



Plant detectives

The story

Cosmic is walking along the street to meet Gem at the shops. On the way he notices a plant sticking out of a crack in the pavement. How exciting! Plants usually grow in gardens, not in pavements. How did the plant get there? He thinks that perhaps someone dropped it as they walked along, but who?

Cosmic runs to ask Gem to help him solve the mystery. She's bound to know the answer. Cosmic explains what he has found, but Gem isn't sure how the plant got there either. She wonders if the plant might have grown from a seed under the pavement, but who could have planted the seed?

Cosmic and Gem know they have to look for clues to solve a mystery. They can't wait to start searching. Aunt Stella loves plants, so she comes to help them. But where will they begin? Can you be plant detectives and help to find clues about plants that grow in unusual places?

What do I do?

1. Follow the instructions on the ACTIVITY CARD. Make sure you give the children time to talk when this symbol is shown. ▶
2. Read the story. Get the children to talk to each other about the questions and the ideas in the Concept Cartoon.
3. Talk with the children about where they can search for plants. Encourage them to think of unusual places to look.
4. Discuss with the children how they will record their findings and make sure everyone stays safe.
5. Children can collect samples, take photographs or create drawings.
6. Warn children not to eat any part of the plants that they find.
7. Encourage children to think how the plants they find have got there.
8. When the children finish hunting let them share their clues about what they have discovered.
9. Can they decide how the plants got to their locations?
10. There are follow up activities for children who have finished or who want to do more finding out at home and earn a bonus sticker.



★ Handy hints

Things to look out for

- ★ The plants that are found during the hunt will vary depending on the time of year. You can repeat this activity in different seasons and find out how the plants change.

Safety

- ★ Follow the organisation's guidelines for outdoor work.
- ★ Children must not put any plants in their mouths.
- ★ Ensure they wash their hands when they have finished.

Background information

- ★ Most children will think that plants need to be planted in soil to grow. They may not be aware that plants (including tree seedlings) can grow in many places where there is little or no soil – for example, between bricks and paving stones, on walls, in gutters, in cracks in the bark of trees and in water. Some plants are adapted to survive in difficult conditions. For example, rosebay willowherb and poppy are plants that grow readily in very sparse conditions.
- ★ Plants get to these locations in various ways, including wind dispersal and being carried by birds or other animals. Some may spread from other areas by plants growing sideways stems (stolons and rhizomes).
- ★ During the plant hunt the children may also find mosses, lichen and fungi. All of these are classified separately from the common plants (such as trees, flowers and grasses); lichens and fungi are not actually plants.

Resources

- ★ Access to a safe outdoor environment, ideally with a variety of surfaces such as brick walls, paving, concrete, grass
- ★ Magnifying glass or digital microscope (optional)
- ★ Identification guides
- ★ Camera(s) or drawing equipment

How can children share their ideas?

- ★ Children can use digital cameras or drawings. If you provide a map or plan of the area, they can add stickers or their images to record where plants were found. Confident children may be able to make their own maps or plans.

