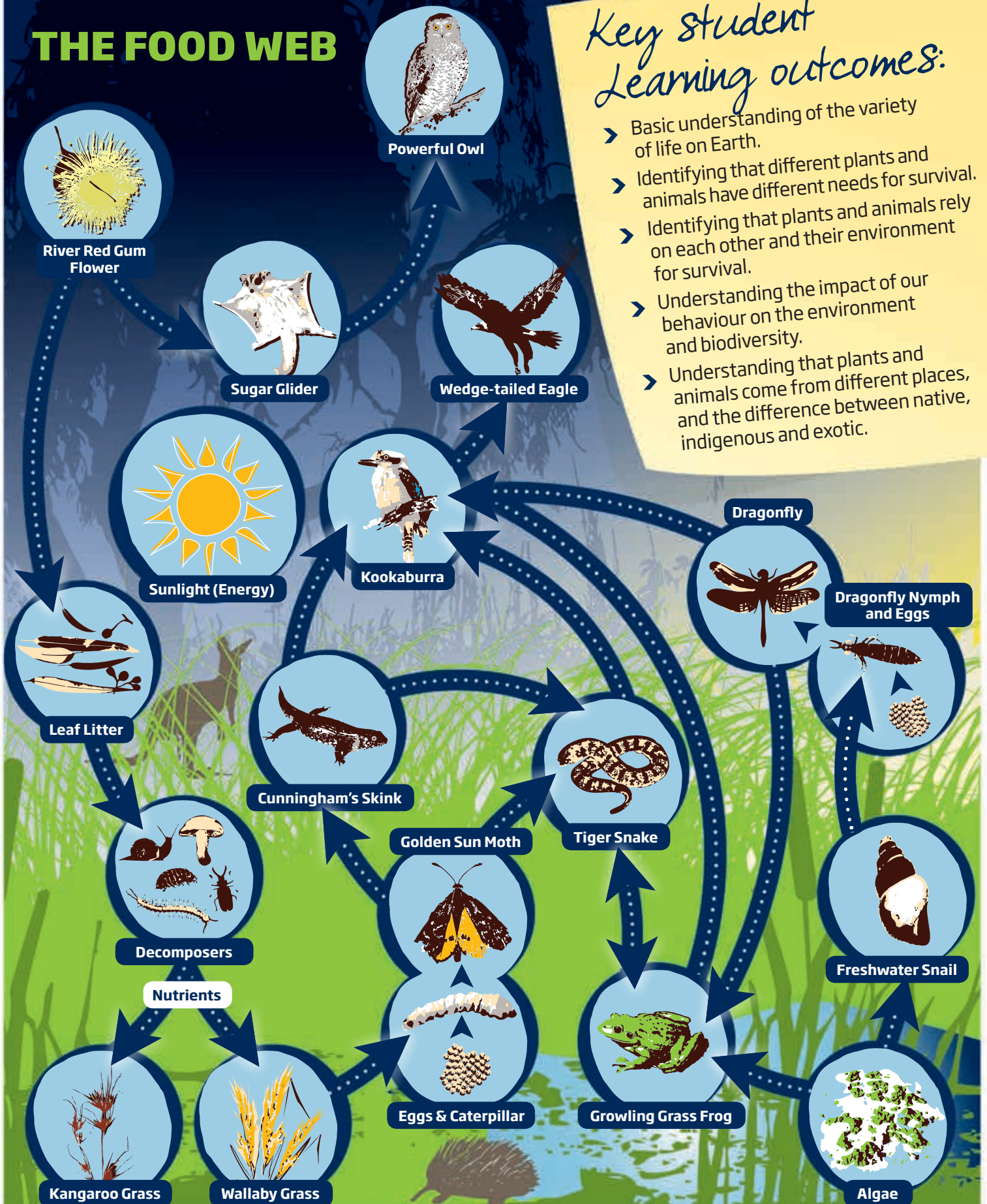


# Biodiversity

Foundation  
- Year 2



## THE FOOD WEB



### Key student Learning outcomes:

- > Basic understanding of the variety of life on Earth.
- > Identifying that different plants and animals have different needs for survival.
- > Identifying that plants and animals rely on each other and their environment for survival.
- > Understanding the impact of our behaviour on the environment and biodiversity.
- > Understanding that plants and animals come from different places, and the difference between native, indigenous and exotic.

