

2018 national curriculum tests

# Key stage 1

## Mathematics

### Paper 2: reasoning

First name	
Middle name	
Last name	

Total marks	
-------------	--



**Amy**



**Ajay**

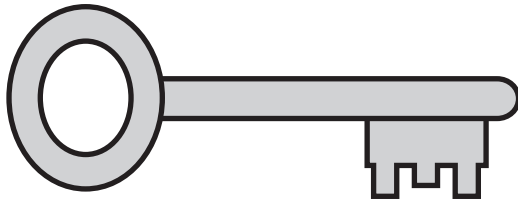
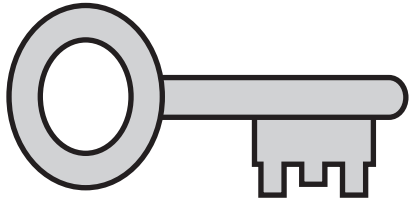
Sam

Ben

Sita

Kemi

## Practice question



1

20 2 2



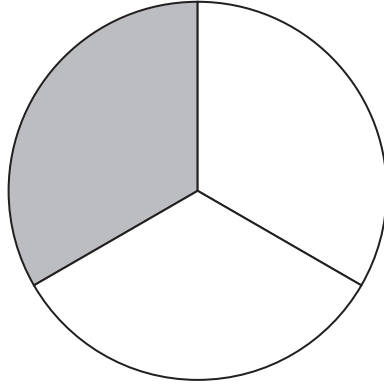
1 mark

2



1 mark

3



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

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

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

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

  
1 mark

4

13



marbles

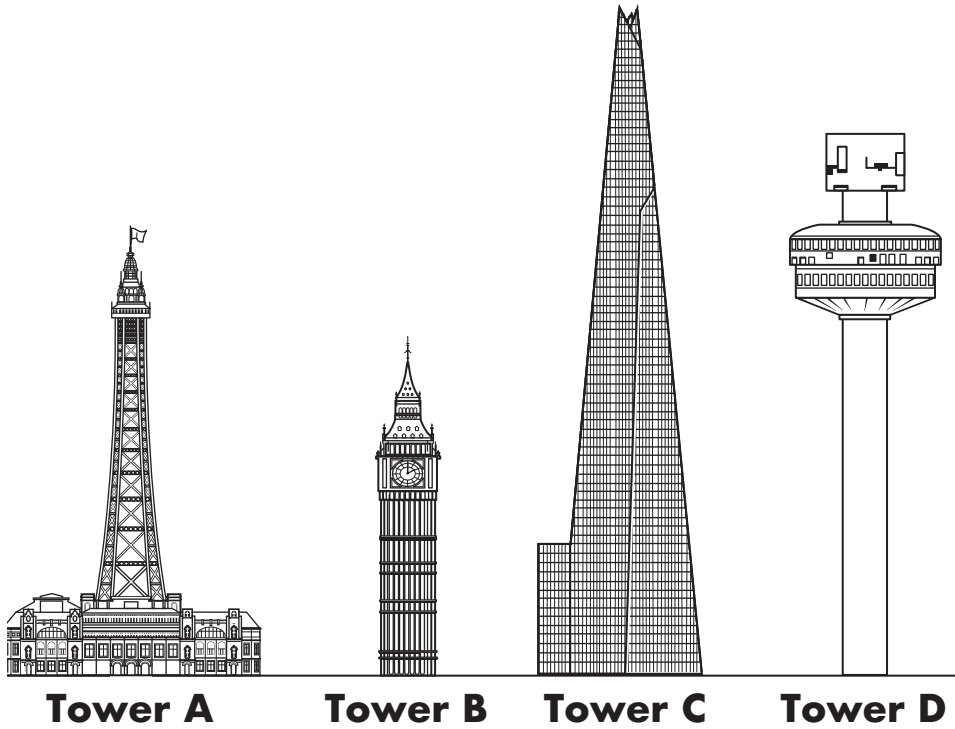


1 mark

5

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

  
1 mark



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

One is done for you.



