

# 1 Plants are living things

## > 1.1 Alive or not alive?

We are going to:

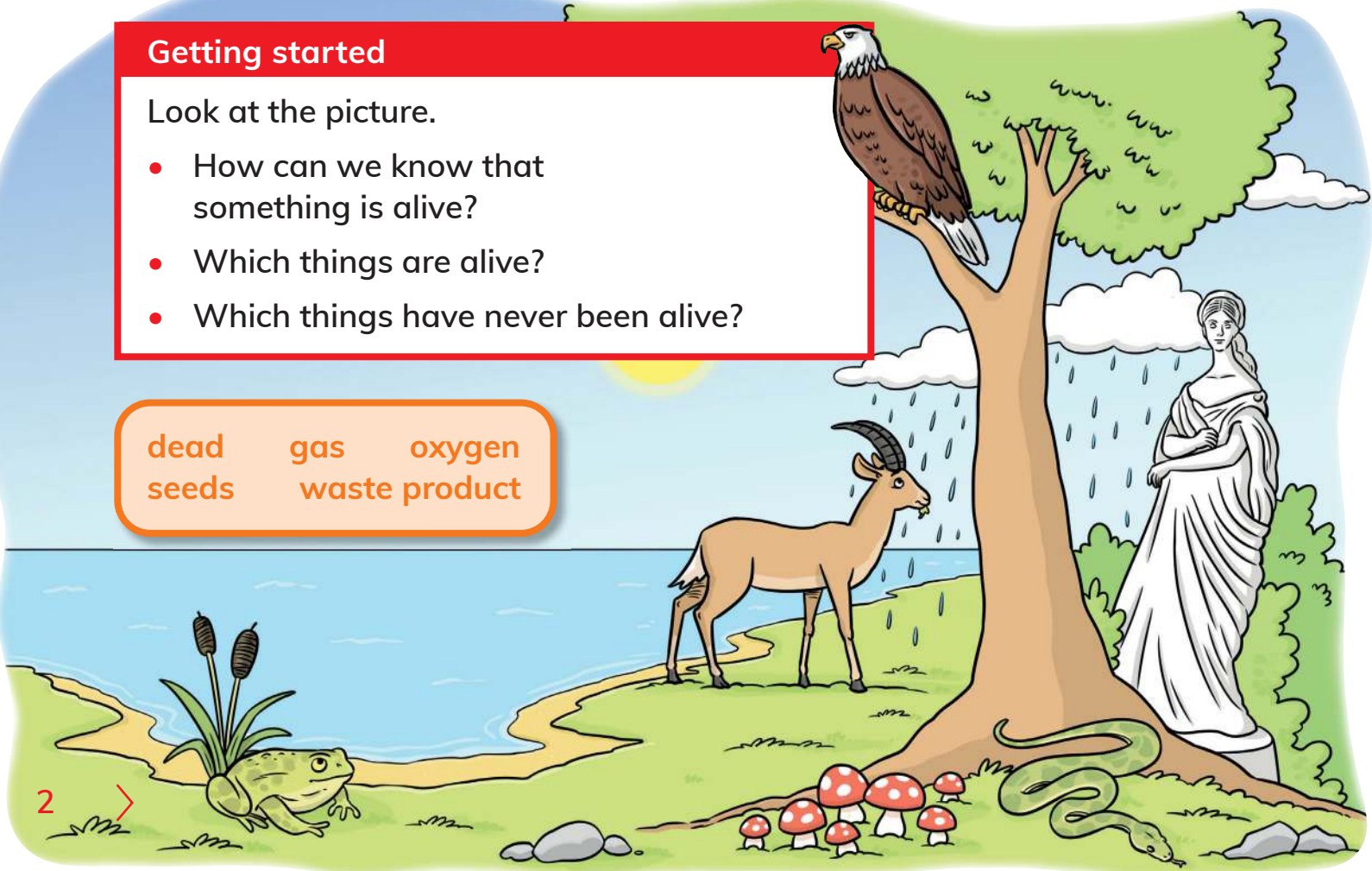
- find differences between things that are living, were once alive and that have never lived
- use seven rules to see if something is alive or not
- learn about scientific enquiry
- learn how to classify things
- collect and record observations.

### Getting started

Look at the picture.

- How can we know that something is alive?
- Which things are alive?
- Which things have never been alive?

dead seeds    gas    oxygen  
 waste product



## 1.1 Alive or not alive?

## Plants grow

This young plant has just started growing. It needs water and sunlight. The young plant can feel light and it grows towards the light.