# Key Terms

## for Biodiversity



**Biodiversity** = the variety of life on Earth and the natural patterns it forms

Biodiversity has three parts:

- Species Diversity = the variety of different species  
e.g. Golden sun-moth, Eastern Grey Kangaroo, Kookaburra.
- Genetic Diversity = the variety within each species  
e.g. One Tiger snake might have distinct stripes, another may look brown.
- Ecosystem Diversity = the variety of different ecosystems  
e.g. Plains Grassland, and Escarpment Shrubland.

Bio = Life  
Diversity = Difference

### Meaning

### Context

#### Environment

The area where something exists or lives. This includes living and non-living things

'The environment' is often used to describe the natural environment: plants, animals, rivers, and weather conditions.

#### Conservation

To keep things the same or to protect things from harm.

Nature Conservation is when nature is carefully looked after and protected from harm. By protecting plants and animals, the number and health of the plants and animals will improve.

#### Habitat

A specific place where a plant or animal lives.

Living things need food, water and shelter to survive. Each plant or animal will need different things in their habitat. For example a fish needs water and a parrot needs a tree hollow.

#### Native

Living or growing naturally in a certain region.

Australian native plants and animals are ones that have originated in Australia.

#### Indigenous

Living or growing naturally in a certain local area.

Plants and animals that have originated in the local area. A Growling Grass Frog is indigenous to Brimbank because it is found here naturally. A crocodile is native to Australia, but it is not indigenous to Brimbank as it is too cold for a crocodile to live in Brimbank.

#### Ecosystem

All living and non-living things in a particular area and their interactions. This includes plants, animals, weather and soil type.

Ecosystems in Brimbank include grasslands, escarpment shrublands, and riparian (river) flats.

#### Species

Animal or plants that have been grouped together because they are like each other in important ways. They look alike and can breed (have babies) or produce seed together.

Some of the bird species you see around you are Magpies, Lorikeets and Swans. Some of the plant species you see around you are River Red Gums, Gold-Dust Wattle and Kangaroo Grass.

# Activities

## for Biodiversity

### DID YOU KNOW?

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Brimbank Schools Sustainability Resources

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### DID YOU KNOW?

Kangaroos, Swamp Wallabies, echidnas and platypus all call Brimbank home. They mainly live along our waterways.

### Activity 1 Many and Varied

**Intro:** Animals can be grouped in different ways.

**Activity:** Ask each student to think of an animal they see in their local environment and write the name of the animal on the blackboard. Encourage students to be specific, and have a variety of types of animals. Ask the students to draw their animal on a small piece of paper with as much detail as possible. A6 works well.

**Explore:** Write different categories on the white board, e.g. Mammals/Fish/Insects/Reptiles or Native/Non Native. Ask students to stick their animal under the different categories. Discuss why they chose that category.



### Activity 2 My Place

**Intro:** Indigenous plants and animals are specific to our local area. They have adapted to our local environmental conditions and rely on each other for survival.

**Activity:** Divide the students into small groups and ask the children to choose a plant or animal that is local to Brimbank. Ask the children to present to the class: What does it look like? Where does it live? What does it eat?

**Explore:** Discuss with the children what would happen to these plants and animals if they lived somewhere else. Could a snake live in Antarctica? What is it about this plant/animal that makes it able to live where it does? Do any of the plants and animals presented rely on each other for survival?

### Activity 3 Animal Audit

**Intro:** Animals live in different places and have different needs for survival.

**Activity:** Conduct an animal audit of your school grounds. Ask the children to write down or draw every animal they see. Remind children to look closely, there are many animals on leaves, tree trunks and in leaf litter. Ask them to take note of signs of animals, e.g. spider webs, feathers, footprints, scats (poo). Remember to look, but don't touch!

**Explore:** In the classroom discuss what the students saw, and where it was. Are there many different types of animals living in the schoolgrounds? Are there many different types of habitats - e.g. a variety of trees, shrubs, rocks, grasses? Are some areas better for animals than others? What can be done to improve these habitats? The NSW Biodiversity for Kids Teachers Guide has some good worksheets for habitat assessment.

