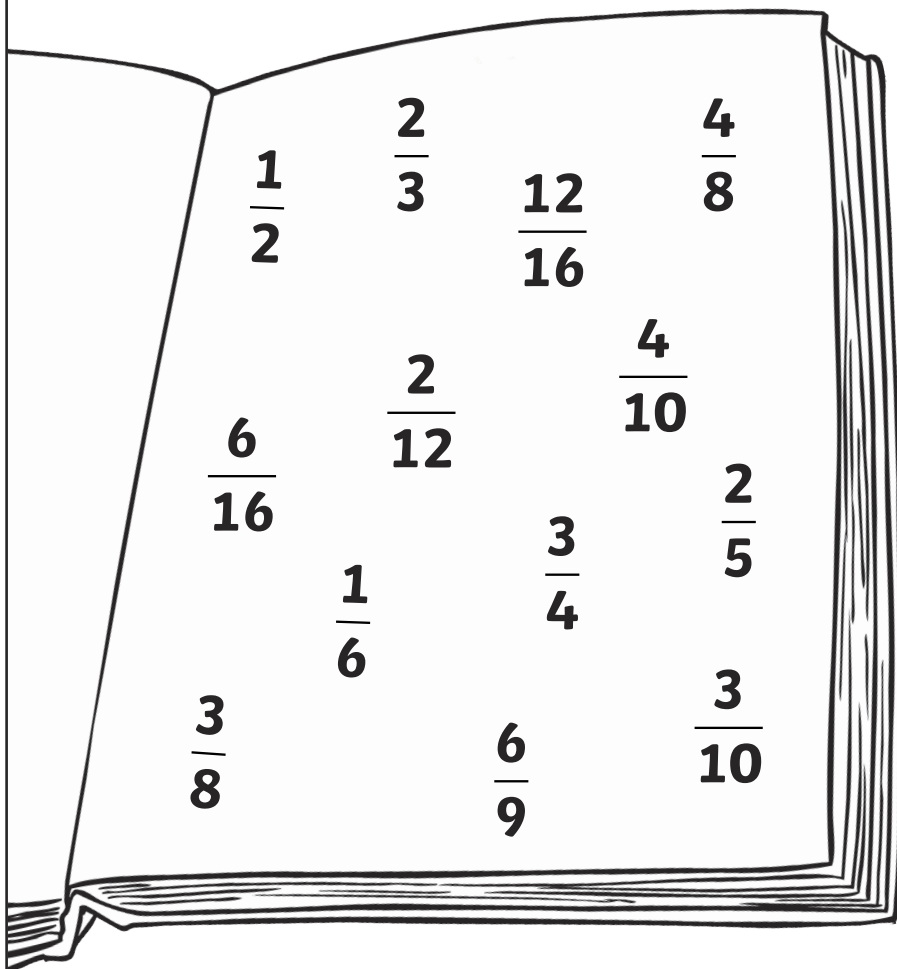


Lost in the Library **Answers**

Clue 1



A book on fractions provides the first clue. A page in the book contains some fractions. There are a number of pairs of equivalent fractions and one fraction will be left over.

The numerator in the fraction left over provides the first clue.

