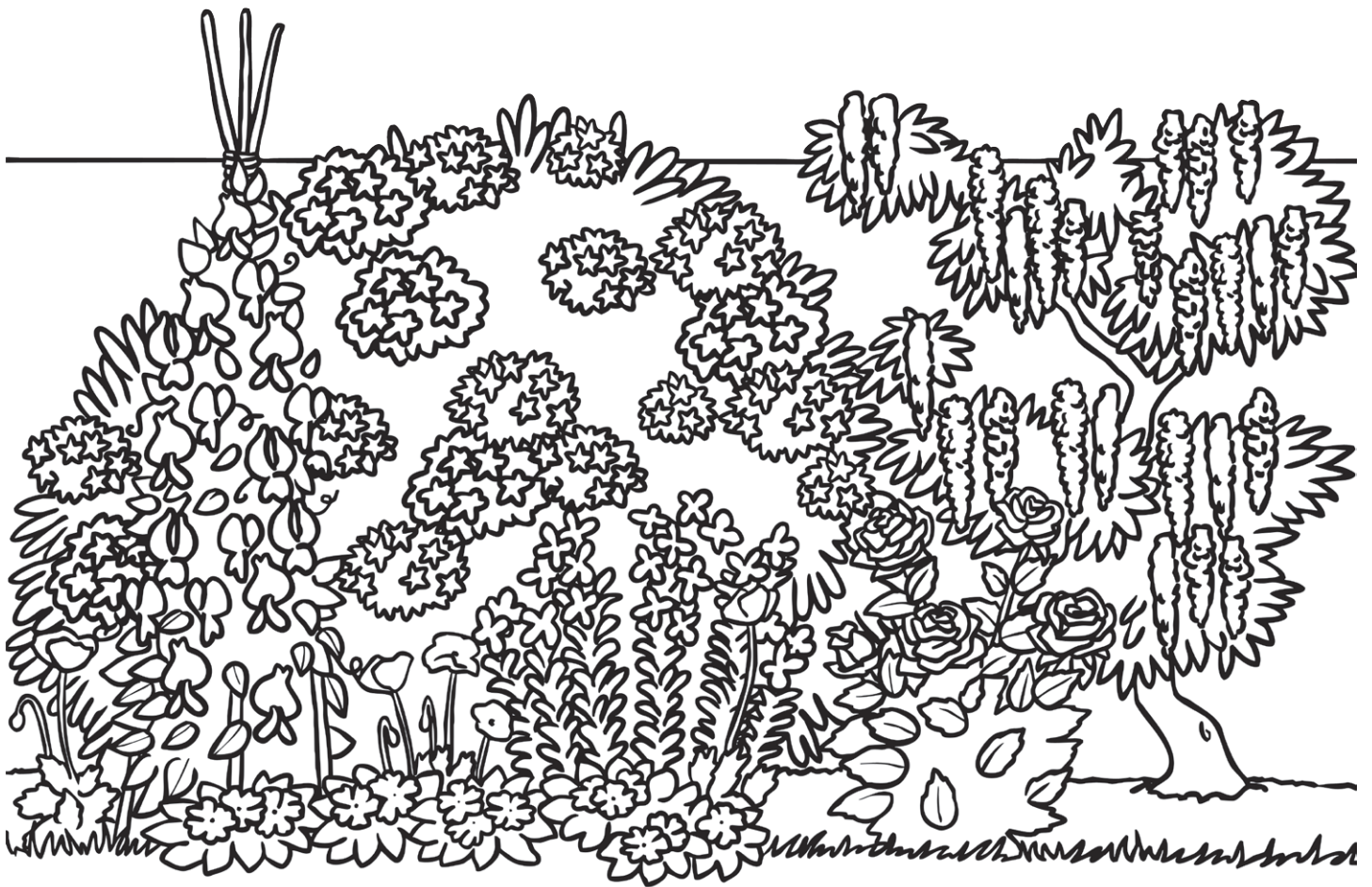


Year 1 Science - Plants

Learning from Home

Activity Booklet



Year 1 Science - Plants

Learning from Home

Year 1 Programme of Study – Plants

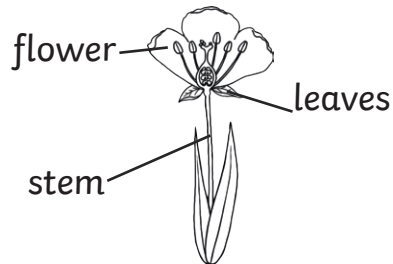
Statutory requirements	Activity Sheet	Page	Notes
To identify and name a variety of common wild and garden plants.	Plant hunters	2-3	
Recognise and describe the difference between deciduous and evergreen trees.	Changes Through the Year	5-6	
	Seasonal Trees	7-8	
Identify and describe the basic structure of a variety of common flowering plants, including trees.	Plant hunters	2-3	
	The Root of It	4	
	Plant food	9	
	Growing seeds	10	
	Share What You Know	11	
Bringing it all together	More Fun Activities with Plants	12	
	Key vocabulary	13	

Note for parents: The main focus of teaching science in key stage 1 is to enable pupils to experience and observe things, and to look at the natural and human-made world around them. Encourage your child to be curious and ask questions about what they notice, and help them to use different methods to answer their questions, such as observing changes over time, grouping and classifying things, carrying out simple tests, and finding things out, using books and the internet. Talk to your child about what they are doing and encourage them to use simple scientific language to explain their ideas to you. Most science learning should take place through first-hand practical experiences, therefore this booklet contains some ideas for recording information but has a strong focus on practical activity as well.

Plant Hunters

Go for a walk in your local woods or countryside. If you live in a town, try walking by a local river or canal or go to the park. Find examples of the flowering plants named below and pick one of each (see above), take a photo or sketch them. Find one other flowering plant as well.

Back at home, draw your four plants in the boxes and colour them in. Then label the parts like this:

