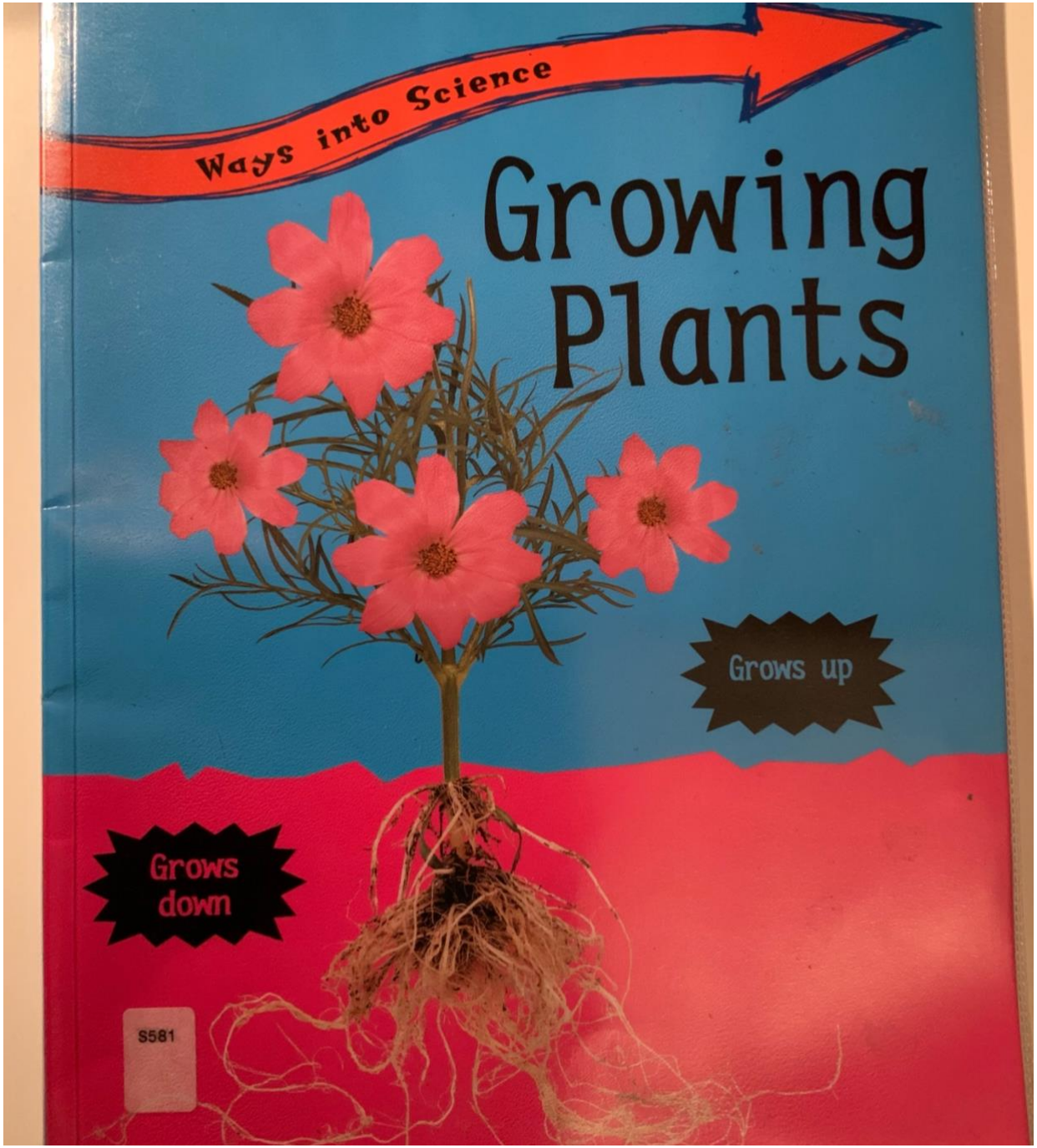
Ways into Science
Growing Plants
Grows up
Grows down
S581

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Thanks to our models:
nber Barkhouse, Reece Calvert, Shani-e Cox, nantelle Daniel, Ammar Duffus, Alex Green, Harry Johal and Emily Scott

To my granddaughter Megan Kate.

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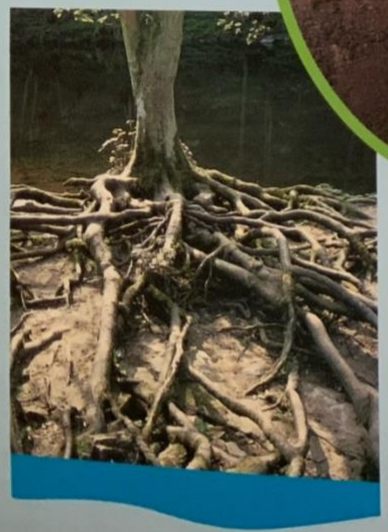
Contents

Roots

Roots grow underground. They take up water from the soil.