$$\frac{1}{2} = \frac{4}{8}$$

$$\frac{6}{16} = \frac{3}{8}$$

$$\frac{2}{5} = \frac{4}{10}$$

$$\frac{2}{3} = \frac{6}{9}$$

$$\frac{2}{12} = \frac{1}{6}$$

$$\frac{3}{4} = \frac{12}{16}$$

3

10

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

3

Lost in the Library **Answers**

Clue 2

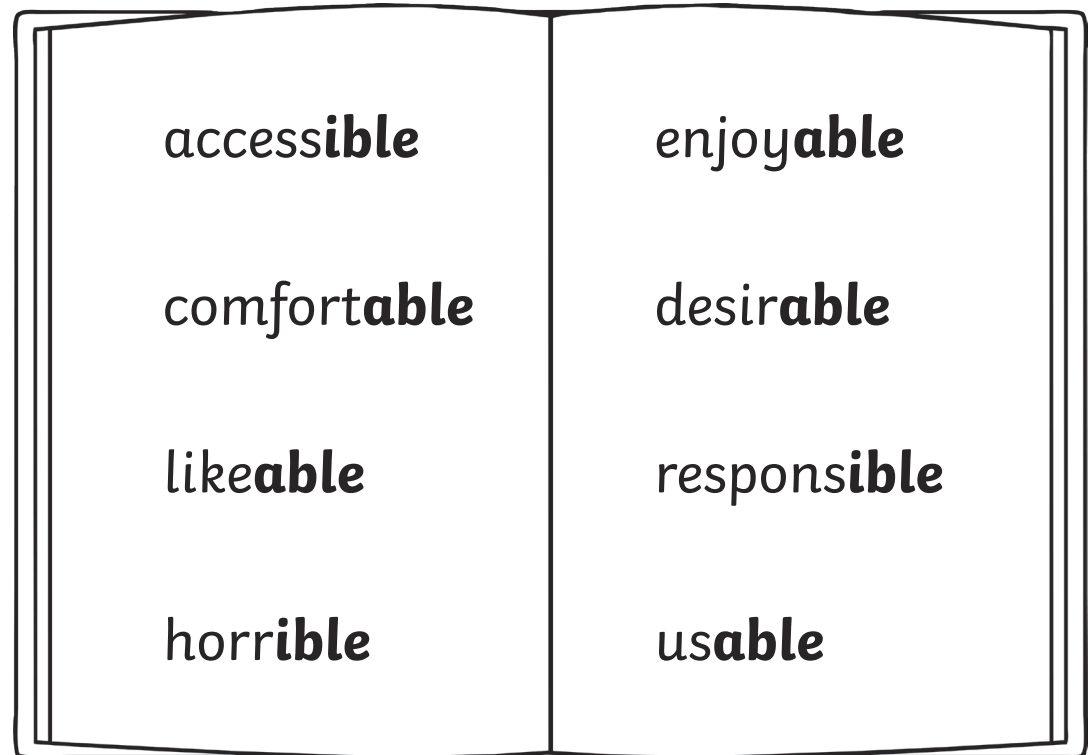
In a dictionary, a set of verbs are listed. Convert each word using the suffix **-able** or **-ible**.
The number of words using the suffix **-able** provides the second clue.