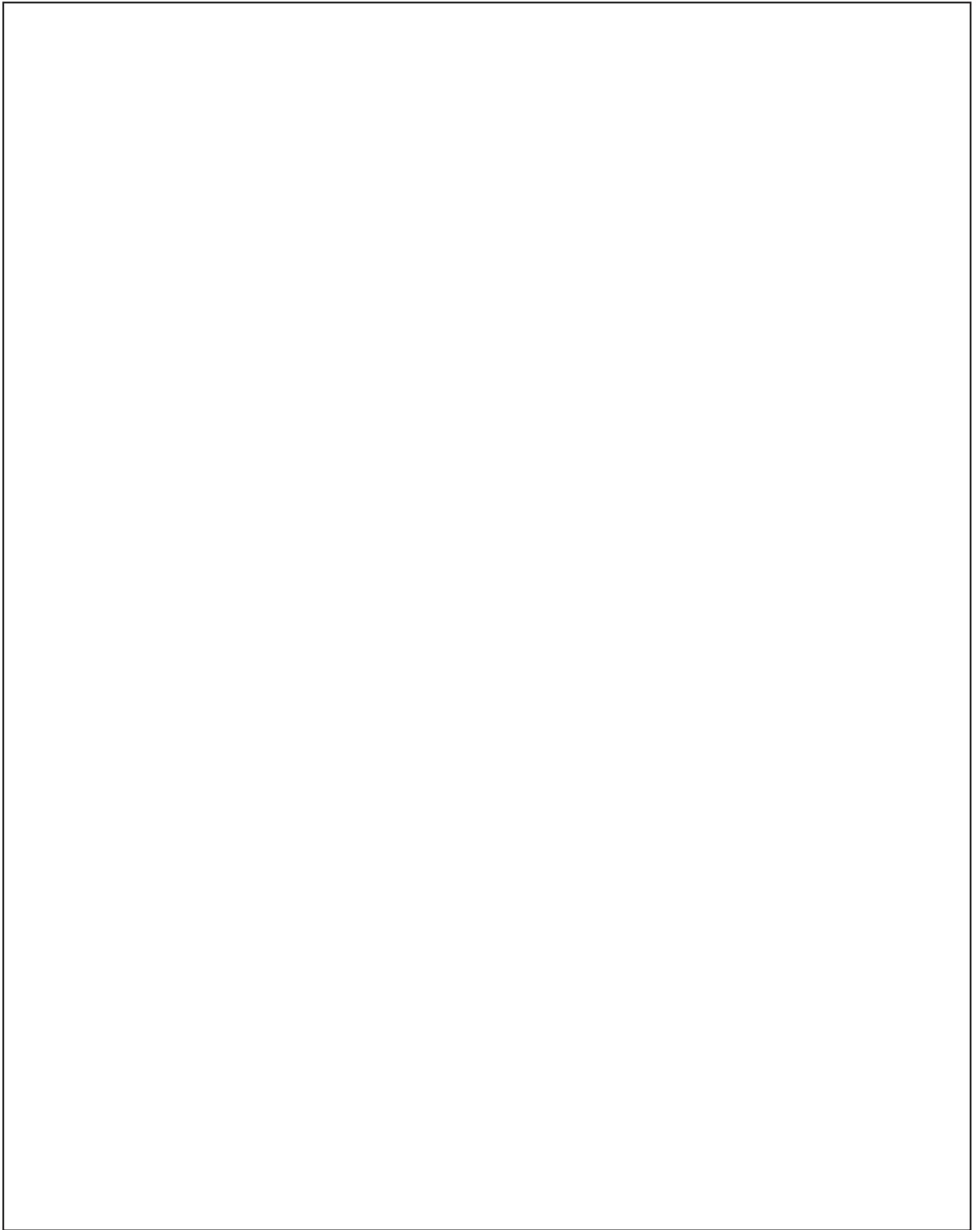


clover	grass
dandelion	another plant

Note for parents: This activity is best done in late spring or early summer when there will be a large number of flowering plants. Encourage your child to sketch or photograph the plants so they have a record of what they have seen and can study the pictures and talk about them later. If your child does wish to pick flowers, encourage them to take only one per plant, and make sure you are aware of plants that are poisonous (for example, deadly nightshade) or which are endangered and cannot be picked (for example, some varieties of bluebell).