# Other Resources and Activities

## for Biodiversity

### Resources



#### Curriculum

[www.dse.vic.gov.au/plants-and-animals/education](http://www.dse.vic.gov.au/plants-and-animals/education)

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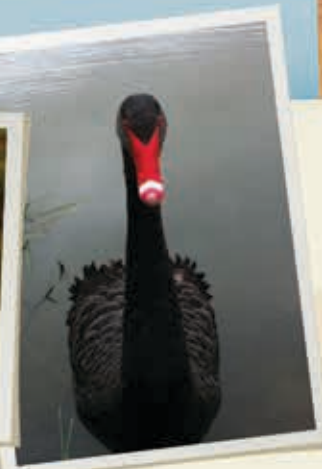
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##### Apps

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Biodiversity of the Western Volcanic Plains - EcoLink

### Activities



#### Other Activities

- Join the Zoos Victoria Common Cents challenge and help support the Eastern Barred Bandicoot threatened species program. [Actwild.org.au](http://Actwild.org.au)
- Think of as many things that you can in the environment that start with the letters from BIODIVERSITY. Use magazines, newspapers and drawings to make a collage for your classroom.
- Create habitat in your school yard by planting indigenous plants.
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- Learn to recognise some of the local bird calls. 'Birds in Backyards' website will help.
- Create a monster animal. Mix up the features of local animals to create a new animal e.g. a Roo-frog-aburra which has a pouch to carry its babies, slimy skin to live in a wetland and a strong beak to catch fish. Create a story about its life.
- Register your school with Biodiversity Snapshots and become Citizen Scientists.
- Germinate some indigenous seeds in your classroom, and watch them grow.
- Change the words of 'There was once an old lady who swallowed a fly' using indigenous species.

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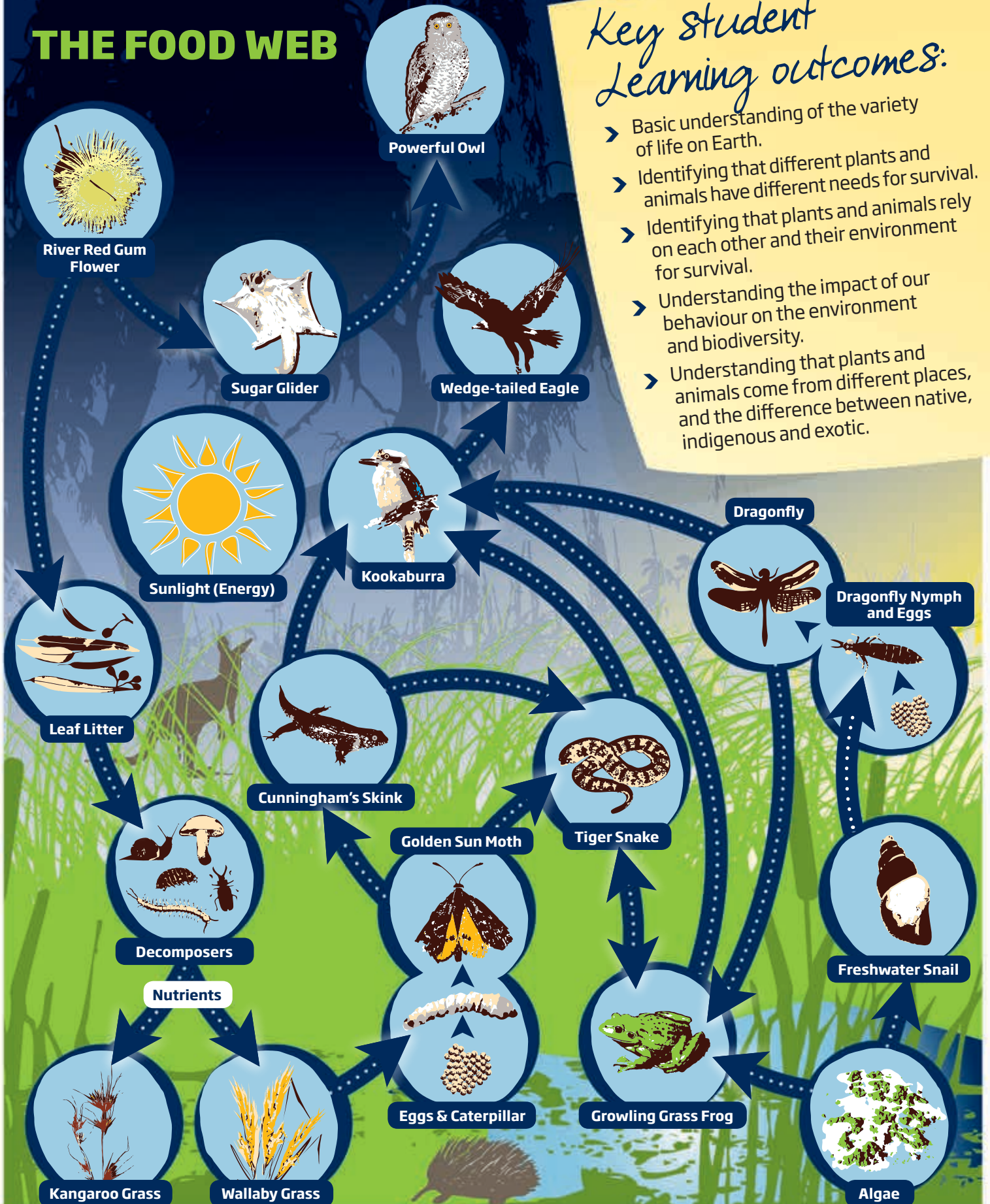