-able

5

-ible

3



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

5

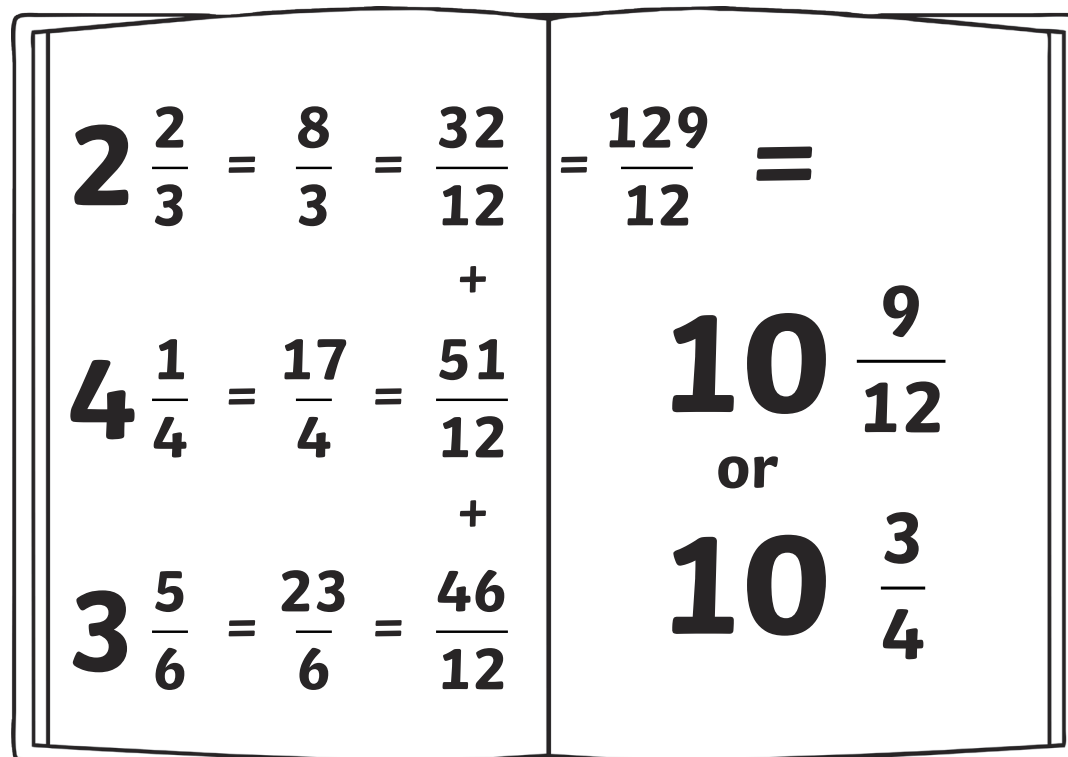
Lost in the Library **Answers**

Clue 3

A second page in the book on fractions gives the third clue:

There are some mixed numbers. To find the required digit, convert the mixed numbers to improper fractions, convert to equivalent fractions with the same denominator, add together and convert back to a mixed number.

The digit that appears in the ones place of the whole number gives the third clue.



The left page of the book shows the following calculations:

$$2\frac{2}{3} = \frac{8}{3} = \frac{32}{12}$$
$$4\frac{1}{4} = \frac{17}{4} = \frac{51}{12}$$
$$3\frac{5}{6} = \frac{23}{6} = \frac{46}{12}$$

The right page shows the sum of these fractions:

$$\frac{32}{12} + \frac{51}{12} + \frac{46}{12} = \frac{129}{12} = 10\frac{9}{12}$$

