

Project Numbat

Teacher and Student Resource Package

Junior Primary School

About Project Numbat

Project Numbat is a community-based not-for-profit organisation working to raise awareness and support for the conservation of Western Australia's unique animal emblem, the Numbat.

Information about the organisation and its activities can be found at www.numbat.org.au.

Teacher Overview

The following package has been developed by Project Numbat to support teachers in embedding conservation education into curriculum programs. The package provides cross-curricular activities focusing on the Western Australian animal emblem – the endangered Numbat – and other native animals.

It has been designed to enhance the effectiveness of the Project Numbat powerpoint presentation which can be downloaded and delivered by teachers with the accompanying detailed lesson plan to support its implementation. It is strongly advised you read the **Numbat Fact Sheet** before delivering the presentation as this covers most aspects of the Numbat and will help in guiding discussion and answering questions during the presentation.

Alternatively, teachers can request a Project Numbat volunteer to deliver the presentation and facilitate discussions on-site with students. Requests can be sent to schools@numbat.org.au.

If a Project Numbat volunteer is visiting your school, please note they are not all trained teachers, though all have experience working within the education field and all have current Working with Children status. Please support our presenters and your students by reading this support pack carefully to ensure you maximise the learning opportunities available from this experience.

The Before and After Activity Packages extend the learning experiences beyond the powerpoint presentation, thus enabling the key understandings to be embedded across the curriculum over a period of time instead of being delivered as an isolated learning experience.

Through use of these activities prior to and after the presentation, teachers can ensure learning opportunities are maximised. This will nurture the development of environmentally responsible students and ultimately lead to positive actions being undertaken that support the well-being of our unique Western Australian native animals.

We Want to Hear from You!

We are keen to hear how you have implemented the Project Numbat education package in your classroom and would like to showcase student learning on our website. If you have anything you would like to show us, please send it to schools@numbat.org.au.



Project Numbat Presentation

Years K-3

The following section provides background information for teachers about what the Project Numbat presentation entails.

The duration of the presentation is approximately 45 minutes and depending on student concentration and motivation may be extended for up to an hour.

The presentation incorporates a range of strategies employed to engage students actively in the learning process. Such strategies include opportunities for collaborative discussion, problem solving and the use of teaching aids.

An example included in the presentation is the use of verbal clues to describe the physical appearance of a Numbat. Students are required to use their imagination to build a picture in their minds matching the clues. Students are then presented with three animal images and the need to identify which image is the Numbat. They will then be provided with an opportunity to justify their reasons for the selection. This example encourages students to be involved in the presentation from the beginning.

Materials/Equipment: Project Numbat Junior Primary School PowerPoint Presentation, Project Numbat Fact sheet for background information, Junior Primary Before and After Activities, Junior Primary Resources and 'Hundreds and Thousands' (optional)

Curriculum Framework Links:

English/Listening and Speaking – Students listen with purpose, understanding and critical awareness in a wide range of situations. Students speak with purpose and effect in a wide range of contexts.

Science/Life and Living – Students understand their own biology and that of other living things and recognise the interdependence of life.

Project Numbat Objectives: By the conclusion of the presentation students will be able to:

- identify the Numbat as an animal unique to Western Australia
- identify and describe some of the physical characteristics and functions of the Numbat
- gain understanding of what the Numbat needs for survival
- gain understanding of the threats to Numbat populations in the wild
- have knowledge of action they can undertake to protect the Numbat and other native animals.



Luc Hoogenstein < luc.hoogenstein@xs4all.nl >

Lesson Plan

If a Project Numbat volunteer is presenting to your students, she/he will introduce herself/himself to the group of students and ask if they know why she/he has been invited to visit them. She/he will explain the purpose of the visit eg: “I have been invited today to talk to you about a unique Western Australian marsupial, the Numbat.”

Prepare the students for thinking. Tune them in by explaining that you are going to share some information about the Numbat with them and let them know in advance that they have a job to do too (so they know not to be passive learners and they have a responsibility at the end of presentation) by asking them, “Does anyone know what their job might be?”

Tell them their job is to:

- listen carefully to the information
- remember at least three pieces of information they find interesting
- think of questions to ask or comments/experiences to share based on the information you are going to give them.

SLIDE ONE - Do you know what a Numbat is?

Begin presentation by asking, “Does anybody know what a Numbat is?” [**Pause on slide title**]

Select a couple of students to respond and praise efforts eg:

- “Well done, that’s very good thinking, a Numbat is an animal special to WA.”
- “Not quite, but I’m going to let you in on a little secret. By the end of our time together you are not only going to know what Numbats are you are also going to know many other cool things about Numbats to share with your family and friends.”