This tree has thick roots made of wood. They help to hold the tree in the soil.

This plant has been growing in its pot for a long time.

The root has grown round and round inside the pot. It is 'pot bound'.

The plant must be put in a larger pot. This is called repotting.

Plants we eat

Most of our food comes from plants.

We eat the flowers and stems of the broccoli plant.

We eat the leaves of the lettuce plant.

Oranges are the fruit of orange trees.

Carrots are roots from carrot plants.

Peas are the seeds of the pea plant.

Bread is made from the seeds of the wheat plant.

Make a chart like this and find out which part of the plant people eat.

	root	leaf	stem	flower	seed	fruit
Turnip						
Apple tree						
Tomato plant						
Sunflower						
Cabbage						

Useful words

bark – the covering on a tree.
flower – the parts of the plant where seeds are made. Flowers come in all shapes, sizes and colours.
fruit – the part of the plant that contains its seeds and is often eaten.
germinate – when a seed germinates it makes a stem and roots, which can eventually grow into a plant.
houseplant – plants that are grown in pots and kept indoors.
leaf – a flat, usually green, part of a plant that grows from the stem.
pip – the seed of the flower when it grows in the middle of the fruit.
root – the part of the plant that goes down into the soil to collect water. It also holds the plant firmly in the ground.
seed – plants start out as seeds.
seedling – a young plant that has just started to grow from the seed.
stem – the part of the plant which is usually long and thin. Roots grow from the stem under the ground, and leaves grow from the stem above ground.
trunk – the thick stem of a tree.

Some answers

Here are some answers to the questions we have asked in this book. Don't worry if you had some different answers to ours: you may be right, too. Talk through your answers with other people and see if you can explain why they are right.

Page 13 The tree trunk has more than 30 rings, which means the tree is more than 30 years old.

Page 15 The flower has got six petals.

Page 17 The seeds cannot be seen here. They are called pips and are found at the centre of the apple.

Page 20 The seeds have not germinated because they did not have any water. Seeds need water and warmth to germinate.

Page 22 This will depend on your houseplants. Check the soil every few days to see if it's dry.

Page 25 Sam's test shows that the plants grow towards the light. If you put a pot plant such as a geranium on a sunny windowsill its stems will grow towards the glass.

Page 27 We eat:
The root of a turnip plant.
The fruit of an apple tree.
The fruit of a tomato plant (although it is sometimes called a salad vegetable). Only the fruit of the tomato plant is edible. Other parts are poisonous.
The seed of a sunflower.
The leaves of a cabbage.

Index

About this book

Ways into Science is designed to encourage children to begin to think about their everyday world in a scientific way, examining cause and effect through close observation, recording their results and discussing what they have seen. Here are some pointers to gain maximum use from **Growing Plants**.

- Working through this book will introduce the basic concepts related to growing plants and also some of the language structures and vocabulary associated with them. This will prepare the child for more formal work later in the school curriculum.
- On pages 19 and 23 the children are invited to predict the results of a particular action or test. Ensure that you discuss the reason for any answer they give in some depth before turning over the page. In answering the question on page 19 look for an answer about how the seeds without water will not grow because plants need water to grow. The process of a plant growing from a seed is called germination and this process also requires water. In answering the question on page 23 look for an answer about plants needing light to stay healthy. They actually use light to make food in their leaves.
- You may like to extend the work on page 7 by letting the children look at a collection of houseplants and group them according to whether they have flowers or not and also by the colours of their flowers.
- The work on page 9 could be extended by drying some cones so that they open, then letting the children shake out the seeds.

Ways into Science

Welcome to a world of science that's lively, colourful and friendly.

Award-winning author Peter Riley explores the basics of science, introducing key words and facts, promoting scientific thinking and building up confidence and enthusiasm.

"This is a sure-fire winner with pupils and teachers alike."
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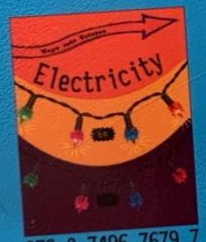

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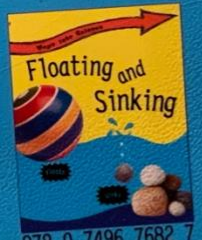

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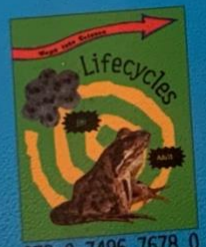

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