or

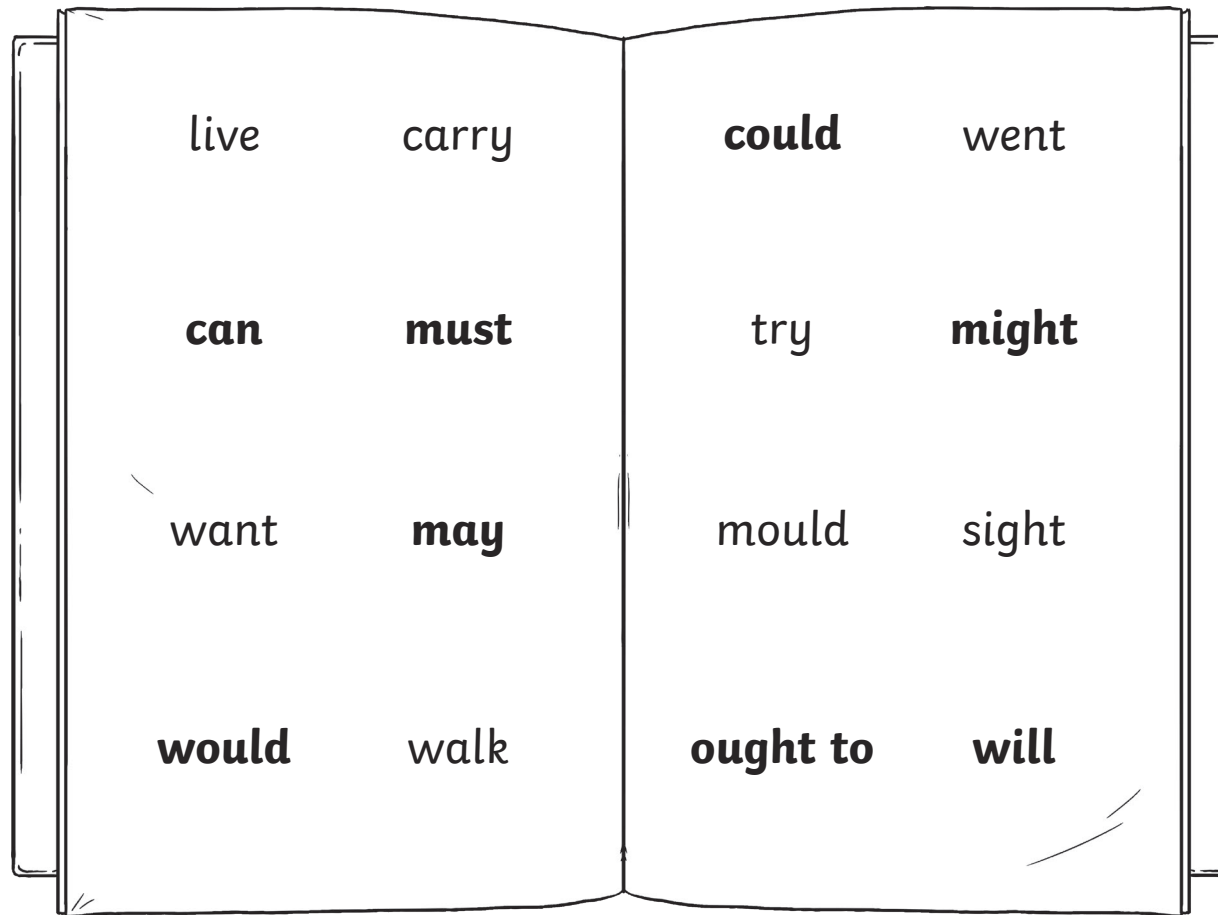
$$10\frac{3}{4}$$

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

0

Lost in the Library **Answers**

Clue 4



A grammar book provides the fourth clue.

How many of the following words are modal verbs?

could **can** **must**

might **may** **would**

ought to **will**

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

8

Lost in the Library **Answers**

Clue 5

The library has a shelf of books that have been purchased at a discount. Alongside is a set of fractions. Match the percentage discounts to the fractions. One percentage has no matching fraction.

15% off £5

25% off £2.80

30% off £3.50

20% off £3.35

75% off £3.99

$\frac{1}{4}$

$\frac{3}{10}$

50% off £4.50

$\frac{1}{2}$

$\frac{3}{4}$

$\frac{1}{5}$

Find the digit in the tens place of the percentage with no matching fraction.

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

1

Lost in the Library **Answers**

Clue 6

The children explored the library carefully, looking for clues that would **probably** help them escape. They **obviously** knew they had to find the clues quickly, so they would not be stuck in the library all night. **Perhaps** they should split up and work in

small groups or as individuals. They searched each shelf systematically. They would **surely** find the clues soon!

The sixth clue is in an adventure story. How many adverbs of possibility are in this paragraph?

The number of adverbs of possibility is the sixth clue.