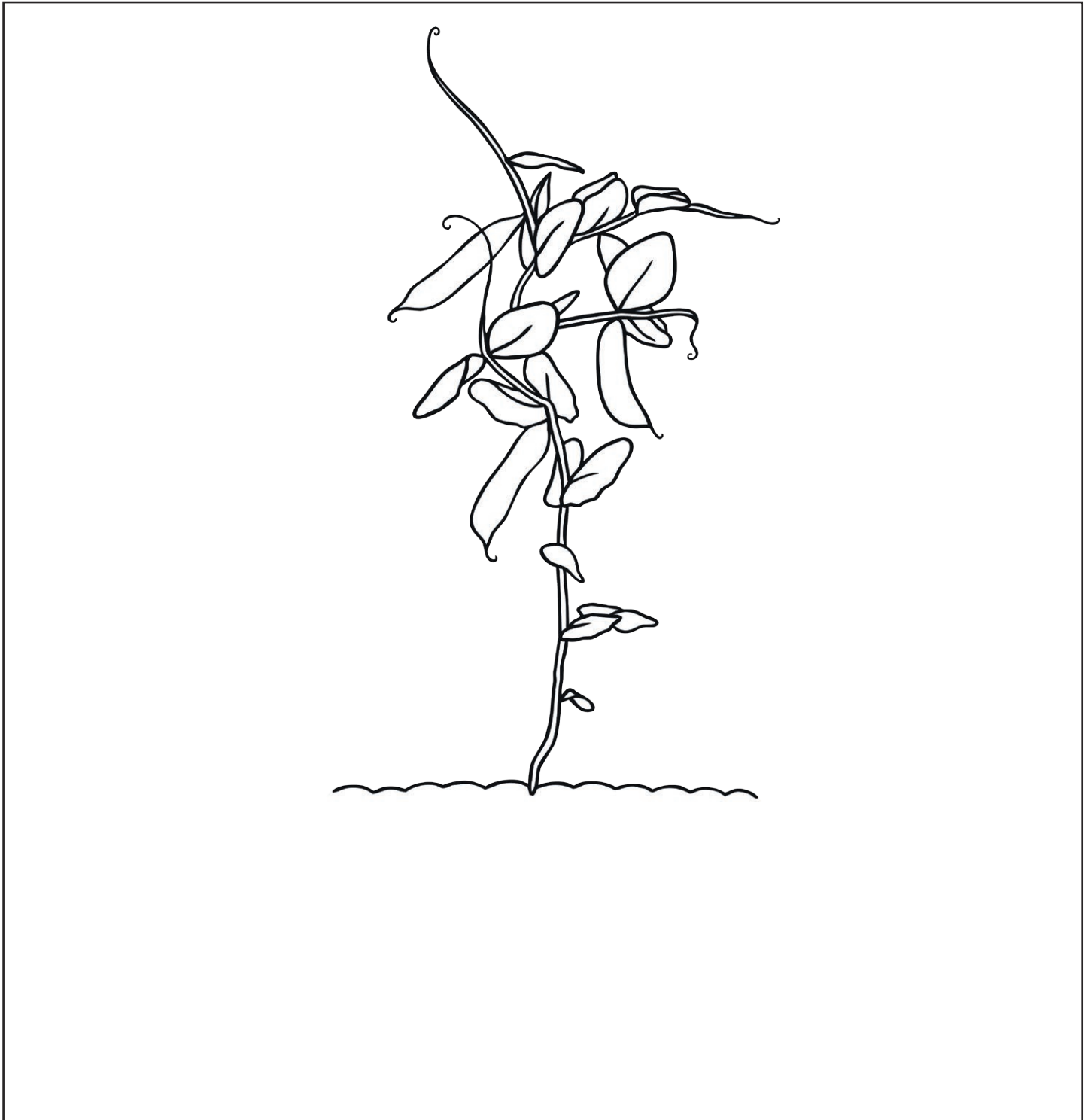
Plant Hunters

Challenge: draw and label three more plants.



The Root of It

Carefully pull up some plants by the roots. Shake off the extra soil and then have a good look at the roots, using a magnifying glass. Draw a picture of the roots here:

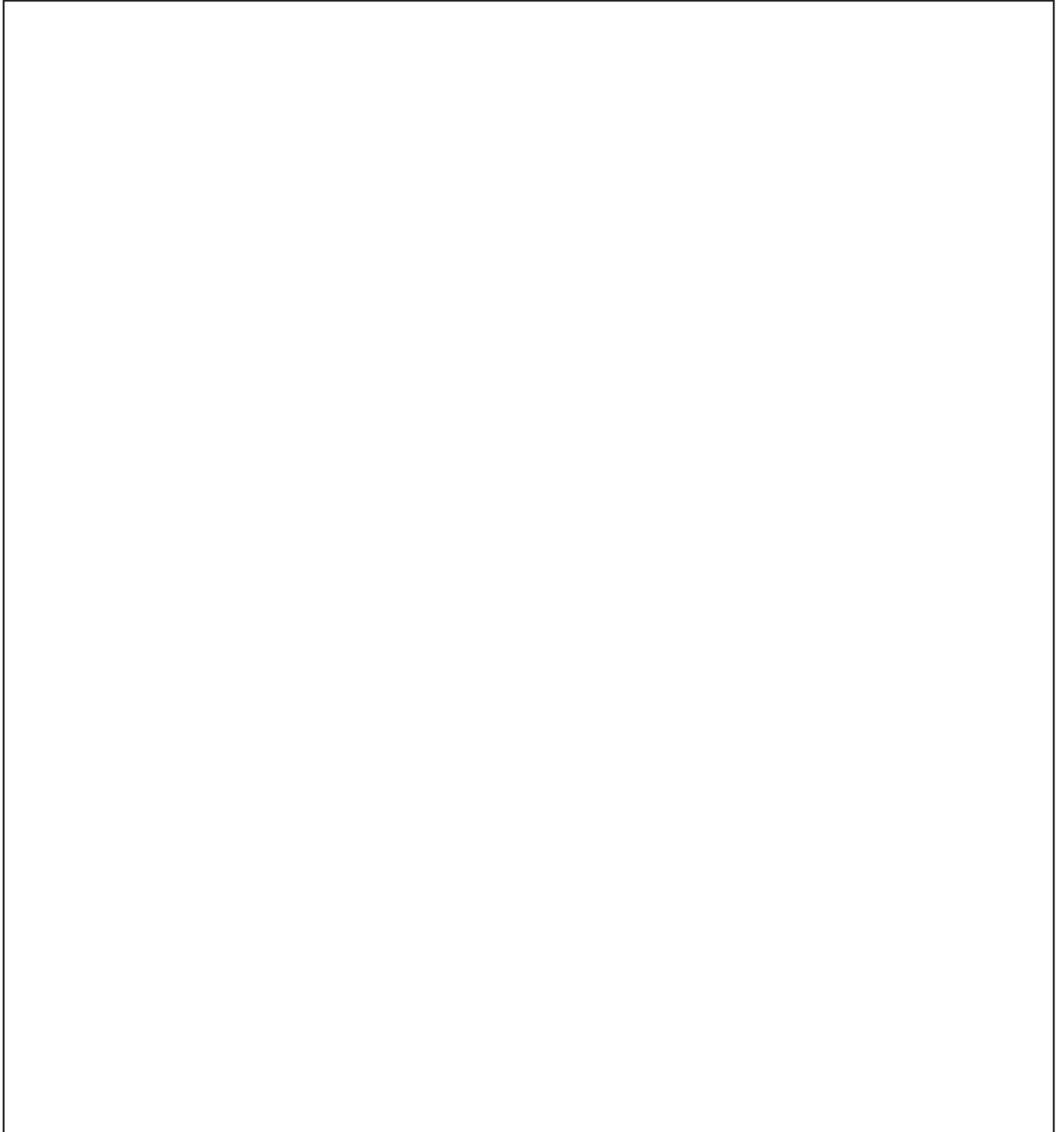


Talk to your helper about why a plant has roots. Use books or the internet to find three reasons.

Note for parents: This activity can be done when you are having a weeding session in your garden. Alternatively, look at the roots of some of the plants you have grown as part of one of the other activities on this sheet.

Changes Throughout the Year

Go for a walk in your local woods in Autumn. Have a look at what is happening to the trees. Draw or write what you can see.



Note for parents: The best time to start a conversation about deciduous and evergreen trees is in the Autumn, when children can be encouraged to notice the changes in deciduous trees. It is worth knowing that evergreen trees often have small, thin and/or shiny leaves. These are all adaptations that enable the tree and its leaves to survive cold, snowy weather.

Changes Throughout the Year

Can you find any trees that look different? Take a leaf from a tree that is changing and a tree that is not. What differences can you see? Draw the two leaves and describe them.

deciduous leaf

evergreen leaf

Seasonal Trees

Decorate the trees on the following page to show what happens in spring, summer, autumn and winter. You can use coloured pens or pencils, painted fingerprints or scraps of tissue and paper.

Make some notes here so you can decide how to decorate each tree:

spring	summer
autumn	winter

Note for parents: There are lots of great time lapse videos on the Internet, showing deciduous trees changing throughout the year. Children need to understand that deciduous trees don't just change in the Autumn, but all year round. Watch one of these videos with your child and discuss what they can see. The completed decorated trees can make a great calendar gift if you attach a small calendar booklet, which you can buy from craft shops!