The young plant is alive.

The plant makes the **gas** called **oxygen**.

Oxygen is a **waste product** of plants. Plants get rid of oxygen into the air. Oxygen is one of the gases in the air.

The oxygen in air is very important because it is a gas which all animals need to live.

When the plant is older it will make **seeds**. New plants will grow from the seeds.

### Questions

- 1 Are all plants and animals alive?
- 2 Is every part of a plant alive?
- 3 How could we care for a plant that is growing in the classroom?

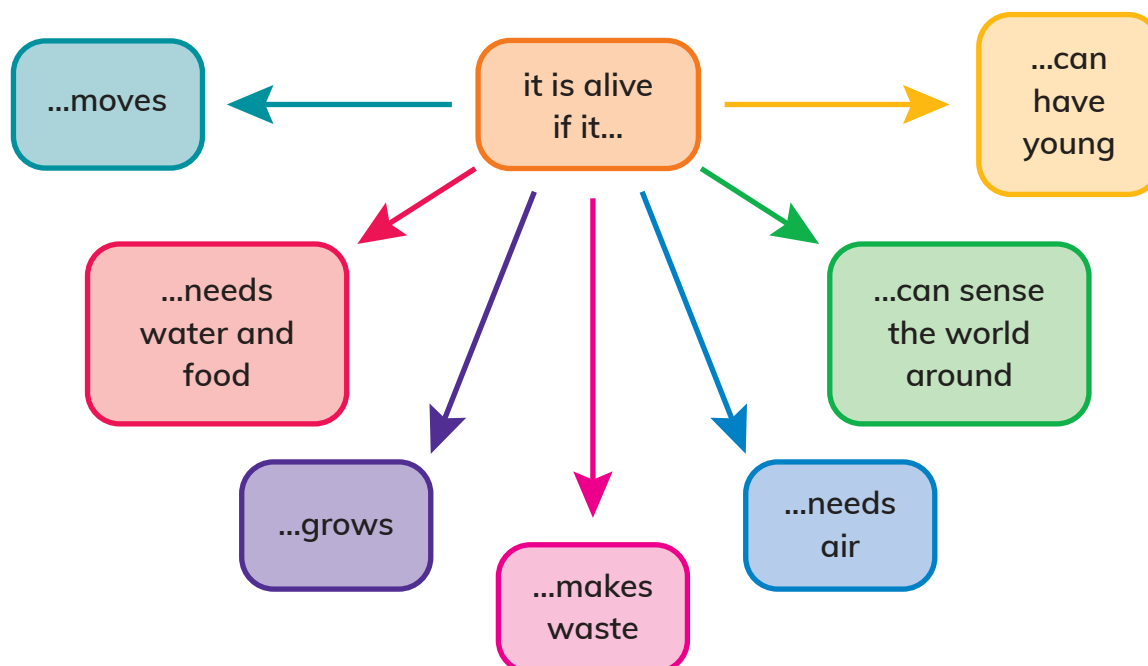


## 1 Plants are living things

# Seven rules: alive or not alive?

Each day you see animals and plants that are alive. You also see materials like wood and straw that were once part of a living thing. Other materials, like sand, have never been alive.

Try using these seven rules to see if something is alive. Living things do all seven!



### Think like a scientist 1

#### Alive or not?

You will need: a plant, a bare branch, a plastic plant, a block of wood, a piece of rock

With a friend talk about these things. Describe each one. What is it made of? Where did it come from? Is it alive or not alive? Use the seven rules to help you.

1.1 Alive or not alive?

Continued

Record what you think in a table.

This was a science enquiry because you were identifying and classifying things.

Object	What is it made of?	Is it alive or not alive?
A rock	rock	not alive

How am I doing?

Show other people your table. Do they agree with you?

Think like a scientist 2

Alive, once alive or never alive?

You will need: access to the school grounds, pencil

Look around the classroom and in the school grounds. Copy and complete this table to record things that:

- are alive now
- were once alive
- have never been alive.

The seven rules will help you.

Object	Once was alive	Alive	Not alive	Because...
two plants in the school library		✓		... they grow, need water, air and food, make waste and can sense the world

This activity was a science enquiry because you were identifying and classifying things.



## 1 Plants are living things



### When do leaves die?

Sometimes it is hard to say if something is alive or not.

Are these leaves alive?