**tallest**



**D**



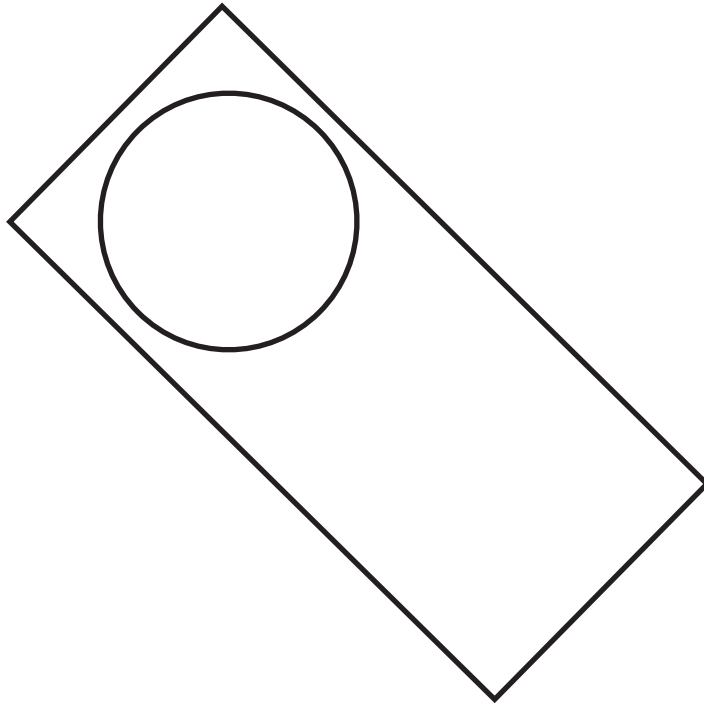
**shortest**



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

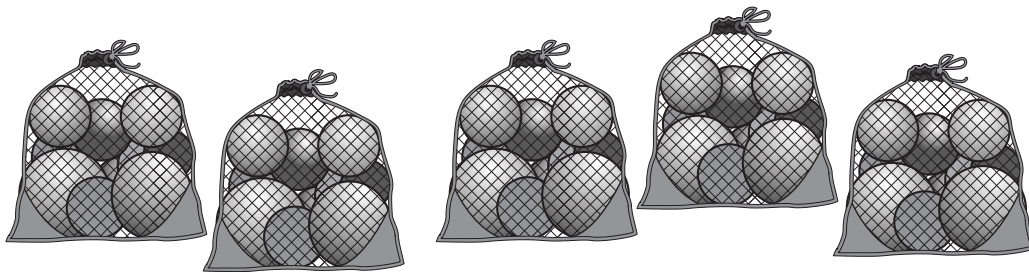
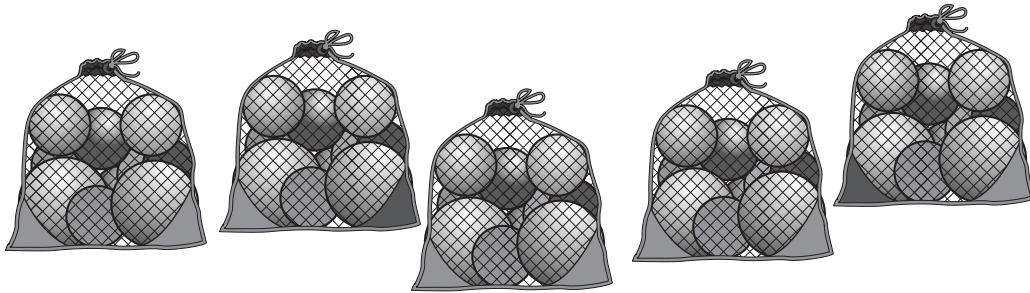
Put a tick below the **fourth black bead**.