Seasonal Trees

spring



summer



autumn









winter



Plant Food

Have a look at these vegetables. Can you decide which part of the plant they come from? If you are not sure, find a picture of the plant growing – this might help!

Word Bank - root, leaves, stem, flower

Plant/vegetable	What part do we eat?	Do you like it?
broccoli 		
carrot 		
lettuce 		
spring onion 		
cauliflower 		
celery 		

Note for parents: This activity helps children to relate their knowledge of plants to everyday life. To make the activity as practical as possible, go with your child to the supermarket or greengrocer and buy a small amount of each of the plants. When you have discussed which plant part they are, encourage your child to try each one and say which they prefer.

Growing Seeds

- Do seeds need water to germinate (begin to grow)? Plant seeds in two separate pots. Water one every day. Don't water the other one. What happens?
- Do seeds need warmth to germinate? Plant seeds in two separate containers. Put one in the fridge and keep one out in another room. What happens?
- Do seeds need light to germinate? Plant seeds in two separate containers. Put one in a dark place such as a cupboard, and the other in the light. What happens?
- Do seeds need soil to germinate? Take some cotton wool and place it in a saucer. Dampen it slightly and sprinkle cress seeds on top. Keep the cotton wool moist and watch what happens.
- Another great trick with cress is to take an empty eggshell and place it in an eggcup. Draw a face on the eggshell and fill it with damp cotton wool. Sprinkle cress seeds on top and watch your egg-man grow hair!

Once your seeds have germinated, try these tricks:

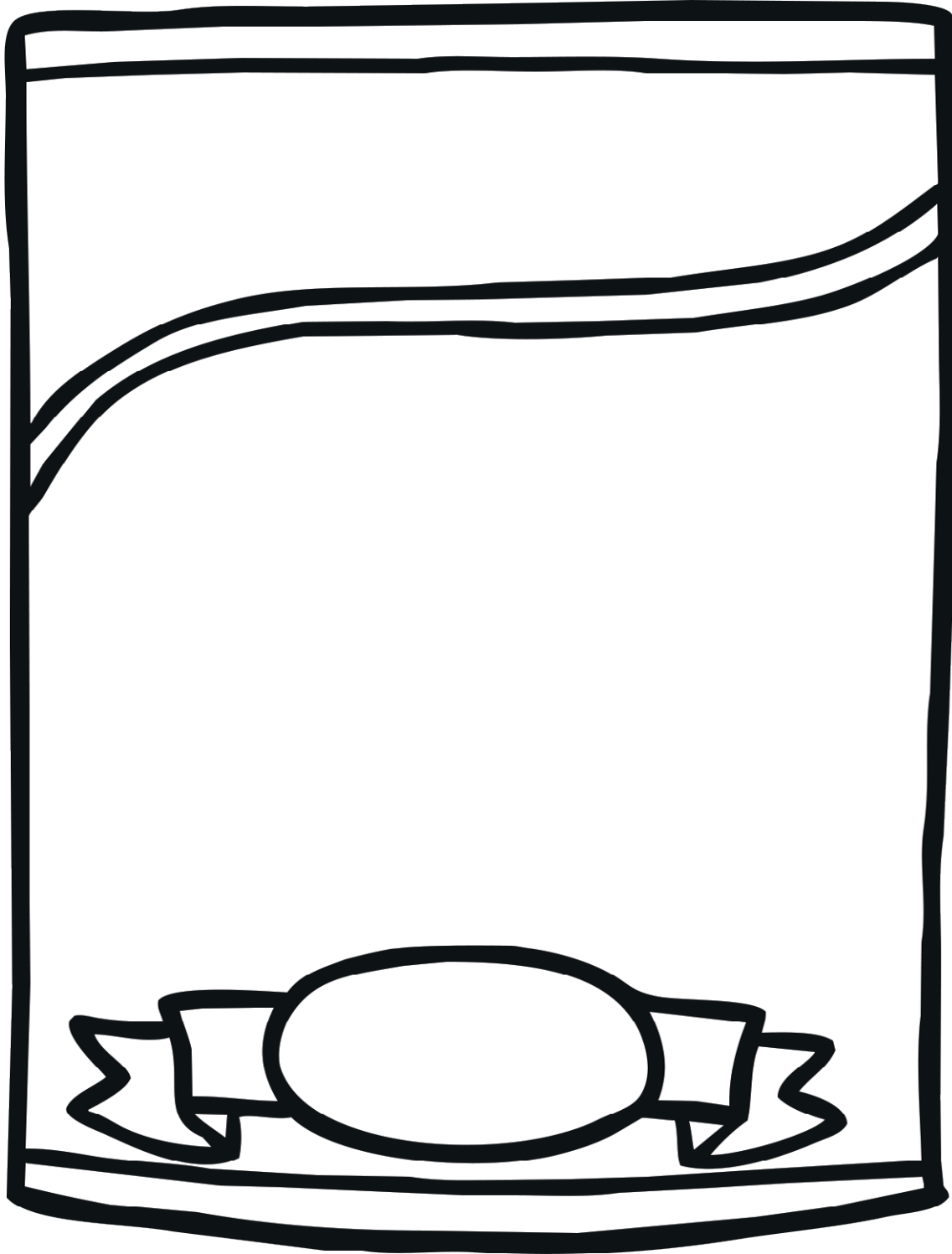
- Water one plant regularly and don't water the other. What happens?
- Take a cereal box or shoe box, and cut a small hole near the top. Place your new plant inside and seal the box up completely. Now wait and watch your plant try to escape from the box!