The plant is alive so all the leaves on the plant are alive.

Some leaves have fallen off. They are not part of a living thing.

Some dead leaves on the ground are yellow and dry.

Even the green leaves on the ground are now dead because they are not part of a living thing.



## 1.1 Alive or not alive?

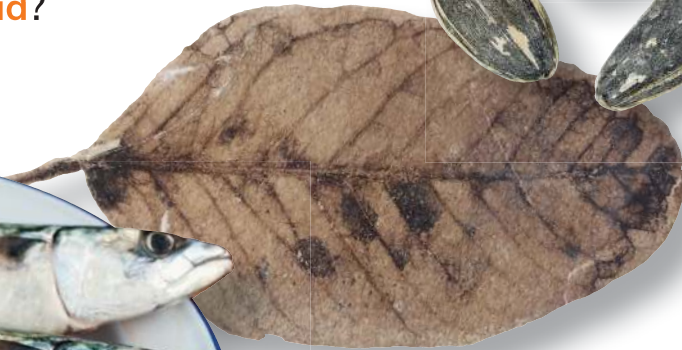
## Think like a scientist 3

## Are these things alive?

You will need: a branch, a block of wood, photos of chicken, meat and fish, seeds, a freshly picked fruit, a fossil

**Wash your hands after handling the materials.**

Scientists identify and classify things.  
 Scientists do this to see patterns and ask questions.  
 Look at these photos and the things listed above.  
 Are they alive? Are they **dead**?  
 Were they never alive?



Think about each thing.

Does it or did it:

- grow?
- move?
- need water and food?
- make waste?
- have young?
- sense the world around?

## 1 Plants are living things

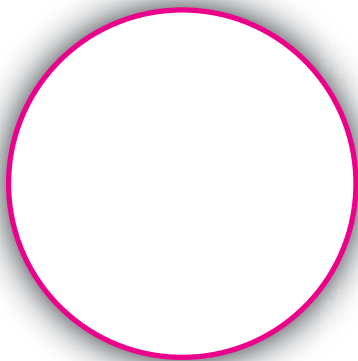
### Continued

Group the things in one of these three groups.

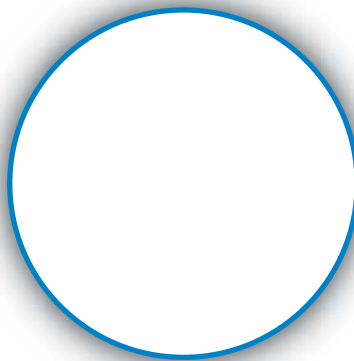
Copy three circles like these and label them.

Draw each thing and write its name in the right circle.

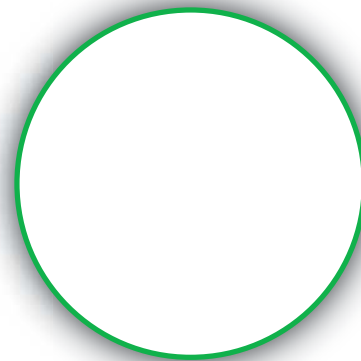
once living  
but not now



living



never  
alive



This activity was a science enquiry because you were identifying and classifying things.

### Activity

#### Making posters

Make two posters using the headings shown on the right. Use drawings and words in your posters.

Things that are alive...

We know they are  
alive because...

Things that are not  
alive...