Ask: “Is everyone ready to learn more about Numbats? [**pause for response**] Put your listening ears on, flick on your thinking caps, eyes this way, ready, steady, GO” [**gesture actions**].

Proceed with Slide One and click through each description.

Numbats are:

- Native to WA
 - “Does anyone know what this might mean?”
- Unique stripes
 - “Unique is another tricky word – I hope you all still have those thinking caps on, can anyone explain what this word might mean?”
- Mammal
 - “Numbats belong to a group of animals called Mammals which is actually the same group you and I belong to. Mammals all have something in common with each other and one of these things is what covers their body. Can you think about what might be covering a Numbat’s body? I’ll give you a clue as it is also covering our body.” (run your hands over your arms, eyebrows and finally flick your hair)
- Black bands across its eyes
- Animal Emblem for WA

- “This means it is special to us, like the emblem you have on your school shirt that shows something special about your school” (gesture to their school crest).
- Threatened with extinction
 - “You’d have to a very good detective to find a Numbat in the wild because they are very hard to find and there aren’t many of them left.”

“Can anyone remember why Numbats belong to a special group of animals known as mammals?”

SLIDE TWO - What does a Numbat Look Like?

[Pause on slide title]

“Now we have done a lot of talking about what a Numbat is, but we still need a clearer picture of what a Numbat looks like.”

“Who is good at making pictures in their minds?” Praise and respond.

“That’s excellent because we are going try and use our minds to imagine what a Numbat might look like.”

Explain that, with their eyes closed, they need to imagine what a Numbat might look like and build a picture in their head using the clues that you are going to give them.

Proceed with clues [one click per clue]:

- A Numbat is a mammal.
 - It has four legs.
 - A Numbat is about the length of your ruler.
 - It has a pointy nose and a long, bushy tail.
 - A Numbat has mostly reddish-brownish fur.
 - It has black and white stripes across its back.
 - A Numbat has a black stripe through each eye area.
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SLIDE THREE - What does a Numbat Look Like?

[Pause on slide title]

Instruct students to open their eyes.

“I know that you are all such clever listeners that you will have a good picture in your head of a Numbat so finally I’m going to show you a picture of one.”

[Click three times for three images to appear]

“Uh oh, there are three (count aloud, one, two and three) animal pictures here... which one do you think is the Numbat and how can you tell? I’ll give you a little bit of time to think about it and make your

decision.”

Select students to respond and explain their reason for choice. Relate back to the clues that you provided earlier.

[Click once and the Numbat photo will enlarge]

Extended question: “Which animal doesn’t belong in Australia?” The fox.

Extended question: “What is the other animal?” Brushtail Possum

SLIDE FOUR - Did you know?

[Click once]

Each Numbat is unique and can be identified by the bands on their back. They’re just like your fingerprints.

“There’s that big word again, ‘unique’ who’s got a good memory and can tell us what it means again?” Clarify, praise and re-explain that the bands of the Numbats back are special to each individual Numbat like our fingerprints are special to only us.

[Click once]

Numbats only eat termites, nothing else. Adult Numbats eat up to 20,000 termites every day.

“What is a termite?” Show image and pour jar of hundreds and thousands into the palms of student hands to demonstrate how many termites are eaten. (about two full handfuls – 100 grams)

[Click once]

Numbats are one of only two marsupials that are awake during the day.

Discuss how most Australian animals are nocturnal or rest during the day. Numbats are awake during the day because that’s when termites are awake.

SLIDE FIVE - Where Numbats Live

“What kind of habitat or environment do you think Numbats live in?”

Respond and explain.

Refer to the first image on the slide and talk about what Numbats live in (hollow logs). Ask: “Why do you think they spend a lot of time in hollow logs?” Praise and explain covering these reasons: shelter, warmth, to raise young, protection.

Mention natural and introduced predators and show images.

[First click: pythons (natural predator)]

[Second click: eagles (natural predator)]

[Third click: fox (introduced predator)]

[Fourth click: cat (introduced predator)]

SLIDE SIX - Mums and Bubs

[Pause on title]

Numbats are special mammals because they are marsupials and marsupials have pouches to carry their babies.

“Can anyone think of another special Australian mammal that also carries babies in a pouch?” Students may be able to name a number of Australian animals that have a pouch to carry their young in.

Depending on their level, you may wish to discuss with students that pouches can be different depending on the animal. For example, a wombat’s pouch has the opening towards the bottom as opposed to a kangaroo which has the pouch opening at the top. A Numbat’s pouch is not a true pouch but rather a part of the stomach with a flap of skin that hangs down over the young. The inner thigh area swells and creates an indentation where pouch young attach to four nipples.

Explain that just like you and I, Numbat babies need their mums’ love and lots of help to begin with.