1 mark

10

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



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

<input type="text"/>
----------------------

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?



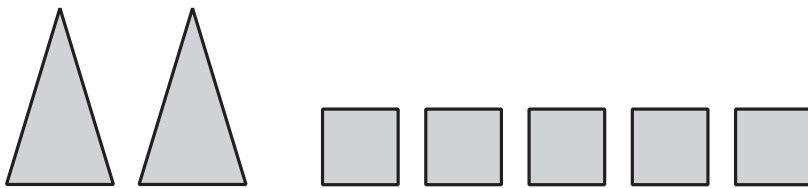
cm



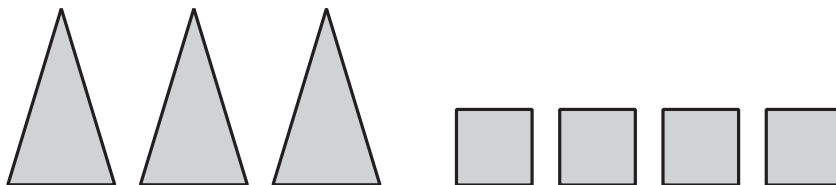
1 mark

13

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



Amy makes a new number.



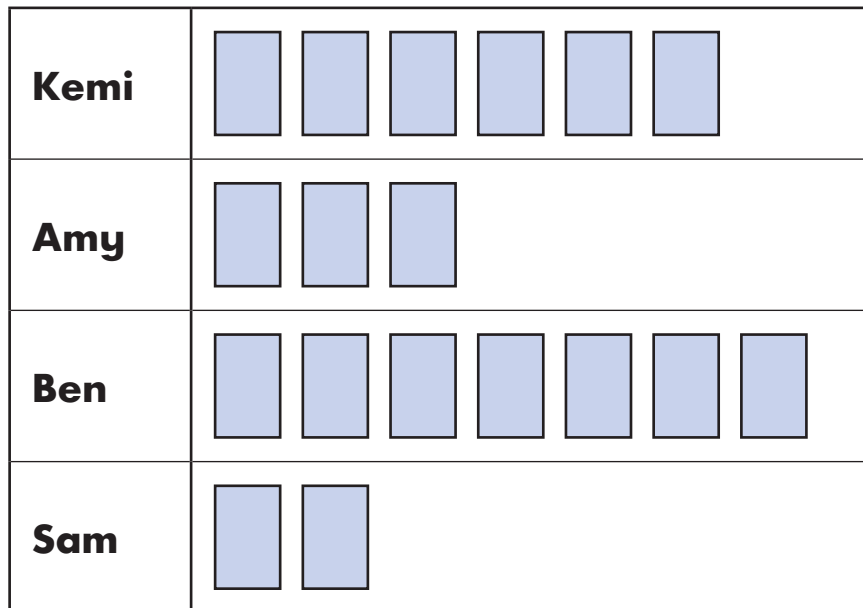
What is Amy's new number?



1 mark

14

The chart shows the number of stickers four children have.

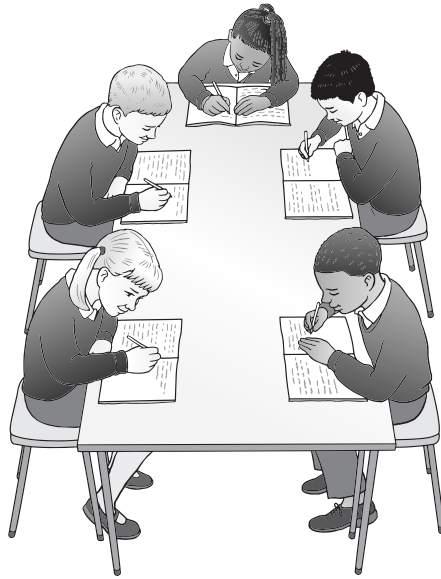


Kemi has more stickers than Sam.

