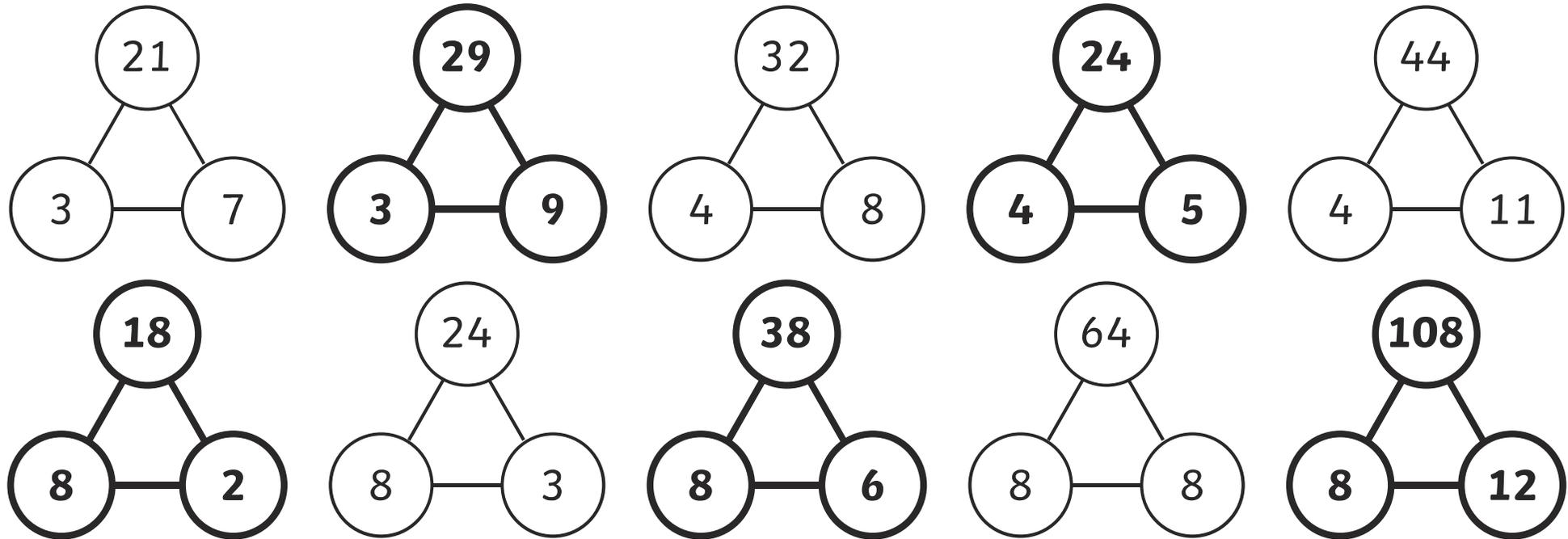A book on multiplication tables provides the first clue. A page in the book contains tables triangles. Check that in each triangle, two of the numbers multiply to make the third.

21 — **3**, **7**

29 — **3**, **9**

32 — **4**, **8**

24 — **4**, **5**

44 — **4**, **11**

18 — **8**, **2**

24 — **8**, **3**

38 — **8**, **6**

64 — **8**, **8**

108 — **8**, **12**

The number of incorrect tables gives the first clue.

