## Secret Garden

## Think

- Where is this?
- What is on this side of the gate?
- What is on the other side of the gate?
- Who owns this garden?


## Respond

You are staying at an elderly relative's house for the weekend and have never stayed there before. In the garden, you discover a mysterious gate in the wall. You open it very slowly...

## Solve

You are building a walled garden. The wall must be a specific height. If you have enough bricks to build a 40-metre-long wall, what is the maximum area of land you can enclose?


## Discuss

What are secrets? Is it good to keep secrets? Can keeping a secret sometimes be harmful to you or another person? What kind of secrets are good? Would it be a good or bad thing to tell someone they are having a surprise party planned for them? How do we know which secrets to share and which to keep? Have you ever had a secret? Have you ever shared someone else's secret?

## Reimagine

Draw what is on the other side of this garden gate. Will it be a pleasant surprise, or something more sinister?

## Discover

Fact: The book The Secret Garden by Frances Hodgson Burnett was first published in 1911 and tells the story of a young girl who moves to Yorkshire after losing her parents in India. Her life changes, as does the life of the cousin she meets that she doesn't initially know is living in the same house.

Question: Who was Frances Hodgson Burnett? When was she born? Where did she live? Did she write any other children's books? What can you find out about the author and her life? Write a short biography and present what you have found out.

## Secret Garden Answers

## What is the maximum area of land you can enclose?

The maximum area that can be enclosed in a quadrilateral is in a square:
length $\times$ width $=$ area
$10 \times 10=100 \mathrm{~m}^{2}$


10 m

The maximum area altogether is if the wall is built in a circle
circumference $\div(2 \times \pi)=$ radius
$40 \div(2 \times \pi)=6.36 \mathrm{~m}$
$\Pi \times$ radius $^{2}=$ area
$\Pi \times 6.36^{2}=127.3 \mathrm{~m}^{2}$


