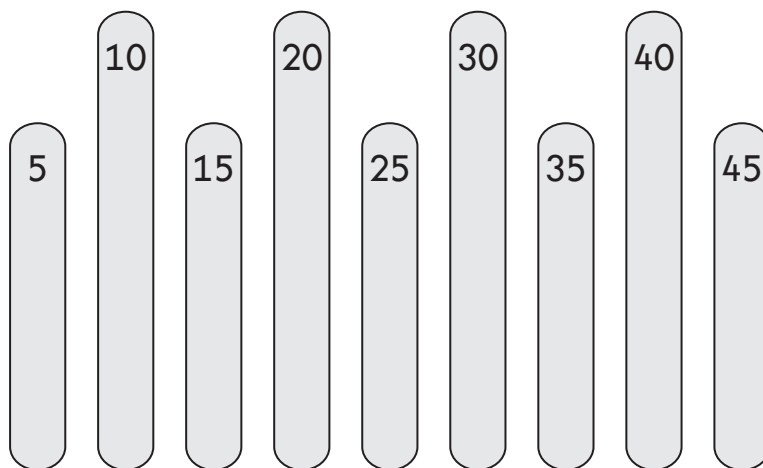
1 mark

26

Kemi makes a pattern with sticks.

Some are long and some are short.

She writes a number pattern on the sticks.



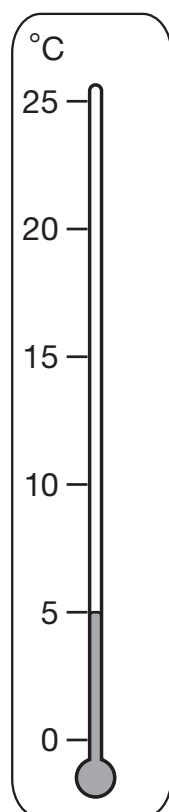
Write the number that will be on the next **short** stick.



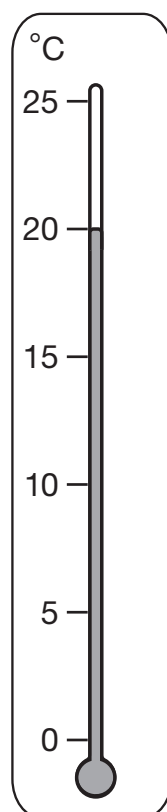
1 mark

27

Look at the thermometers.



playground



classroom

The temperature on the playground is lower than the temperature in the classroom.

How much lower?

°C



1 mark

28

Write the **same** number in both boxes to make the sum correct.

$$\square + \square = 26$$



1 mark

29

Draw a rectangle **7cm** long and **3cm** wide.

Use a ruler.



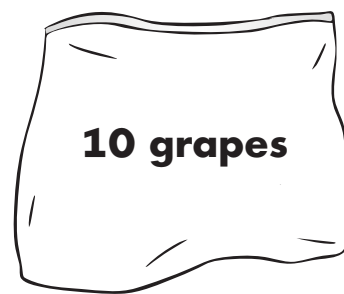
1 mark

**30** Ben has **7** bags of grapes.

Each bag has **10** grapes.

Ben gives **25** grapes to his friends.

How many grapes does he have **left**?



Show  
your  
working

grapes



2 marks

- 31 Write the missing number in the box.

$$13 + 6 = 10 + \boxed{\phantom{00}}$$



- 32 Write two numbers that are **greater than 20** to make this subtraction correct.

$$\boxed{\phantom{00}} - \boxed{\phantom{00}} = 2$$



End of test

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Standards  
& Testing  
Agency

2018 key stage 1 mathematics

Paper 2: reasoning

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