

ADOPT A BUSHLAND

YEAR FOUR TO FIVE TEACHERS GUIDE

WHO LIVES HERE? / WHAT DO I EAT? / WHAT ARE MY FEET USED FOR?

Students will look at how plants and animals are interdependent. *Who lives here?* looks at where animals live and how plants are important in providing shelter for animals. In *What do I eat?* *What are my feet used for?* students will look at beak adaptations for eating and feet adaptations of birds.



Sciences

Year	Content Description	Elaborations	Teaching Points
Four	Science Understanding /Biological Sciences Living things, including plants and animals, depend on each other and the environment to survive. ACSSU073	<ul style="list-style-type: none">Investigating how plants provide shelter for animals.Investigating the roles of living things in a habitat, for instance producers, consumers or decomposers.	<ul style="list-style-type: none">Discuss how living things all have a role to play in a habitat e.g.<ul style="list-style-type: none">provide shelter;food source;produce oxygen; anddecompose dead living things.Terms: producer, consumer, decomposer.
Five	Science Understanding /Biological Sciences Living things have structural features and adaptations that help them to survive in their environment. ACSSU043	<ul style="list-style-type: none">Explaining how particular adaptations help survival such as nocturnal behaviour or silvery coloured leaves of dune plants.Describing and listing adaptations of living things suited for particular Australian environments.Exploring general adaptations for particular environments such as adaptations that aid water conservation in deserts.	<ul style="list-style-type: none">Define adaptation as a characteristic that helps a living thing to survive.Adaptations can be:<ul style="list-style-type: none">structural - how it is made;behavioural - what it does; andfunctional - how it works.Examples of adaptations e.g.<ul style="list-style-type: none">waxy leaves to conserve water (structural);resting in the hottest part of the day to conserve water (behavioural); andreptiles going into torpor during winter (functional).

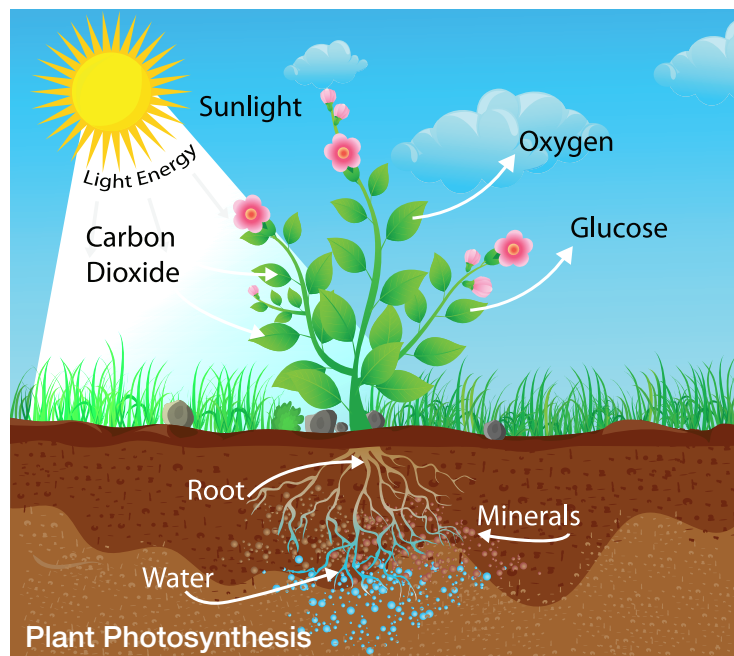
Geography

Year	Content Description	Elaborations	Teaching Points
Four	<p>Geographical Knowledge and Understanding</p> <p>The types of natural vegetation and the significance of vegetation to the environment and to people.</p> <p>ACHGKO21</p>	<ul style="list-style-type: none"> Exploring how vegetation produces the oxygen all land animals (including people) breathe; protects land from erosion by water or wind; retains rainfall; provides habitat for animals; shelters crops and livestock; provides shade for people; cools urban places; produces medicines, wood and fibre; and can make places appear more attractive. 	<ul style="list-style-type: none"> Discuss the role plants play in a community. <p>Extension</p> <ul style="list-style-type: none"> Carbon cycle <ul style="list-style-type: none"> photosynthesis (carbon dioxide + water + sunlight → oxygen + sugars [glucose]) respiration (oxygen + sugars [glucose] → carbon dioxide + water + energy)
Five	No relevant curriculum		

Who lives here?

- Prior to reading the text have a discussion about the type of animals and plants students have seen in their local bushland. Talk about how every living thing has a role to play and that all living things are interdependent. Discuss how plants supply oxygen made from the carbon dioxide people exhale. This may be represented in a cyclic diagram such as the one below.
 - During the day plants photosynthesise using carbon dioxide, water and sunlight to produce oxygen and sugars (glucose).
 - Plants AND animals respire ALL the time. Respiration uses oxygen to release energy from sugars (glucose). The by-products are carbon dioxide and water.

- You may like to complete some pre-reading vocabulary exercises depending on the reading level of your students, such as:
 - Skimming to pick out words they do not understand, then discussing the meaning.
 - Scrambled animal names.
 - Spelling list.
 - Watch a video about the Australian bushland.
- Read the text in small groups or as a class, taking note of where the animal lives. After reading, students draw the animals into the picture.





**What do I eat? /
What are my feet used for?**

- Discuss adaptations with class. Adaptations are features that help an animal (or plant) to survive. They can be structural, behavioural and physiological, for example:
 - waxy leaves to prevent water loss e.g. gum tree leaves (structural);
 - resting in the heat of the day to conserve water e.g. kangaroo (behavioural); or
 - shivering to get warmer e.g. humans (functional).

- Watch a video or look at some poster pictures of animals and discuss what adaptations they may have.
- With the *What do I eat? What are my feet used for?* worksheet, have students work in small groups. Students are to discuss each beak/foot, make decisions based on evidence and complete the table. You may like to put the names of the birds on the board.

Answers

What do I eat?

Beak Adaptations			
Beak	Bird	Food	Reasons
1	Willie Wagtail	insects	Short sharp beak, works like a pincer, good for capturing insects.
2	Falcon	insects, birds, reptiles e.g. lizards and snakes, small mammals such as rabbits and bats	Sharp strong beak for grasping, tearing meat.
3	Honeyeater	nectar, insects	Fine, slightly curved beak for reaching into flowers.
4	Cockatoo	seeds, nuts, berries, roots	Strong, robust beak – like a nutcracker.
5	Tawny Frogmouth	lizards, frogs, birds, insects, worms, slugs, snails, small mammals	Short, sharp beak.
6	Wattlebird	nectar, some insects, flowers, berries, some seeds, fruit	Short, slender beak for probing into flowers.

What are my feet used for?

Feet Adaptations			
Foot	Bird	Used for	Reasons
1	Cockatoo	perching/grasping	Rounded, three toes at front and one back toe for grasping branches and prey.
2	Falcon	grasping	Strong toes and sharp talons for grasping prey and tearing apart.
3	Wattlebird	perching	Small talons, rounded toes for holding onto branches.
4	Willie Wagtail	perching, hopping	Small talons, slightly flatter spread to toes.