probably

obviously

Perhaps

surely

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

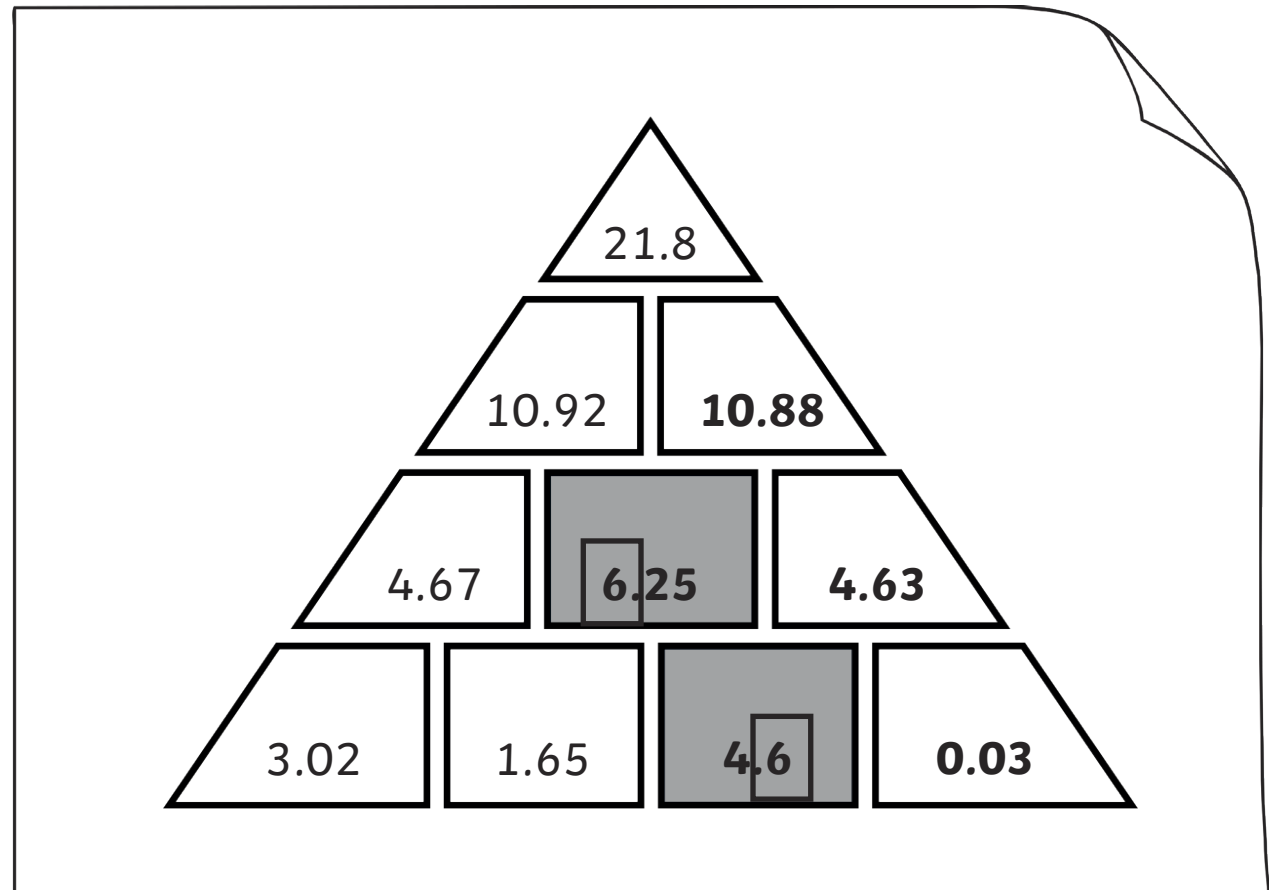
4

Lost in the Library **Answers**

Clue 7

Clue number 7 is found on a poster in the library, which shows a pyramid with the following numbers. Look at the relationship between the three decimal fractions in the bottom left hand corner, and use that to complete the pyramid.

Find the common digit in the shaded boxes for the seventh clue.



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

6

Lost in the Library **Answers**

Clue 8

Clue number 8 is found in a notebook which has a set of words and a set of prefixes.