# Biodiversity

Year 3 - Year 4



## THE FOOD WEB



## Key student Learning outcomes:

- > Basic understanding of the variety of life on Earth.
- > Identifying that different plants and animals have different needs for survival.
- > Identifying that plants and animals rely on each other and their environment for survival.
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# Key Terms

## for Biodiversity



**Biodiversity** = the variety of life on Earth and the natural patterns it forms

Biodiversity has three parts:

- Species Diversity = the variety of different species  
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Bio = Life  
Diversity = Difference

### Meaning

### Context

#### Environment

The area where something exists or lives. This includes living and non-living things

'The environment' is often used to describe the natural environment: plants, animals, rivers, and weather conditions.

#### Conservation

To keep things the same or to protect things from harm.

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#### Habitat

A specific place where a plant or animal lives.

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#### Native

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Australian native plants and animals are ones that have originated in Australia.

#### Indigenous

Living or growing naturally in a certain local area.

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#### Ecosystem

All living and non-living things in a particular area and their interactions. This includes plants, animals, weather and soil type.

Ecosystems in Brimbank include grasslands, escarpment shrublands, and riparian (river) flats.

#### Species

Animal or plants that have been grouped together because they are like each other in important ways. They look alike and can breed (have babies) or produce seed together.

Some of the bird species you see around you are Magpies, Lorikeets and Swans. Some of the plant species you see around you are River Red Gums, Gold-Dust Wattle and Kangaroo Grass.

# Activities

## for Biodiversity

### DID YOU KNOW?

There have been 563 different types of local indigenous plant species recorded in Brimbank and 196 local indigenous animal species.

Brimbank Schools Sustainability Resources

### 'Brimbank's Biodiversity' presentation:

Found at the web address above, this presentation tells the story of Brimbank's landscape and local plants and animals.

With detailed notes included, you can use this presentation as it is, or edit it to suit your needs.

### DID YOU KNOW?

Kangaroos, Swamp Wallabies, echidnas and platypus all call Brimbank home. They mainly live along our waterways.

### Activity 1 Food Web

**Intro:** Energy passes from one animal to another as they eat plants or one another.

**Activity:** Ask the students to complete the Indigenous Plants and Animals Worksheet. Give the hint that all these living things rely on each other somehow.

**Explore:** In groups, cut out the icons from the worksheet. Ask the students to arrange the icons into a Food Chain with at least three elements. As a class build on these Food Chains to make a Food Web. Discuss with the class the idea of gaining energy through food or photosynthesis.