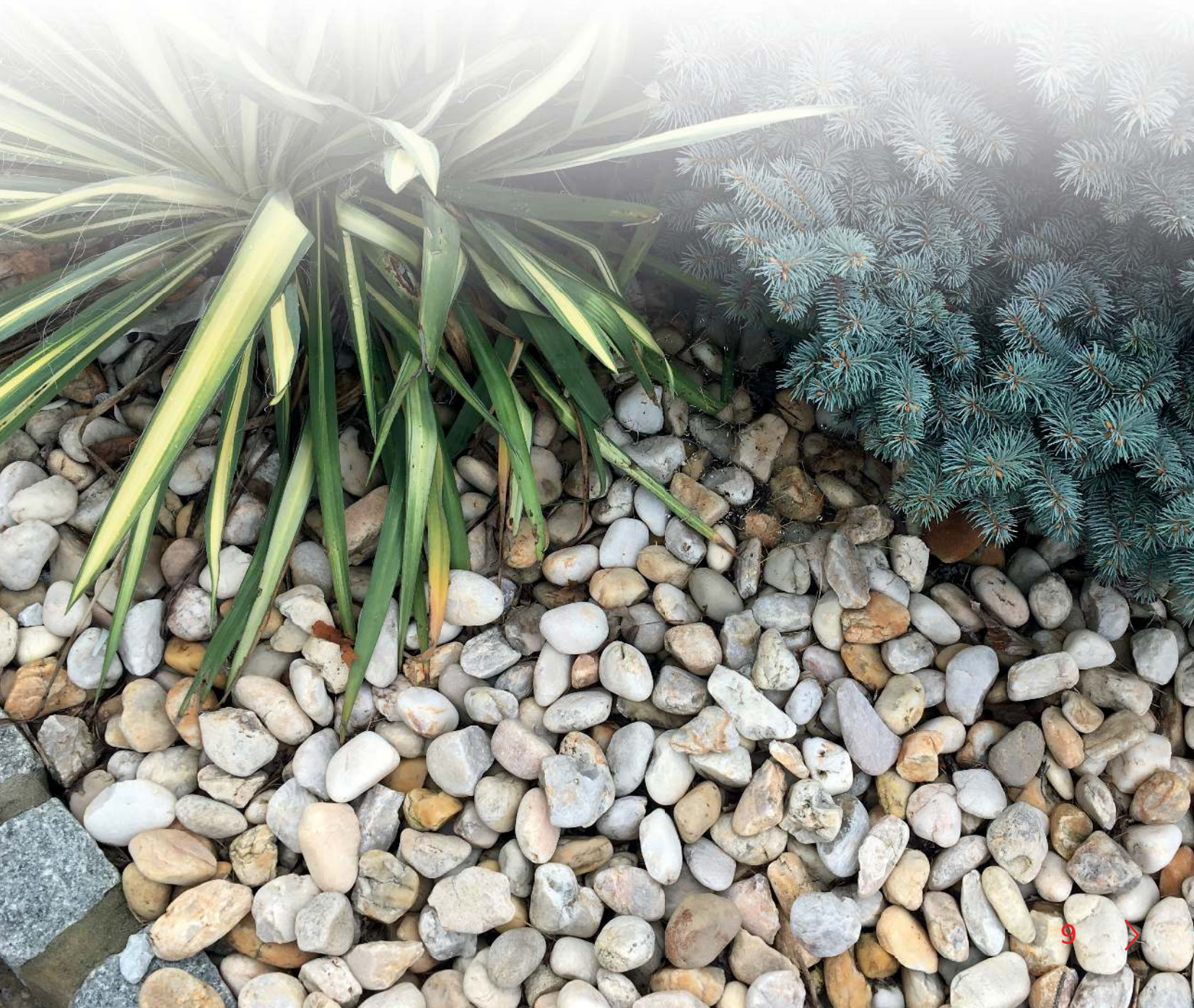
We know they are  
not alive because...



## 1.1 Alive or not alive?

### Look what I can do!

- I can find differences between things that are living, things that were once alive and things that have never lived.
- I can use seven rules to see if something is alive or not.
- I know about the types of scientific enquiry.
- I can classify things.
- I can collect and record observations.