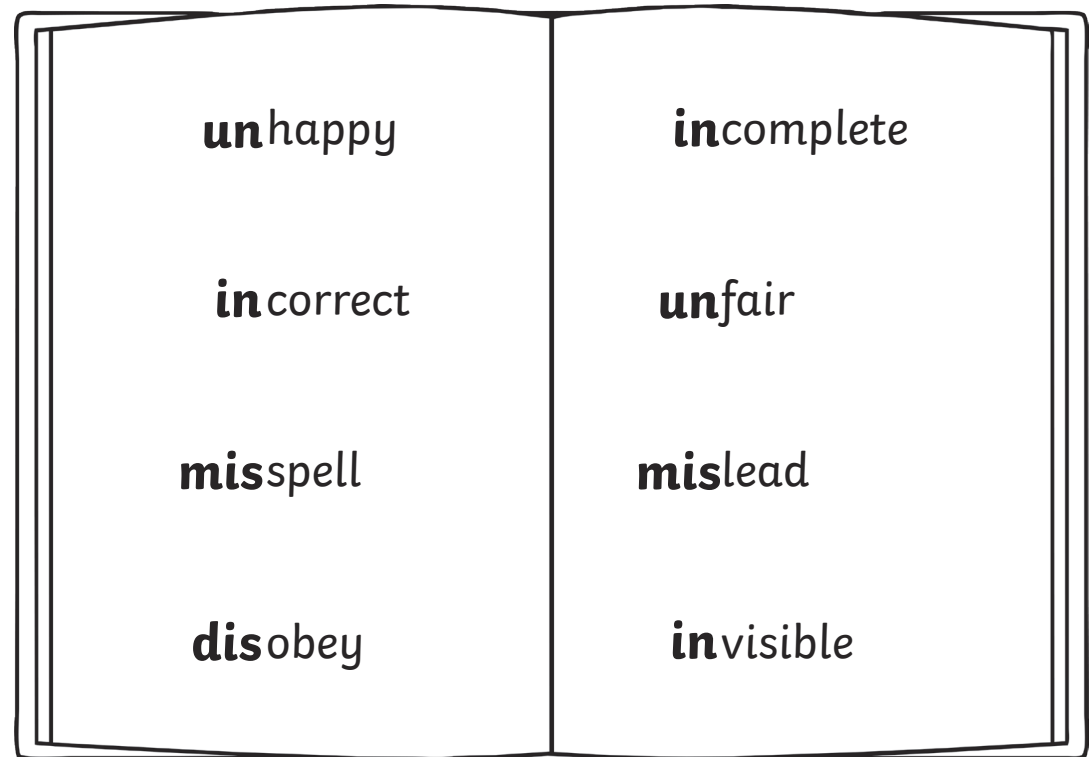
Match each word to the correct prefix:

un- in- dis- mis-

Add the number of words using the prefix un- and in- and subtract the number of words using the dis- prefix.

The answer gives the eighth clue.

$$\begin{array}{c} \text{un-} \\ \text{in-} \end{array} \begin{array}{|c|} \hline 5 \\ \hline \end{array} - \begin{array}{c} \text{dis-} \\ \text{mis-} \end{array} \begin{array}{|c|} \hline 1 \\ \hline \end{array} = \begin{array}{|c|} \hline 4 \\ \hline \end{array}$$