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.

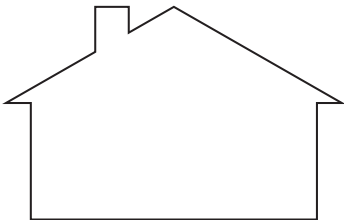
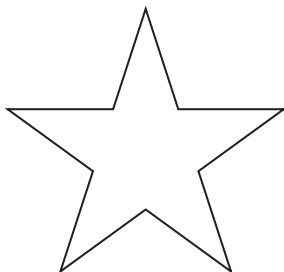
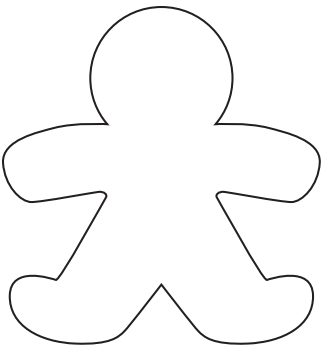
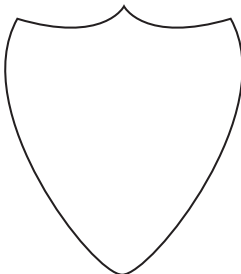
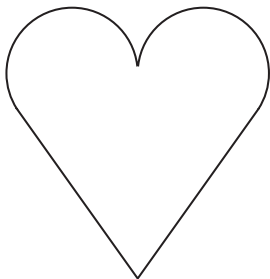
How many fish go in each bowl?



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.

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

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

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

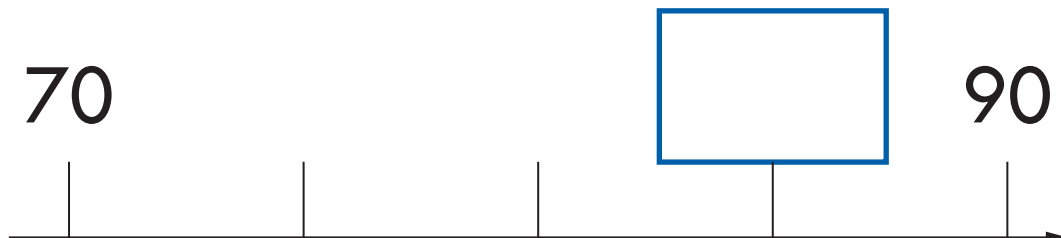


1 mark

20

Here is part of a number line.

Write the correct number in the box.

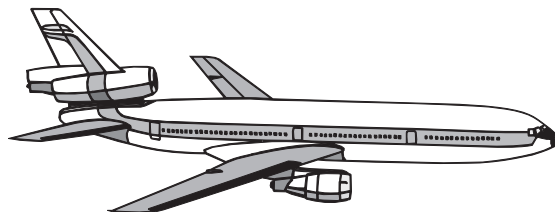


1 mark

21

One plane lands every minute.

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

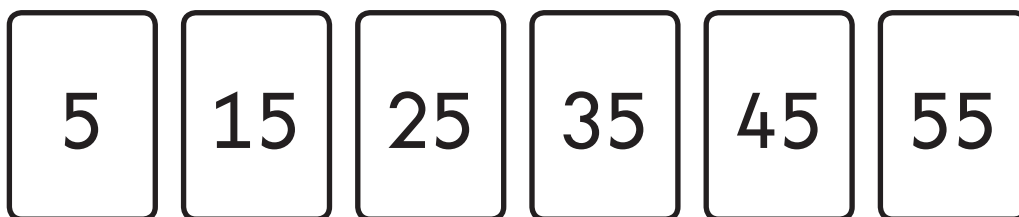


planes

1 mark

22

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



$$\square + \square = 60$$

$$\square + \square = 60$$



2 marks

23

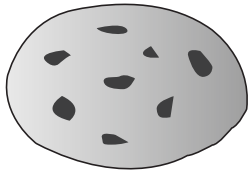
Sam has 55p.