Note for parents: Planting and growing seeds is a fun, engaging way of teaching children about how plants grow and develop, and can give them opportunities to carry out simple investigations. The quickest and most rewarding seeds to grow are cress, broad beans or sunflowers, with the added bonus that the final plant is either edible or beautiful! Here are some ideas of things you can try and observe when your seeds are growing. Before you try each one, ask your child to think about what may happen (make a prediction) and, if appropriate, explain why. Encourage your child also to think about making each test 'fair' – this basically means changing only one thing (the variable) and keeping everything else the same. So if we are testing whether plants need water, the only thing we change is the amount of water we give the plants. Everything else that might affect the plants' growth must be the same – temperature, light, type of plant etc.

Share What You Know

Imagine you are writing instructions to go on the back of a packet of seeds. What would you tell people to do to make sure their seeds grow and stay healthy?



Note for parents: Children can complete this activity at their own level. Confident writers should be able to have a go at writing the instructions; less confident writers may need more support, or to express their ideas verbally.

More Fun Activities with Plants

- Put several drops of food colouring into a beaker of water then place the stem of a white carnation flower into the water. Over time the flower will change colour as the water is drawn up through the stem by 'capillary action'. To make this more interesting, have two beakers with two different colours of water. Carefully split the carnation stem up the middle using a sharp knife, then place half the stem in one colour and half in the other. Ask your child what they think will happen.
- Grow some food! Salad crops like radishes and lettuce can be grown easily, in pots or containers. Strawberry plants usually grow well, provided the fruit is protected from birds. Or you could grow potatoes in an old bin or a specially designed potato bag.
- Go through your cupboards and sort all the food in there according to whether or not it comes from a plant. Or you could look at what you are eating for dinner and discuss the plants you are eating. Children may be surprised to learn that things like bread, oils and cereals come from a plant. Discuss with your child, that foods that don't come from plants also need plants – for example, we would not be able to have burgers, eggs, milk or cheese if animals could not eat plants.

Key vocabulary

Children should become familiar with this vocabulary and, where appropriate depending on age and ability, should be able to read and spell the words.

stem	blossom	evergreen
leaf	trunk	deciduous
root	branch	germinate
bulb	seed	plant
flower	fruit	bud
petal		