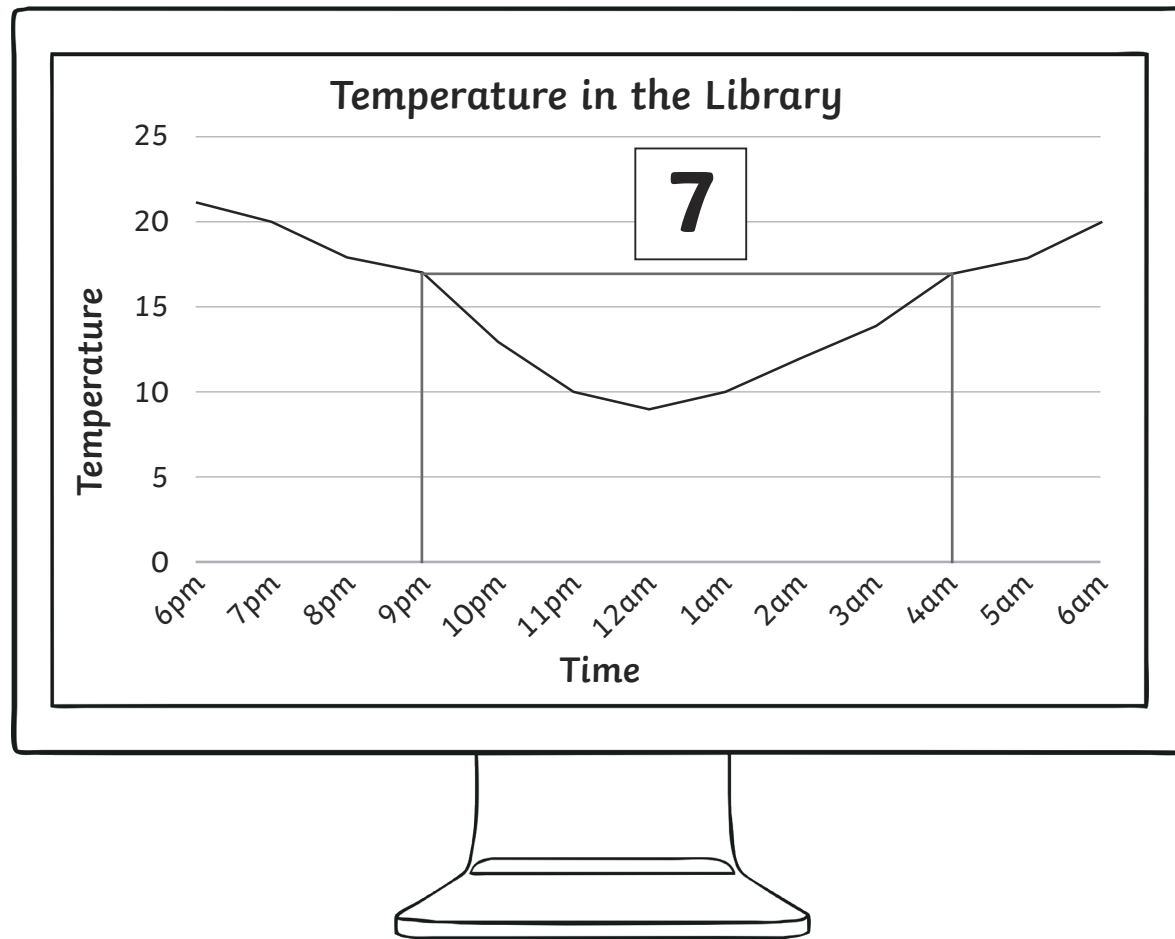


This is the **eighth** digit you need to unlock the door.

4

Lost in the Library **Answers**

Clue 9



The ninth clue appears on a computer screen, which shows a line graph. The chart shows the temperature in the library overnight.

Find the number of hours between the two times when the temperature was 17°C.

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

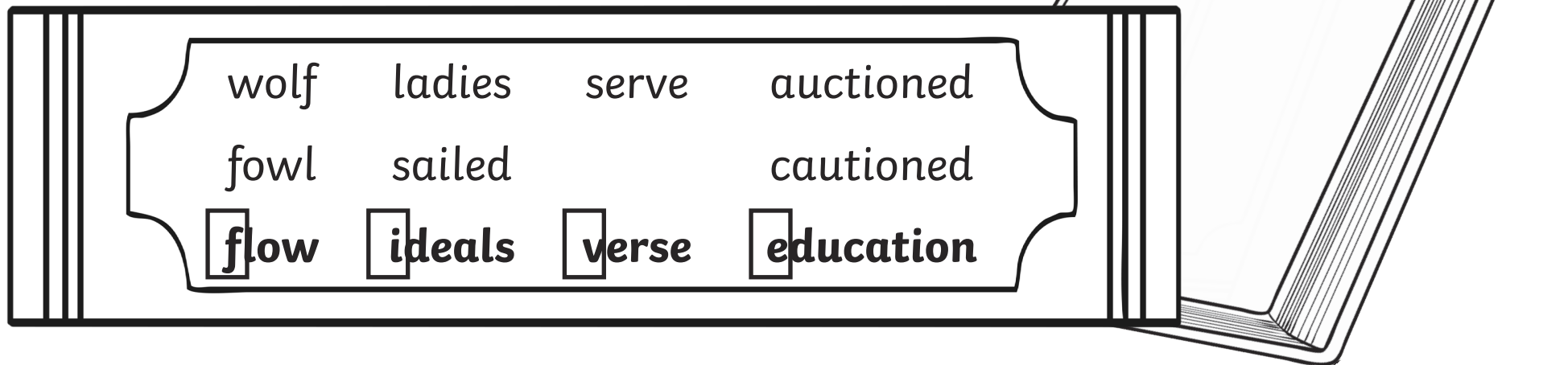
7

Lost in the Library **Answers**

Clue 10

The final clue is found on a bookmark with a list of anagrams.
(Anagrams are words where the letters are mixed up, usually to make a new word or words.)

Solve these anagrams. The first letter of each answer gives the last number.



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

5