



**THE WORKSHOPS
RAIL MUSEUM**

ANIMALS, ANIMALS, ANIMALS!

Prep and Year 1 Science

Teacher notes:

Overview and Curriculum

This program has been produced and published by The Workshops Rail Museum, North Street, North Ipswich, Qld, Australia 4305.

The Workshops Rail Museum's Vision Statement is:

to be recognised as a creative, innovative and exciting journey of discovery into Australia's rail story.

The Workshops Rail Museum's Mission Statement is:

to harness the significance of the Workshops precinct by delivering international standard cultural and tourism related activities, education and public programs associated with the interaction of rail on people's lives.

The Queensland Museum Network's Vision Statement is:

to be the premier Museum in Australia, connecting real objects and contemporary research with communities, creating authentic and compelling experiences and stories that inspire, enrich and empower.

The Queensland Museum's Mission Statement is:

to inspire generations of Queenslanders to discover, celebrate and value our distinctive natural and cultural environments.

The Queensland Museum Network Lifelong Learning vision is:

to provide lifelong learning experiences and opportunities for everyone, connecting QMN collections, research and stories, with the aim to inspire, enrich and empower people to make meaning.

Education programs produced by The Workshops Rail Museum, whether in hard copy or accessed from the Museum's internet website, are able to be reproduced and used by educational and like institutions for educational purposes free of charge. Programs cannot be reproduced or used for commercial purposes in any form. All programs, their contents and their images remain the property of The Workshops Rail Museum or other therein acknowledged sources, and normal copyright laws apply.

This program © The Workshops Rail Museum 2017

For further information and enquiries:

Phone: 07 3432 5100

Fax: 07 3432 5114

Email: info@theworkshops.qm.qld.gov.au

Web Site: www.theworkshops.qm.qld.gov.au

Curriculum information

The workbook tasks are aligned with the Australian Curriculum (v8.2): Science for Foundation/Prep and Year 1 students. The Science content strands addressed are *Science Understanding*, *Science as a Human Endeavour* and *Science Inquiry Skills*. These links are elaborated on the following pages.

Foundation/Prep Year

Science Understanding

Biological sciences:

Living things have basic needs, including food and water (**ACSSU002**)

Elaboration:

- recognising the needs of living things in a range of situations

TEACHER NOTES:

- The animals on display in the exhibition offer students the opportunity to compare and contrast interesting features, as well as things that are unique to living organisms; e.g. limbs for movement and other specialisations, such as claws for hunting, digging, etc.
- Students explore how wildlife have basic needs such as food, water, shelter and warmth, and how these are adapted to different habitats

Physical sciences:

The way objects move depends on a variety of factors, including their size and shape (**ACSSU005**)

Elaboration:

- observing how the movement of different living things depends on their size and shape

TEACHER NOTES:

- Students look at how wild animals in different habitats move, for example, walking, swimming and running

Science as a Human Endeavour

Nature and development of science:

Science involves observing, asking questions about, and describing changes in, objects and events (**ACSHE013**)

Elaboration:

- sharing observations with others and communicating their experiences

TEACHER NOTES:

- Students recognise that observation is an important part of exploring and investigating the things and places around us
- Students asks questions and provide explanations about living things, their needs, their environments and how they move

Science Inquiry Skills

Planning and conducting:

Participate in guided investigations and make observations using the senses **(AC SIS011)**

Elaboration:

- using sight and hearing so that students can gather information about the world around them

TEACHER NOTES:

- Students explore and observe the exhibition using the senses such as hearing and seeing to discuss, pose and respond to questions about animals such as different colours, patterns and textures of animal coverings, and different physical features, such as teeth, claws, horns and antlers
- Students record their information in the student workbook, through written texts and drawing

Processing and analysing data and information:

Engage in discussions about observations and represent ideas **(AC SIS233)**

Elaborations:

- taking part in informal and guided discussions relating to students' observations
- using drawings to represent observations and ideas and discussing their representations with others

TEACHER NOTES:

- Students work in small groups to generate and discuss ideas about animal needs and movement
- Students also communicate this information through drawings and written texts

Communicating:

Share observations and ideas **(AC SIS012)**

Elaboration:

- communicating ideas through role play and drawing

TEACHER NOTES:

- Students use drawings to represent specific habitats and the animals living within them, including their basic needs, for example the presence of food, water and shelter
- Students role play being different animals as a post-excursion activity option

Year 1

Science Understanding

Biological sciences:

Living things have a variety of external features (**ACSSU017**)

Elaborations:

- recognising common features of animals such as head and legs
- describing the use of animal body parts for particular purposes such as moving and feeding

TEACHER NOTES:

- The animals on display in the exhibition offer students the opportunity to compare and contrast interesting features as well as things that are unique to living organisms; e.g. limbs for movement and other specialisations, such as claws for hunting, digging, etc.