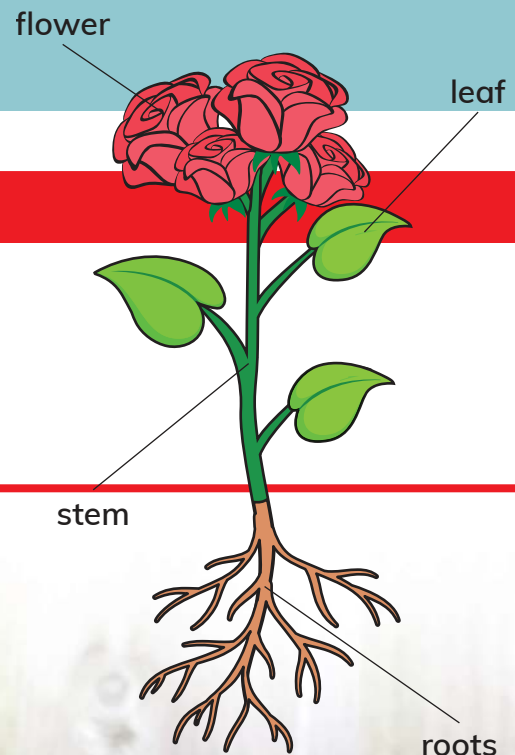


## 1 Plants are living things

# > 1.2 Plant parts

### We are going to:

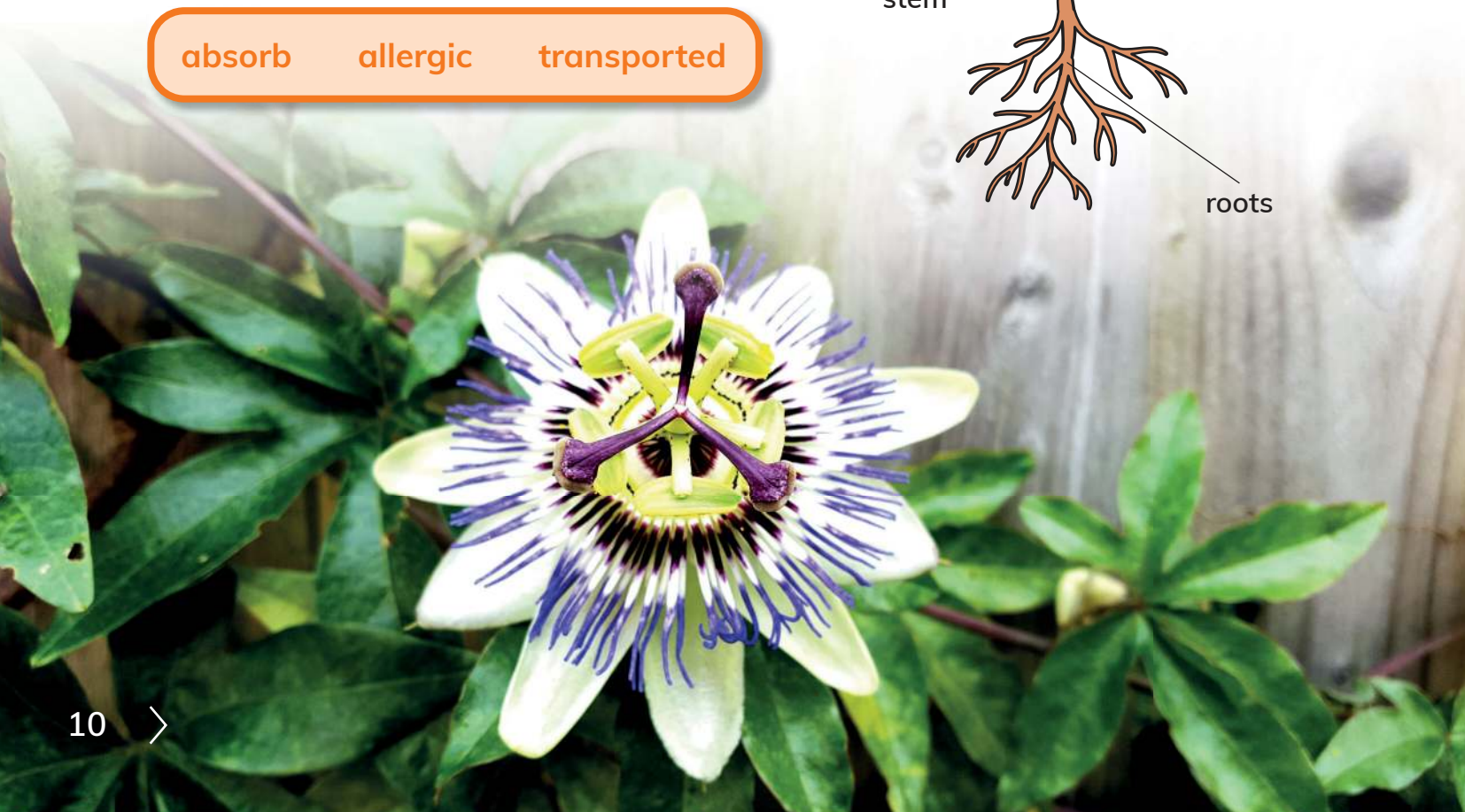
- say what the leaf, flower, stem and root of a plant do
- make a model of a plant
- draw some plant roots
- do some research about leaves
- stay safe while doing practical work.



### Getting started

- What do the parts of this plant do?
- The plant has one main stem. Why does the plant have many roots, leaves and flowers?

absorb    allergic    transported



## 1.2 Plant parts

# Roots, stems, leaves and flowers

Some plants are very small and some are very big.  
Most plants begin life as seeds which then grow.