This is the **first** digit you need to unlock the door.
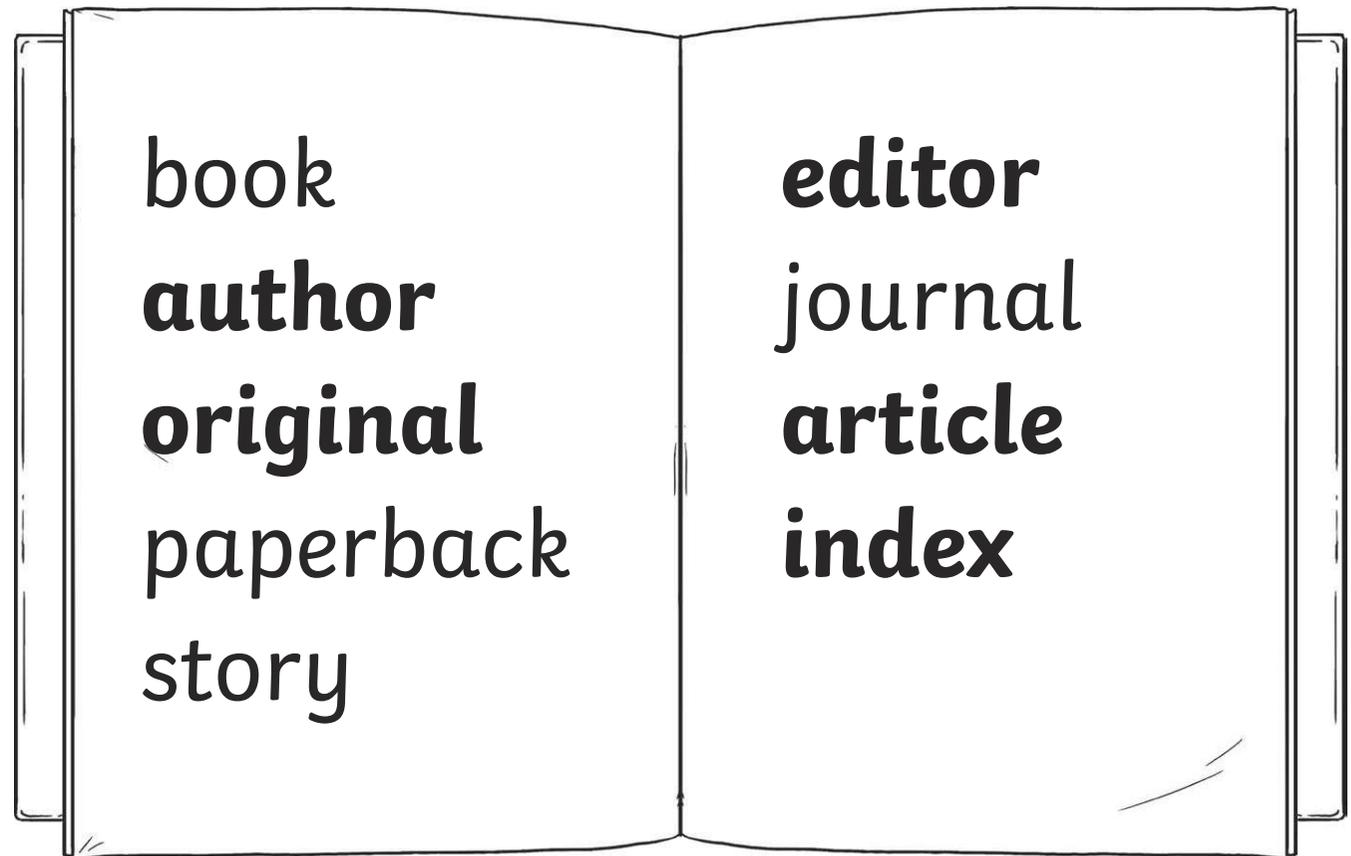
5

In a dictionary, a set of words are listed. Decide if each word would use the determiner 'a' or 'an'.

