



**THE WORKSHOPS
RAIL MUSEUM**

ANIMALS, ANIMALS, ANIMALS!

Prep and Year 1 Science

Teacher notes for
Student Workbook

Using the student workbook

The student workbook may be downloaded and printed for student use from The Workshops Rail Museum website. It consists of activities to do before, during and after the excursion.

The pre-excursion activities are designed to provide context for the excursion and draw on students' prior knowledge. These activities also introduce or reiterate key points about what living things need for survival, their environments, physical features, and how they move. These activities can be done over a number of lessons and incorporated into other school-developed unit plans/lessons where relevant.

The excursion-based activities encourage students to explore the above concepts more deeply while looking at real animal specimens. These activities guide student investigations and encourage students to observe and share their findings with each other in a range of modes, e.g. speaking, drawing and writing.

The post-excursion activities allow for consolidation of learning from the excursion experience where students apply their learning through sharing their observations of the animals through verbal descriptions, drawings and written texts.

A number of the workbook activities include a component called "Talking Time" where students are encouraged to discuss their ideas and observations to encourage collaborative and peer learning. As with the pre-excursion activities, these activities can be done over series of related lessons.

An information and answer key for the student workbook is provided within this document.

Excursion information

For ease of movement through the exhibition and for better viewing of the animals, it is recommended that approximately 50 students at a time enter the exhibition space. For schools with larger cohorts visiting the Museum, an optional *Big Mammal Trail* worksheet is also available at the Museum. This trail takes visitors on a search throughout the rest of the Museum to locate information posters about some of the animals in the exhibition. Students also record some interesting facts about the different animals they find. Copies of the trail are located inside the Museum entrance.

We recommend spending about 45 minutes to an hour in the exhibition to work on the workbook excursion activities. On the interpretive panels for the exhibits, there are Kids Activity panels which are represented by this symbol:

Each one has a small activity or discussion question which further enhances the exhibition experience.



Answer and information key

Many tasks are open ended in nature and encourage student discussion so a number of responses may be acceptable with reasonable justification or explanation. Additional teacher notes or teaching considerations are included for a number of the activities.

Pre-excursion activities

Activity 1: My favourite animal

Q1-5: Possible responses:

- Students own responses to the task based on their personal favourite animal

TEACHER NOTES:

- **Q3: What does your animal drink?:** Students may offer a range of acceptable responses depending upon their personal experiences, e.g. they may give milk to a pet cat. Students may need guided instruction to elicit **water** as the key response here as all animals need water in some capacity to survive
- **Q5: Where does your animal live?:** Encourage students to be quite specific in their responses, e.g. if their favourite animal is a dog, it may live in a kennel. The key idea is to develop an understanding that all animals require some form of **shelter/somewhere to live** (links to later understanding of **Habitat**)

Additional class discussion question:

- **How does your animal move?**
 - Through guided discussion, elicit from students the different ways animals; e.g. running; climbing; walking; jumping; sliding/slithering; etc.
 - Share ideas as to why animals may move certain ways, e.g. run fast to catch prey or escape from predators; etc.

Activity 2: Talking time:

- Students responses/ideas will vary based on their personal favourite animals

TEACHER NOTES:

Class discussion questions/ideas:

- These are guided class discussion questions to encourage students to focus on the commonalities among animals. Teachers can document class ideas for future learning and reference.
 1. Show each other your pictures and information about your animal. Does anyone have the same favourite animal?
 2. Discuss what the different animals eat – do any of the animals eat the same types of food?

3. What do the animals look like? What is similar? What is different?
4. Where do the animals live? What is similar? What is different?
5. Compare and contrast: Do any of the animals move in the same way? Which ones move differently?

Activity 3: What's the same?

Q1: Possible responses:

- Answers can vary depending on the different pairs' animals
- Answers may include: have 4 legs; have fur/hair; can run; eat meat; etc.

TEACHER NOTES:

- Q1: May need guided class discussion after group work activity to start to elicit key commonalities among animals, i.e. their needs; how they move; physical appearance; etc.

Q2: Answer:

- All animals need (1) **food, water** and (3) **shelter/somewhere to live**.

TEACHER NOTES:

- ***Air*** or ***oxygen*** is also an acceptable response
- Key idea is to highlight the needs of living things – ***food, water, shelter, air***

Excursion activities

TEACHER NOTES:




- All excursion activities can be done collaboratively in small groups or pairs
- ***Talking Time*** activities can be expanded upon back at school after the excursion to consolidate and reflect on learning experiences

Excursion welcome page:

TEACHER NOTES:

- Read the excursion welcome page together before the excursion
- Help students identify the different animals from the pictures and identify the features mentioned in the text (Note: Horns are usually single-pronged and are permanent; Antlers are usually on males only, have several branches and are shed and regrown yearly)

			
Brown Bear	Lion	Cape Buffalo	Reindeer

		
Jaguar	Pronghorn	Black Bear

- When in the exhibition, encourage students to find these animals

Activity 1: Where do I live?

