

# Questacon at HOME

## Citizen Science: Kindergarten to Year 2

### Backyard Adventure

#### Instructions

Get somebody to help you read through the 'backyard adventure resource sheet' and do your best to answer all the questions below – including the bonus points! With a responsible adult get out and about your house to track down some of these interesting creatures. Look high and low but remember not to touch anything and to stay safe at all times!

#### Cockatoos

Cockatoos, or “Cockies”, can be found throughout much of Australia and are native to our country. Can you name two types of Cockatoo?

1. \_\_\_\_\_
2. \_\_\_\_\_

What do Cockatoos eat?

\_\_\_\_\_

Bonus point! What type of birds are Cockatoos?

\_\_\_\_\_

#### Mushrooms

Can you give another name for mushrooms? (Hint: it starts with the letter “T”)

\_\_\_\_\_

What types of mushroom should we avoid?

\_\_\_\_\_

Bonus point! Can you draw a mushroom?



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### Beetles

Can you name 2 types of beetle?

1. \_\_\_\_\_
2. \_\_\_\_\_

What kind of animal is a beetle (Hint: they have 6 legs)?

\_\_\_\_\_

Bonus point! Can you find and draw a beetle? Beetles can't hurt you, but don't touch them because we can accidentally hurt them!

### Ants

Can you name 3 types of ants?

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

How many leg do ants have? How many sections are their bodies made up of?

\_\_\_\_\_

Bonus point! Draw the 3 different ants you named!

### Eucalypts

Commonly known as gum trees these cover much of Australia and are known around the world as being one of our most common trees.

Native animals love Eucalypts, for food and shelter – can you name 3 animals you might find living in Eucalypts?

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_



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Not many animals eat Eucalyptus leaves – do you know why?

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Bonus point! Can you find 3 different Eucalyptus leaves and draw them below?

### Slaters

Slaters can move in a funny way which has led to them getting a fun nickname – do you know what it is?

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Where can you find some slaters?

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Bonus point! Find a slater in your yard or outside and draw a picture of one below:

### Flies

How many wings do flies have?

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Flies use the same type of mouth part as a Butterfly! Do you know what it is called? (Hint: It's the long trunk like part on their faces – it starts with the letter "P" but is a bit of a longer word)

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Bonus point! Make a fun little rhyme about a fly below:



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### Caterpillars

What two insects do caterpillars turn into?

- \_\_\_\_\_
- \_\_\_\_\_

Where would you look for caterpillars? Do you know why you would find them there?

Bonus point! See if you can find a caterpillar. What colour was the caterpillar you found?

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### Feathers

Can you name three things feathers help birds do?

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

Why do you think some feathers are curved?

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Bonus point! Feathers come in lots of different shapes, colours and sizes! See if you can find 3 different feathers. How are they different?



# Resource Sheet

## Cockatoos

The cheeky and noisy 'Cocky'! Their loud calls would be familiar to anyone living in Australia. The large white Cockatoo with a yellow crest, named the Sulphur-Crested Cockatoo, is one type of cockatoo native to our country, and it has a very large population. Other types of cockatoos include the Gang Cockatoo, and Red or Yellow Tailed Black Cockatoos. It is normal to see flocks of Cockatoos ripping into their food on grassy areas, or perched in their hundreds throughout trees, screaming loudly at each other.

Cockatoos are mainly seed eaters, though they can also eat roots, plant bulbs and even the occasional insect or their larvae (the first life stage of a young insect)! To crack through hard seed cases Cockatoos have a very powerful beak so never ever put your fingers near them!

**Fun fact:** Cockatoos are actually a part of the Parrot family!

## Mushrooms

Mushrooms are sometimes called toadstools, because they look like a perfect seat for a toad! They grow in the soil, but you may sometimes find them growing on trees. Mushrooms grow more just after it has rained, so keep an eye out next time it rains! But be careful, because some mushrooms can be poisonous (like the Deathcap, Destroying angel and Webcap mushrooms). Even though some people do eat mushrooms, it is best not to touch or pick them up unless you have a mushroom expert with you. When you draw your mushroom, remember they can come in all shapes, sizes and colours!

## Beetles

There are over 400,000 different types of beetles in the world! Some are teeny weeny, and others grow to be quite large. The longest beetle in the world is the Hercules beetle, and the most massive is the Titanus beetle. Beetles are a type of insect. Like all insects, they have 6 legs! They also have two sets of wings: a fragile inner set for flying and a harder outer set that protects them. Beetles are not dangerous at all, but it's best not to handle them because we could hurt them.

When you are trying to find a beetle outside, look on the ground, in the grass, or under a rock.