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**?

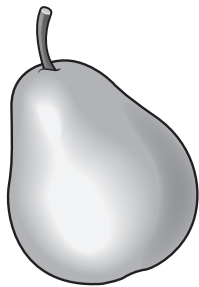
Show  
your  
working

p

2 marks



25



35p

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

She pays with a 50p coin.



How much change does Amy get?

p



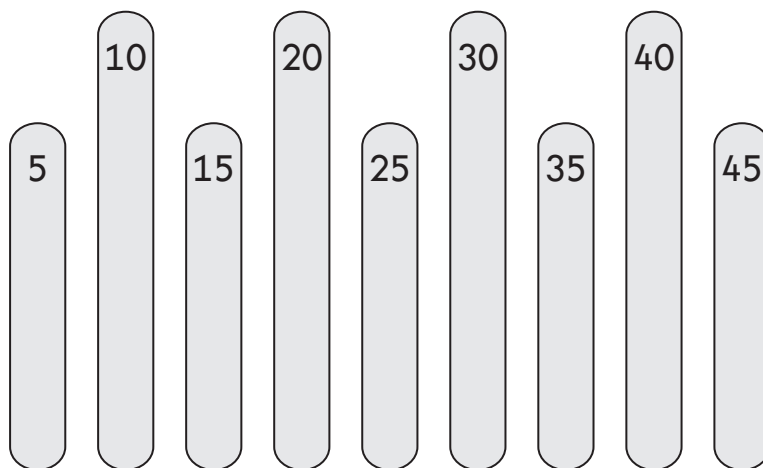
1 mark

26

Kemi makes a pattern with sticks.

Some are long and some are short.

She writes a number pattern on the sticks.



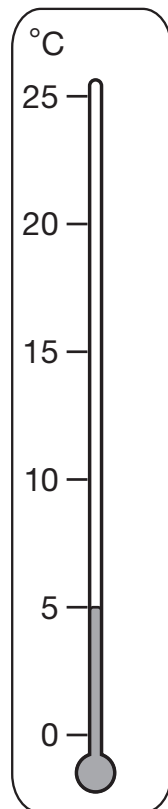
Write the number that will be on the next **short** stick.



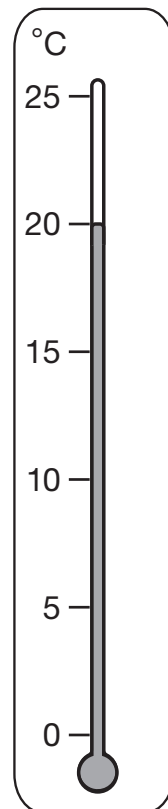
1 mark

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

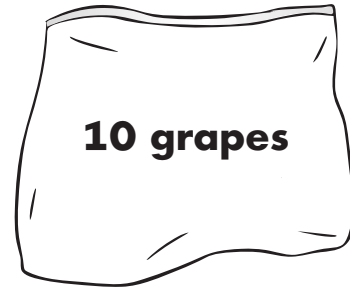
**30**

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.

$$13 + 6 = 10 + \square$$



1 mark

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

$$\square - \square = 2$$



1 mark

End of test

**[BLANK PAGE]**

Please do not write on this page.



2018 key stage 1 mathematics

Paper 2: reasoning

Print version product code: STA/18/7965/p ISBN: 978-1-78644-422-6

Electronic PDF version product code: STA/18/7965/e ISBN: 978-1-78644-638-1

### **For more copies**

Additional printed copies of this booklet are not available. It can be downloaded from [www.gov.uk/government/publications](http://www.gov.uk/government/publications).

© 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.



### **Exceptions – third-party copyright content in test materials**

You must obtain permission from the relevant copyright owners, as listed in the '2018 key stage 1 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).