Living things live in different places where their needs are met (**ACSSU211**)

Elaborations:

- recognising that different living things live in different places
- exploring what happens when habitats change and some living things can no longer have their needs met

TEACHER NOTES:

- Students explore different habitats of the animals in the exhibition and share ideas about how different habitats provide for the needs of animals including food, shelter and water
- Students develop their understanding what happens when habitats change and some living things can no longer have their needs met

Science as a Human Endeavour

Use and influence of science:

People use science in their daily lives, including when caring for their environment and living things (**ACSHE022**)

Elaboration:

- identifying ways that science knowledge is used in the care of the local environment such as animal habitats

TEACHER NOTES:

- Students investigate the importance of different animals' habitats on which a range of living animals depend for food, shelter, water and fresh air
- Students identify ways that scientific knowledge is used to care for the environment and suggest changes to better meet the needs of animals
- Students learn about what Queensland Museum scientists do - they ask questions, investigate and observe changes to help us understand about the natural environment

Science Inquiry Skills

Planning and conducting:

Participate in guided investigations to explore and answer questions **(AC SIS025)**

Elaboration:

- sorting information and classifying objects based on easily observable characteristics with teacher guidance

TEACHER NOTES:

- Students are encouraged to pose and respond to questions about the purpose of animals' external features
- Students are encouraged to ask questions about what will happen if an animal did not have a specific external feature or adaptation, or if an aspect of the environment were to change and how this would affect the animals within the habitat

Processing and analysing data and information:

Use a range of methods to sort information, including drawings and provided tables and through discussion, compare observations with predictions **(AC SIS027)**

Elaboration:

- using matching activities, including identifying similar things, odd-one-out and opposites using drawings to represent observations and ideas and discussing their representations with others

TEACHER NOTES:

- Students work in small groups to generate and discuss ideas about animal needs and movement
- Students also communicate this information through drawings and written texts

Communicating:

Represent and communicate observations and ideas in a variety of ways **(AC SIS029)**

Elaborations:

- discussing or representing what was discovered in an investigation
- engaging in whole class or guided small group discussions to share observations and ideas

TEACHER NOTES:

- Students use drawings to represent specific habitats and the animals living within them, including their basic needs, for example the presence of food, water and shelter
- Students role play being different animals as a post-excursion activity option

Additional Queensland Museum Network resources

For information regarding Queensland Museum loans kits visit:

<http://www.theworkshops.qm.qld.gov.au/Learning+resources/QM+Loans>

For information on the *A Room for Wild Animals* exhibition visit:

<http://www.theworkshops.qm.qld.gov.au/Events+and+Exhibitions/>

For Queensland Museum learning resources on biodiversity and animal adaptations, visit the website below and enter keywords in the search box:

<http://www.theworkshops.qm.qld.gov.au/Learning+resources/Resources>

To explore the Queensland Museum's Biodiversity on-line collection visit:

<http://www.collections.qm.qld.gov.au/naturalEnvironments.page.do>

Other internet resources

For general factual information about different types of animals for student reference:

<http://www.softschools.com/facts/animals/>

For an alphabetical list of a wide range of different animals, including domestic pets, for student reference:

<http://a-z-animals.com/animals/>

A Room for Wild Animals at The Workshops Rail Museum

Get up close to 20 taxidermy specimens from the Queensland Museum collection.

Most of us are familiar with Australian mammals such as koalas and kangaroos, but have little appreciation for the sheer size and form of many overseas land mammals.

In a first for Ipswich, *A Room for Wild Animals* showcases 20 taxidermy specimens from the Queensland Museum collection including big cats, bears and deer.

The specimens featured represent some of the most impressive mammals on the planet, providing a rare opportunity to experience them up close. The exhibits featured in this display are part of a larger collection, some of which were seized as Proceeds of Crime and donated to Queensland Museum on behalf of the Commonwealth of Australia.

Today they speak on behalf of their living relatives across the globe and help us to learn an important conservation lesson.

Dates: 25 February 2017 - 26 November 2017

Price: Free with Museum entry