The number of words using the determiner 'an' gives the second clue.
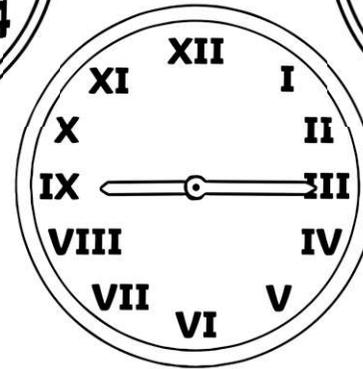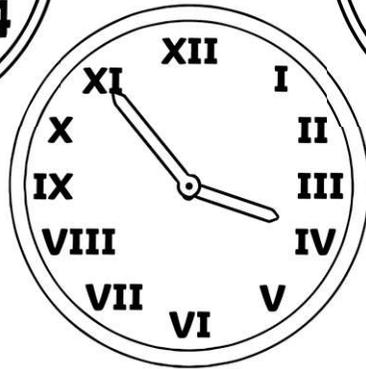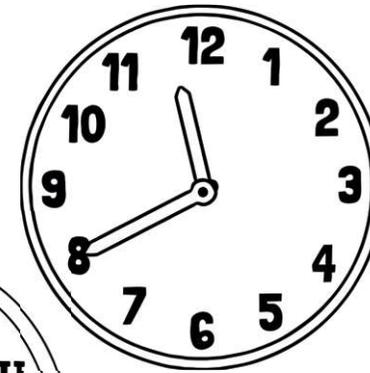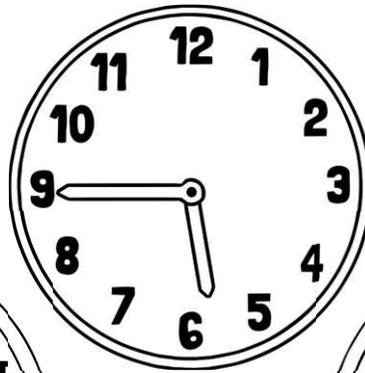
book

author

original

paperback

story

editor

journal

article

index

This is the **second** digit you need to unlock the door.

5

The library has a number of clocks on the wall showing the time in different cities around the world. All the times are between 9a.m. (before midday) and 6p.m. (after midday).
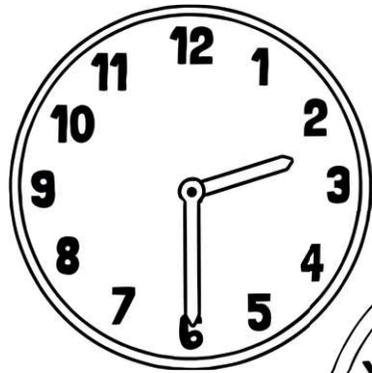
1430 (**8**)

1745 (**17**)

1140 (**6**)

1555 (**16**)

0915 (**15**)

Are all the times after midday? Read each clock in 24-hour time.

Add the digits of each 24 hour time. The smallest total gives the third clue.

This is the **third** digit you need to unlock the door.