Q1: Answer:

- Polar bear – Snow
- Lion – Grass plains
- Tiger – Jungle
- Gemsbok – Desert

Activity 2: Talking time:

Possible responses:

- Range of responses acceptable based on students' knowledge and experiences; for example:
 - Snow – penguins; seals; foxes; reindeer; etc.
 - Grass plains – zebra; elephants; antelope; giraffe; etc.
 - Jungle – monkeys; leopards; snakes; birds; etc.
 - Desert – lizards; camels; snakes; bilbies; etc.

TEACHER NOTES:

- Encourage students to think of animals other than those in the exhibition that live in the habitats in Q1.

Activity 3: What do I eat?

Q1: Possible responses:

- Students choose which one applies to themselves

TEACHER NOTES:

- The purpose is to introduce the vocabulary of **herbivore**, **carnivore** and **omnivore** but not to focus on it – exposure to these terms only

Q2: Possible responses:

Herbivore: plant eater	Carnivore: meat eater	Omnivore: plant and meat eater
Animal name: <i>Any of the following:</i> <ul style="list-style-type: none"> • Common Eland • Greater Kudu • Cape Buffalo • Water Buffalo • Gemsbok • Chital • Moose • Reindeer • Sambar • Rusa • Red Deer • Pronghorn • African Elephant 	Animal name: <i>Any of the following:</i> <ul style="list-style-type: none"> • Cheetah • Lion • Tiger • Jaguar • Polar Bear * <i>* mainly a carnivore but will on occasion eat small amounts of vegetation</i>	Animal name: <i>Any of the following:</i> <ul style="list-style-type: none"> • Black Bear • Brown Bear/Grizzly Bear • Polar Bear * <i>* mainly a carnivore but will on occasion eat small amounts of vegetation</i>
Food drawing: Students' own work Food name: <i>Potential responses:</i> <ul style="list-style-type: none"> • Plants • Grass • Trees • Leaves • Vegetation 	Food drawing: Students' own work Food name: <i>Potential responses:</i> <ul style="list-style-type: none"> • Meat • Other animals • Seals • Fish 	Food drawing: Students' own work Food name: <i>Potential responses:</i> <ul style="list-style-type: none"> • Plants • Berries • Fruit • Grass • Moss • Honey • Seals • Fish • Other animals • Meat

Activity 4: Animal I spy:

Q1 & 2: Answers:

- Photo 1: Cheetah; fur/skin
- Photo 2: Brown Bear; claws/paw/foot
- Photo 3: Lion; mouth/teeth

Activity 5: Talking time:

Possible responses/key ideas:

- Cheetah: camouflaged fur to help hide it so it can get closer to its prey without being seen – the spots help it blend in with the long grasses on the plains
- Brown Bear: to tear apart logs to get at food; for hunting
- Lion: to catch and tear apart its prey

TEACHER NOTES:

Extension activities or discussion ideas:

- Discuss with students why the cheetah can run so fast: long legs; lightweight body; small head; flexible back – all assist with speed and movement
- Discuss how big the bear's shoulders, claws and teeth are – helps with pulling apart rotting logs to get to food; to catch fish/salmon; etc.
- Discuss the lion's mane: Which lions have one? (males); Why do they have a mane? (to impress female lions and to protect the male lion's neck when fighting)

Activity 6: How do I move?

Q1-3: Answers – any of the following:

- Q1: Cheetah; Pronghorn
- Q2: Black Bear; Brown Bear; Polar Bear
- Q3: Polar Bear; Elephant (note: the elephant is not a full specimen – only tusks and a foot)

Activity 7: Talking time:

Possible responses:

- Students come up with their own examples of other animals with can move like the ones in Activity 6
- Other examples of movement may include: flying; sliding/slithering; hopping/jumping; swinging through trees; crawling; climbing; etc.
- Possible reasons for different types of movement can include: to catch/find food; to escape from predators; to get shelter (e.g. climbing trees); etc.

Post-excursion activities

Activity 1: My favourite exhibition animal:

Q1 & 2: Possible responses:

- Students own choice of animal and a related fact – based on their preferred exhibition specimen

Activity 2: A home for my animal:

Q1 & 2: Possible responses:

- Students own responses to the task – based on their favourite animal from the exhibition

TEACHER NOTES:

Post excursion extension activities:

Activity 1: My favourite exhibition animal:

- Students can do extended research on this animal using websites and/or reference books to find out more information about their animal
- Students can present their information to the class; e.g. as a poster; in digital format; etc.

Activity 2: A home for my animal:

- Students create a diorama or 3D model of their home for their animal
- Students can present their drawing/model to the class and explain the home they have created for their animal

Moving like an animal charades:

- Students take turns at pretending to be one of the animals they saw in the exhibition
- They can move and make noises like that animal
- The rest of the students need to guess what animal they are