### Activity 2 Act it out

**Intro:** Some plant and animal relationships are mutually beneficial and some are competitive.

**Activity:** Talk to the students about the relationships between local plants and animals. Break the class into pairs, and ask them to choose a particular relationship that they can mime out to the class. E.g. a slithering Tiger Snake is swooped and eaten by a Kookaburra.

**Explore:** Ask the pairs to present their mime to the class; can the audience guess the roles and relationships? When the class have presented their scenario, ask the students to keep their character from the previous performance, but find another partner in the class to create a new scenario. E.g. the slithering Tiger Snake may now pair up with a small frog that he can eat.

### Activity 3 Habitats

**Intro:** Plants provide shelter for animals.

**Activity:** Ask the students to choose a local indigenous animal to research and create a poster. Ensure that the poster includes where the animal shelters from predators and the weather, where it lives, what home it makes, and what materials it uses.

**Explore:** Discuss with the class the variety of ways in which animals use plants for shelter and protection. Are there many of these plants in the schoolyard or at home? What can be done to improve the habitats in the school and at home? The students may want to display these posters around the school, or present what they have learnt to another class.

# Other Resources and Activities

## for Biodiversity

### Resources



#### Curriculum

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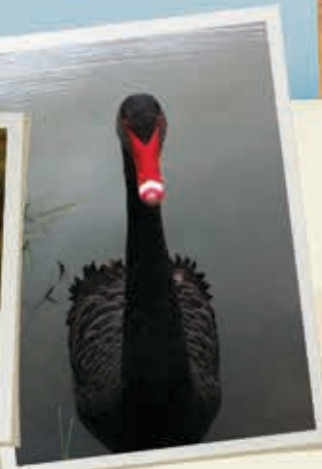
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### Activities



#### Other Activities

- Join the Zoos Victoria Common Cents challenge and help support the Eastern Barred Bandicoot threatened species program. [Actwild.org.au](http://Actwild.org.au)
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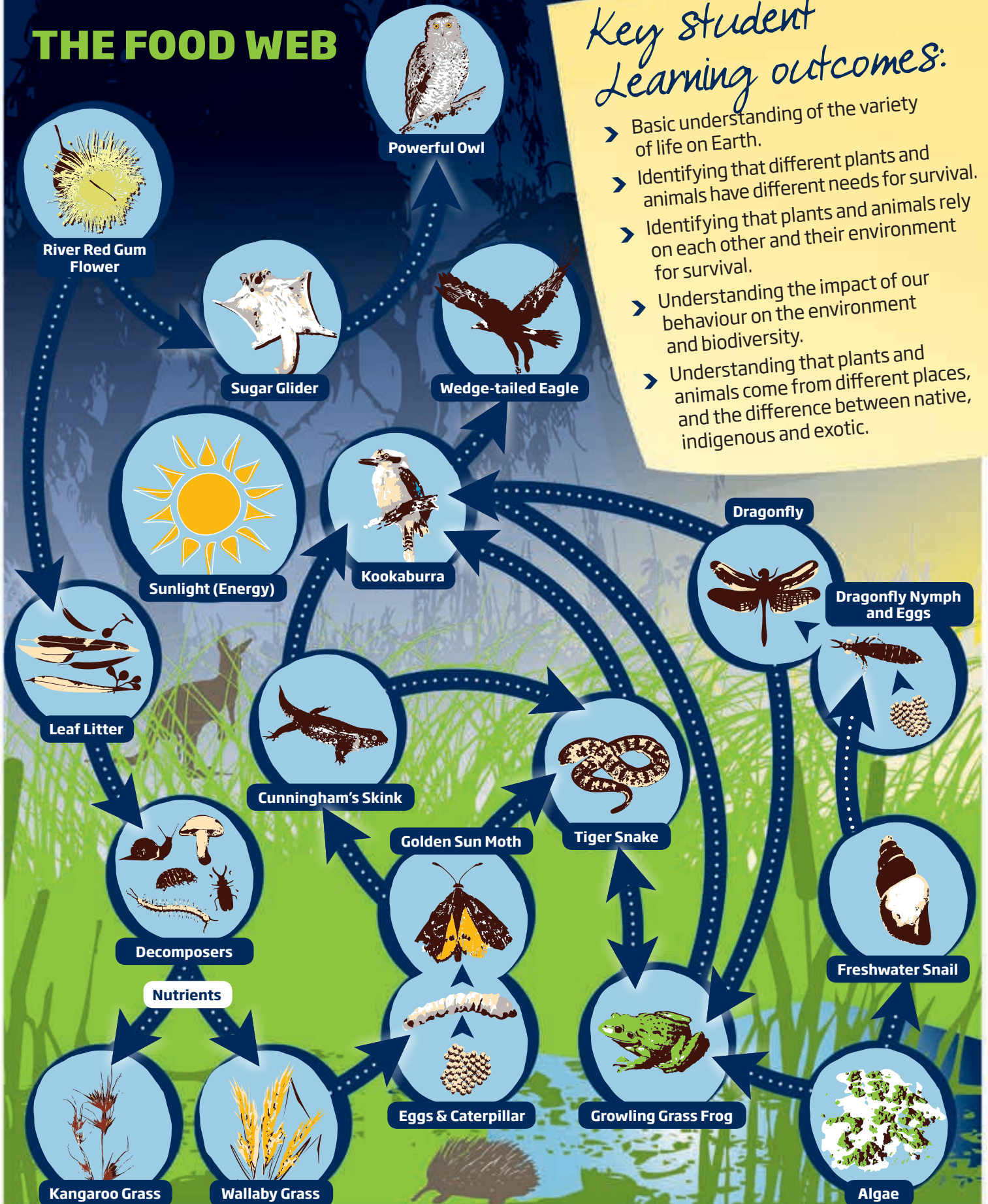