6

mistake

disable **un**able

misbehave

disown

disappear

misinform

unwell

discover **un**cover

unhelpful

miscount **dis**count

disinfect

undo

unlucky

unhurt

displeasure

dishearten
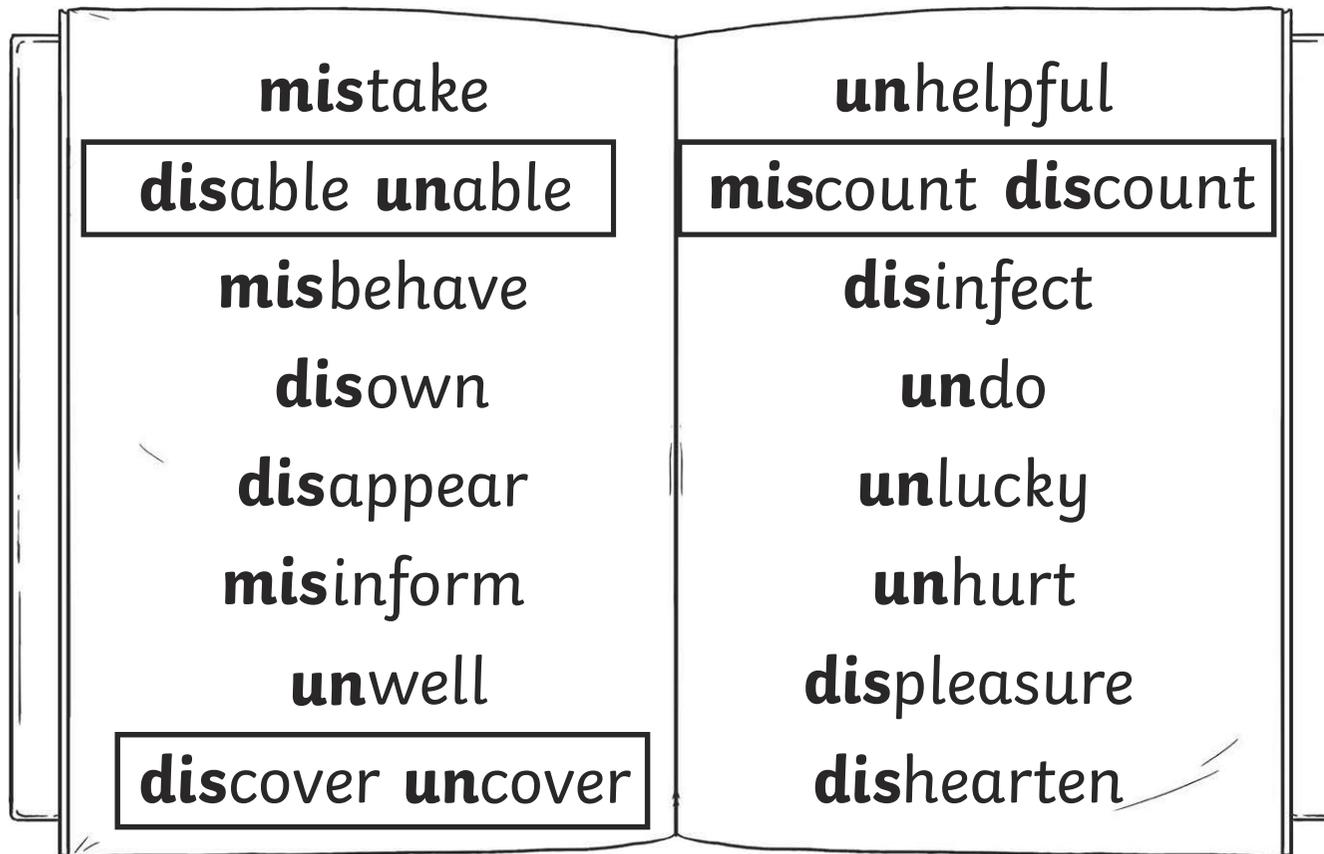
A grammar book provides the fourth clue.

Match the prefixes **dis**, **mis-** or **un-** to the following words. Some words can use two of these prefixes.

The number of words using two of the prefixes un-, dis- or mis- gives the fourth clue.

This is the **fourth** digit you need to unlock the door.

3

Clue number 5 is found on a poster in the library, which shows a set of fractions and pictorial representations of fractions.

Match the fractions and representations. Find the fraction with no representation.

The numerator in the fraction with no equivalent representations gives the fifth clue.

$\frac{1}{3}$

$\frac{7}{10}$

$\frac{1}{2}$

$\frac{2}{5}$

$\frac{3}{8}$

$\frac{4}{5}$

$\frac{5}{6}$

$\frac{3}{4}$

This is the **fifth** digit you need to unlock the door.

2

The children looked carefully at all of the books **because** they needed to find all the clues quickly. There were some books that were out of reach, **although** they looked so dusty it was unlikely they had any clues. One clue was found in a book on fractions found by some girls. Another was on a poster, hidden behind a screen **until** some boys moved it. Eventually, all the clues were found **so** they could open the door. Gratefully, all the children made their way out of the library to safety.

The sixth clue is in an adventure story. How many conjunctions are used?

The number of conjunctions used is the sixth clue.

This is the **sixth** digit you need to unlock the door.

4

There are 60 seconds in a minute.

13:30 is in the morning.

There are 30 days in April.

There are 12 hours between noon and midnight.

There are 100 seconds in 2 minutes.

A leap year has 366 days.

February always has 28 days.

5.30pm is in the afternoon.

The seventh clue appears on a computer screen, which has some sentences about time.

