



Food Webs and Life Cycles

How Living Things Interact in Ecosystems

Stage 2

NSW Stage 2 Outcomes:

ST2-4LW-S · ST2-2DP-T · GE2-1 · GE2-2 · EN2-1A · EN2-2A · MA2-17SP · CA2



WHAT DO ANIMALS NEED?



What do living things need to survive?

All living things need access to:

- food
- water
- shelter

A habitat provides these needs. If one is missing, survival becomes difficult.

Which need is most important for survival? Why?



Complete the table:

NEED	WHAT HAPPENS IF IT IS MISSING?
Food	
Water	
Shelter	



FOOD CHAINS



Food Chains

A food chain shows how energy moves from one living thing to another. Energy begins with plants and then moves to animals.

Why do all food chains start with plants?

Draw and label a food chain: plant → animal → animal

A large empty rectangular box with a black border, intended for drawing a food chain.

Explain how energy moves through your food chain.

Three horizontal lines for writing an explanation.

FOOD WEBS

Food Webs

A food web shows how different food chains are connected. Most animals eat more than one type of food, so they are part of many chains.

Why is a food web more accurate than a food chain?

Sketch one animal and show TWO things it eats.

Explain what would happen if one food source disappeared.

ROLES IN A FOOD WEB

Roles in Ecosystems

Living things have different roles in food webs.

These include:

- producers (plants)
- consumers (animals)
- predators and prey



Choose an animal.
What role does your animal play?

Complete:

Animal: _____

What it eats: _____

Role: Producer / Consumer: _____



LIFE CYCLES

Life cycles

A life cycle shows how a living thing grows and changes over time.
All animals go through stages of development.



Why are life cycles important for survival?

Draw and label:

Draw and label a life cycle:

- young
- growing
- adult

A large empty rectangular box with a black border, intended for a student to draw and label a life cycle.

GROWTH & SURVIVAL

Growth & Survival

Animals need food and protection to grow and survive.
If young animals do not survive, populations can change.



What helps young animals survive?

Explain:

What might happen if young animals do not survive? Think 'bigger picture!'

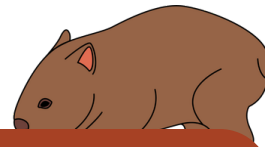


HUMAN IMPACT

Human Impact

Humans can change ecosystems by:

- removing habitats
- polluting environments
- introducing new species



How do these changes affect food webs?

Complete:

Think of a human action and the effect it might have on animals.
Explain below.



AT THE ZOO

Observe animals and how they interact.

Look for:

what animals eat

where they find food

Choose one animal. Record:

- What it eats
- Where it gets food
- Why this helps it survive

ZONE: TRICKY TONGUES & TREETOPS

FEEDING RELATIONSHIPS

Animals depend on food sources in their habitat.

LOOK...

Can you see any potential food sources for the animals in this exhibit?

THINK...

What happens if food sources change?

ACTIVITY...

If a food source disappears, then:

- _____
- _____
- _____

ZONE: DAINTREE RAINFOREST

RAINFOREST ECOSYSTEMS

Rainforests have many connected food chains.

LOOK...

What can you see in this exhibit?

THINK...

Why do you think many different species live in rainforests?

ACTIVITY

List two ways animals depend on plants.

- _____
- _____

ZONE: KANGAROO WALKABOUT

KANGAROO

Kangaroos eat grass and plants.

They are primary consumers.

LOOK...

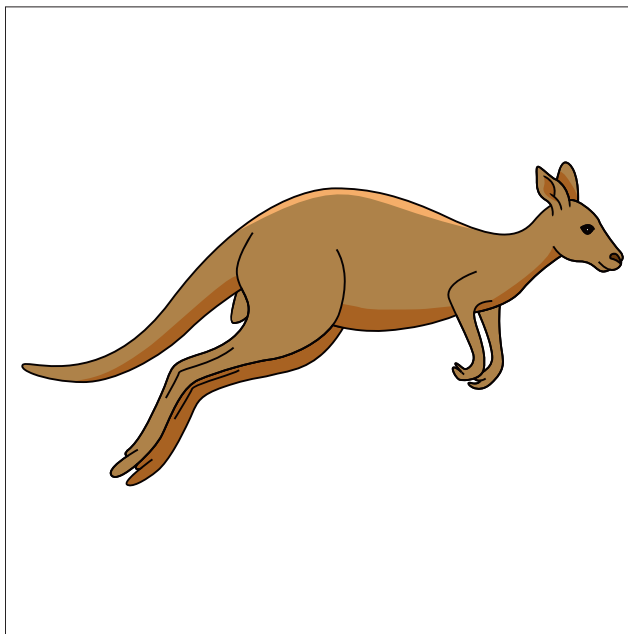
What is the kangaroo eating?

THINK...

How does its diet affect its survival?

ACTIVITY...

Explain how energy moves from plants to the kangaroo.



ZONE: NIGHTFALL

NOCTURNAL ANIMALS

Some animals feed at night.

Sugar gliders eat insects and plant foods.

THINK...

Why is being active at night helpful to this animal's lifecycle?

ACTIVITY...

Explain how this behaviour supports survival.



ZONE: CROCODILE BILLABONG

CROCODILE

Crocodiles are predators. They eat other animals.

THINK...

How does this animal get its food?

Activity

Explain how the crocodile fits into a food web.

AFTER OUR VISIT TO THE ZOO

Reflection

Describe one animal:

What it eats

How it survives

PROTECTING ECOSYSTEMS

Write:

How can we protect food webs and animals?