# Biodiversity

Year 5 - Year 6

## THE FOOD WEB



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### DID YOU KNOW?

Kangaroos, Swamp Wallabies, echidnas and platypus all call Brimbank home. They mainly live along our waterways.

### Activity 1 Changes over time

**Intro:** European settlement has changed the landscape of our local environment.

**Activity:** Ask students to write a story about a typical day in their life. They should describe their surroundings throughout the day, how they travel from one point to another, and what plants and animals they see.

**Explore:** Discuss the stories with the class. What plants and animals do they see? Would these have been here before European settlement? What about the landscape? Are there roads, rivers or parks? How might these have changed since settlement?



### Activity 2 Human Impact

**Intro:** Local plants and animals have adapted to the local environmental conditions.

**Activity:** Ask students to produce a report on an indigenous plant or animal, paying particular attention to the habitat and characteristics that allow them to live in this environment. Can they live in man-made environments? E.g. possums living in the roof.

**Explore:** Discuss with the class the ideal habitat of these plants and animals. Do these habitats still exist in our local area? How have they adapted to live in man-made environments? What are the dangers and benefits of living in man-made environments? Do houses and roads prevent the movement of the animals to travel from one habitat to another?

### Activity 3 Habitat Corridors

**Intro:** Human behaviour and buildings can be barriers to animals moving through the landscape. We can do small things to help minimise these barriers.

**Activity:** Discuss with the students how different animals move through the landscape. Do they travel short or long distances? Do they need shelter along the way to protect from predators? As a class make a list of indigenous animals and write down how they move, how quickly and how far.

**Explore:** Explore the idea that different animals face different barriers e.g. birds can fly over roads, but a lizard may be run over. Think about your local area and how animals can move through this landscape. Discuss the importance of waterways providing a safe corridor for animals. Get students to brainstorm how we can help create habitat corridors in an urban environment. Create a plan for your school and home to become wildlife friendly.

# Other Resources and Activities

## for Biodiversity

### Resources



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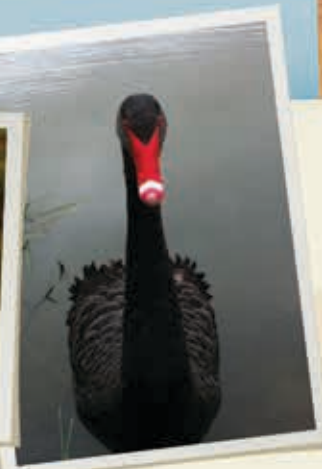
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