The number of correct sentences gives the seventh clue.
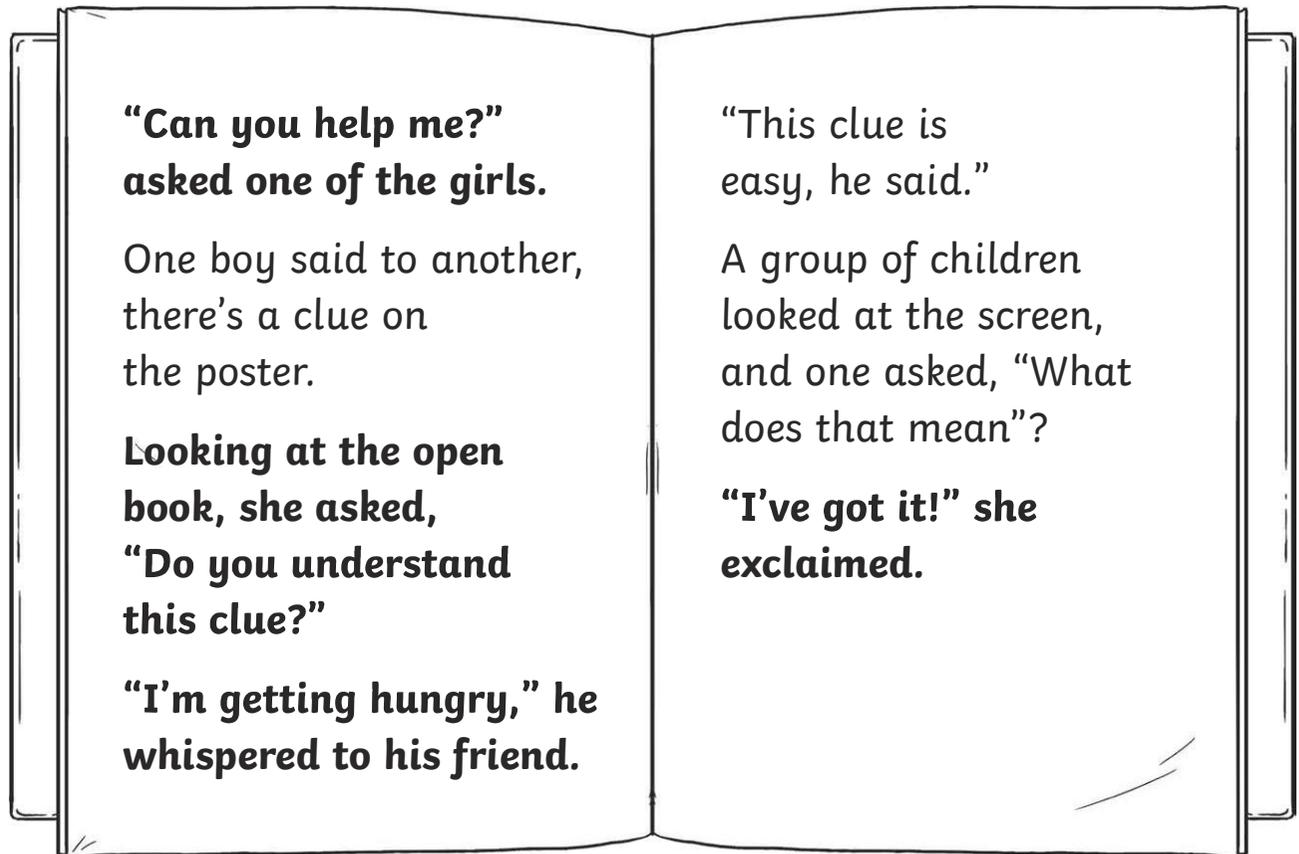
This is the **seventh** digit you need to unlock the door.

5

Clue number 8 is found in a notebook which has a set of sentences with speech.

The number of sentences with correctly punctuated speech gives the final clue.

"Can you help me?" asked one of the girls.

One boy said to another, there's a clue on the poster.

Looking at the open book, she asked, "Do you understand this clue?"

"I'm getting hungry," he whispered to his friend.

"This clue is easy, he said."

A group of children looked at the screen, and one asked, "What does that mean"?

"I've got it!" she exclaimed.

This is the **eighth** digit you need to unlock the door.

4