Talk through the images of the Numbat babies growing.

[First click: 2–3 days old] Count how many babies there are in the picture (4).

[Second click: 5 months old]

[Third click: 9 months old]

Explain that they give birth to four young after carrying the babies inside for 14 days. Relate this to how long they were in their mummy’s tummy for. Do they think 14 days is a long or short time? Compare to length of school holidays.

Talk through how they grow, carried around on their mum’s teats and then when they’re 6–7 months old, they’re put in a burrow. They stay with their mum until they can look after themselves and then they move away and put all the things they have been taught into practice.

Explain that we have already learnt lots of things about Numbats. “What are some facts that you have learnt already?” Select five students to quickly recap some of the information that has been presented.

SLIDE SEVEN - What do Numbats need to survive?

[Pause on title]

“What are some things that you and I need to survive?” Select students to respond. (The purpose is for students to relate their own needs of survival to that of the Numbat.)

Explain that just as we need certain things to survive and be healthy so do animals like the Numbat.

[Click once] “The Numbat needs to eat. Who can recall what the Numbat like to eat?”

[Click once] to show image of termites.

[Click once] “The Numbat needs a home. Who can remember what kind of home a Numbat needs to live in?”

[Click once] to show an image of Numbat habitat. Discuss hollow logs.

[Click once] “The Numbat also needs a mate so they can start a family. Can anyone remember how many baby Numbats a mother can have at one time?”

[Click once] to show an image of a Numbat (this is a male as his sternum gland is red and active, which means he is looking for a mate).

[Click once] “Numbats also need to learn about stranger danger to protect themselves against natural and introduced predators and stay safe.”

[Click once] to show an image of a Numbat upright as it looks across its surroundings.

Extension questions:

“What do you think would happen if Numbats couldn’t find termites to eat? Why wouldn’t they be able to find food?”

- They wouldn’t be able to find food if there were no logs or habitat, or if it was too wet or too dry (as termites don’t live in these areas).

“What about if there were no hollow logs for Numbats to live in? What could happen in the bush for hollow logs to disappear?”

- There could be a fire, logging or other type of habitat destruction.

“What would happen if a Numbat couldn’t find a mate?”

“If Numbats don’t know how to keep safe from predators, what can happen?”

Praise students’ thinking, elaborate on each question above and lead onto next slide.

SLIDE EIGHT

[Pause on map]

Refer to map of Australia and explain that the Numbat used to live in this large area here (point to range on map – colour ‘tan’) and can now only be found in small numbers here just out of Perth (point to current sites identified on map of Australia – colour ‘orange’).

Explain how all of the things Numbats need to live are being threatened. Either tell the students or ask them to tell you the threats.

[First click] Habitat loss, farming, agriculture.

[Second click] Predators (introduced and natural).

[Third click] Fire.

This has meant there are fewer Numbats and now they need our help.

“How many Numbats do you think are left in the wild? Let’s hear some of your estimations and I’ll tell you whether each estimation is higher or lower than the actual number.”

There are fewer than 1,000 Numbats left in the wild. Relate this to the number of students in the school.

SLIDE NINE – How can you help the Numbat and other animals?

[Pause on title]

“Lots of people are trying to help Numbats... but here are some simple things that you and your school friends and families can do to help out and this will help other animals as well.” Click through each action and explain.

[One click] Be a responsible camper.

[One click] Be a responsible pet owner.

[One click] Stay on the tracks during bushwalks.

[One click] Make a donation to Project Numbat.

[One click] Set up a fundraiser for Project Numbat like a cake stall, free dress day or barbecue.

[One click] Tell people (or show people by using posters, writing about in newsletters, books etc) about the Numbat.

“We are going to do one of these actions right now and teach others about what we have learnt. In a moment I want you to turn to someone near you and let them know one interesting thing that you learnt today about the Numbat. You can talk about what you could do together as a class to help out. Then after you have done this I’m going to ask some of you to share your ideas.”

Give students a couple of minutes to share with each other and then refocus their attention again. To conclude ask the above question to the class and hear a few responses from the students about what they learnt today and what they think they may be able to do as a class to help protect the Numbat.

SLIDE TEN - Where to see Numbats

[Click once]

You may be lucky to see Numbats in the wild in Dryandra Woodland, Perup and other areas around Manjimup in WA’s south-west but they are often hard to see.

Perth Zoo is one of only two zoos in the world that has Numbats and the only one which breeds them.

Encourage students to tell as many of their family and friends about the unique WA native animal, the Numbat and although they may be challenging to spot in the wild a trip to Perth Zoo is a good spot to see a real Numbat up close.

SLIDE ELEVEN

To conclude, thank the students for their great listening.