## Ants

These amazing insects live almost everywhere on the planet. Ants play an important role in nature, in fact our living planet couldn't exist without them! Watch out though – most ants bite! The bigger the ant, the more it will hurt – so make sure you are not standing on an ants nest when you're outside. Ants are a type of insect, just like bees and butterflies. This means that they have six legs and three main body parts: the head, thorax and abdomen.

Ants are very social animals, and like to live in big communities (called a colony). There are three types of ants that live in a colony: the Queen, female workers and males. The worker's don't have wings, but the Queen and males do. The Queen spends its' whole life mating with the males and laying eggs!

**Fun fact:** Ants can lift about 20 times its own body weight. That means that if you were as strong as an ant, you could pick up a car!



## Eucalypts

Eucalypts! The good ol' gum tree that covers most of Australia! There are nearly 700 different types of gum tree across Australia and a wide range of heights and forms. Some even have multiple trunks, called Mallee. Some people do not like having eucalypts in their yards as they can drop a lot of their branches, twigs and leaves.

Each gum tree provides a home for lots of birds, mammals and invertebrate species (invertebrates are animals without a backbone, like insects). In the wild it is common to find Koalas sleeping among the leaves, and if you look at the trunk of a gum tree, after a while you will see lots of insects that call this tree home. Eucalypt species include the River Red Gum, Silver Leaved Stringybark, Mountain Gum, Ghost Gum and Apple Box!

Fun fact: the leaves of Eucalypts contain toxic chemicals (which aren't good to eat) and not very many healthy vitamins, which is why most animals won't eat them – and why koalas spend so much time sleeping to digest the nasty food.

## Slaters

Also known as Roley Poleys, Pill Bugs, or Wood Lice, Slaters are not even a type of bug, they are a crustacean! This means that they are closer relatives of the crab than the bee or the fly. These creatures live in groups of hundreds and can be found in almost every backyard in the world, including your very own! To have a search for some yourself, try looking under rocks, wood and long-left household items.

To identify a slater, look for its seven pairs of legs and two pairs of antennae. When you see these little creatures, you may also notice that they also curl up into a ball. The reason they do this is because this is how they defend themselves when they feel threatened. So try not to scare them too much!

Slaters occasionally come inside the house. They don't bite or sting so just sweep them up and put them back outside if you find one exploring inside.

**Fun fact:** Slater's are scavengers which mainly feed on decaying organic matter, which is why they tend to be found in places of decay, for example, underneath rotting wood. They form a crucial part in our soil cycle, which means they are actually super beneficial to keep in your backyard.

## Flies

With over a million types of flies in the world, you probably know what a fly looks like! You can rest assured, these creatures are not dangerous at all! Flies are cool and special because they have two sets of wings. They use their first set of wings to fly, and use the second set to maintain balance and go in crazy patterns. The two most common flies you are most likely to encounter are the bush fly (small and are often found in groups) and the larger blow fly. Both love poop and rotting meat which is where they lay their eggs and why they are often found around all things stinky!

Though they can be annoying, flies form an important part of many environments.

- Flies are the second most productive pollinators after Bees (this means they take plant seeds and pollen to a new environment to grow new wildlife)
- Some types of flies are collectors - they take stinky, rotten things apart, which help them to break down into tiny pieces.
- Some flies also eat other insects - this helps to make sure there aren't too many nasty bugs around.



Flies don't eat things with a normal mouth either. They use a long trunk-like mouth called a Proboscis, where they can suck food up!

**Fun fact:** Flies are also used in medicine! When flies are very young they look a bit different, they look like fat squishy worms, and we call these maggots. Maggots have been used to heal people, because they eat the dead (yucky) bits of a wound, which makes a very important part of our ecosystem.

### Caterpillars

These creepy, crawly creatures are the early stages of both butterflies and moths. Caterpillars have soft, squishy bodies that grow very quickly. Some types (called species) grow as small as 1mm or as big as 14cm! Many animals like to eat caterpillars, so they use their appearance to protect themselves. Caterpillars hide on the underside of leaves where they can blend in and hide from the animals that will eat them. Caterpillars like to munch on leaves, and can sometimes leave bite marks in your plants. This makes it easy to look out for caterpillars in your own garden or backyard!

### Feathers

Feathers are very important because they help birds to fly, stay warm and keep dry! There are many different types of feathers, with lots of different shapes, colours and sizes. This depends on the type of bird (called species) and what the feather is used for. Feathers on birds are like our hair, sometimes they fall out and then regrow again. If you find a curved feather in your backyard, it means that they were used to help keep a bird really warm. The curved shape means that air can get trapped under their feathers, helping to protect them from the elements! We call this insulation – just like how the more layers of clothing you wear when it's cold outside, the warmer you will be. Feathers can be quite beautiful especially when organised together! You should wash your hands after handling them though as they may carry mites or lice.

