



CLASSIFICATION & ADAPTATIONS

CURRICULUM LINKS:

- SC4-LIV-02 – analyses how the structural and behavioural features of organisms support survival in their environments
- SC4-LIV-03 – classifies organisms based on observable features and uses classification systems, including dichotomous keys
- SC4-PQU-01 – uses scientific inquiry to pose questions, plan investigations and evaluate evidence
- SC4-DAT-01 – collects, processes and analyses data to identify patterns, trends and relationships in scientific investigations
- SC4-NAT-01 – explains how scientific knowledge is developed and used to understand living things and biodiversity



**STAGE 4
WORKSHEETS**

WILD TEENS

Classifications and Adaptations Worksheet

Stage 4 – Year 7 & 8



Section 1

On your journey through the zoo, make sure to complete the animal checklist as you observe and discover each animal. Some animals may be hiding so make sure you take a closer look inside each enclosure.

Animal	Body surface				Reproduction					Temp		Type of limb (inc. numbers)				Vertebrate class
	Naked, moist skin	Dry scales	Feather	Fur or hair	Jelly-like eggs	Soft-shelled eggs	Hard-shelled eggs	Live young w/ pouch	Live young w/out pouch	Endo-thermic	Ecto-thermic	None	Legs	Wings	Fins/ flippers	
Bush Stone-curlew																
Echidna																
Southern cassowary																
Green tree frog																
Kangaroo																
Rock wallaby																
Python																
Crocodile																
Turtle																
Wombat																
Spider																
Platypus																



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Section 2

Observe the koalas closely and read the information presented in the Koala Rooftop exhibit to answer the questions below.



1. Koalas are classified as marsupials. Marsupials are one of the three groups that make up the larger group called mammals.

a. Provide three features that koalas share with other mammals.

i.

ii.

iii.

b. Explain why the koala is a marsupial.

2. Name and describe two features (adaptations) that koalas possess that allow for survival in trees.

i.

ii.

3. Explain why a koala joey eats the soft faecal pap produced by the mother.

4. What does the koala do to stay cool?

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Section 3

Use the dichotomous key below to identify the reptiles you observe. A dichotomous key works by asking a series of yes/no questions. Start at Question 1 and follow the directions until you identify the reptile.

For each reptile you find:

- Record the reptile's name in the table.
- Mark whether it has legs, eyelids, a shell and webbed feet.
- Use the dichotomous key to determine its reptile group (snake, turtle/tortoise, crocodile or lizard).
- Record the reptile group in the final column.

Step	Features	Reptile Group	Step
1a	Doesn't have legs or eyelids	Snake	1a
1b	Has legs and eyelids	Go to 2	1b
2a	Has a hard shell above and below the body	Turtle/Tortoise	2a
2b	Doesn't have a hard shell	Go to 3	2b
3a	Has webbed feet	Crocodile	3a
3b	Doesn't have webbed feet	Lizard	3b



Reptile Name	Has Legs?	Has Eyelids?	Has a Hard Shell?	Has Webbed Feet?	Reptile Group
	Yes / No	Yes / No	Yes / No	Yes / No	
	Yes / No	Yes / No	Yes / No	Yes ...	

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Did you know?

Australia is home to many venomous snakes, including the world's deadliest, the inland taipan. The venom of an inland taipan is extremely potent and is considered among the most toxic of any snake species.

Inland taipans live in the Australian Outback, one of the world's most remote environments. To cope with this harsh environment, they change colour with the season. They are lighter during summer to reflect the sun's rays, and become darker in winter to absorb more heat from the sun. While the inland taipan has the world's most lethal venom, it is shy in nature and rarely attempts to bite, even when provoked. There are no human fatalities on record from this species, and anti-venom is available should a bite occur.

In the space provided below, draw one of the reptiles you have observed today and label its external features that help it to survive.



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Section 4

Animal Focus: Australian Birds

There are many different bird species that call WILD LIFE Sydney Zoo home, each with distinct features and adaptations that help it survive in its environment.

Find the following key species and complete the table below to compare the animals listed.



Bird	Habitat Location	Features / Characteristics
Satin bower bird		
Bush-stone curlew		
Rainbow lorikeets		
Southern Cassowary		



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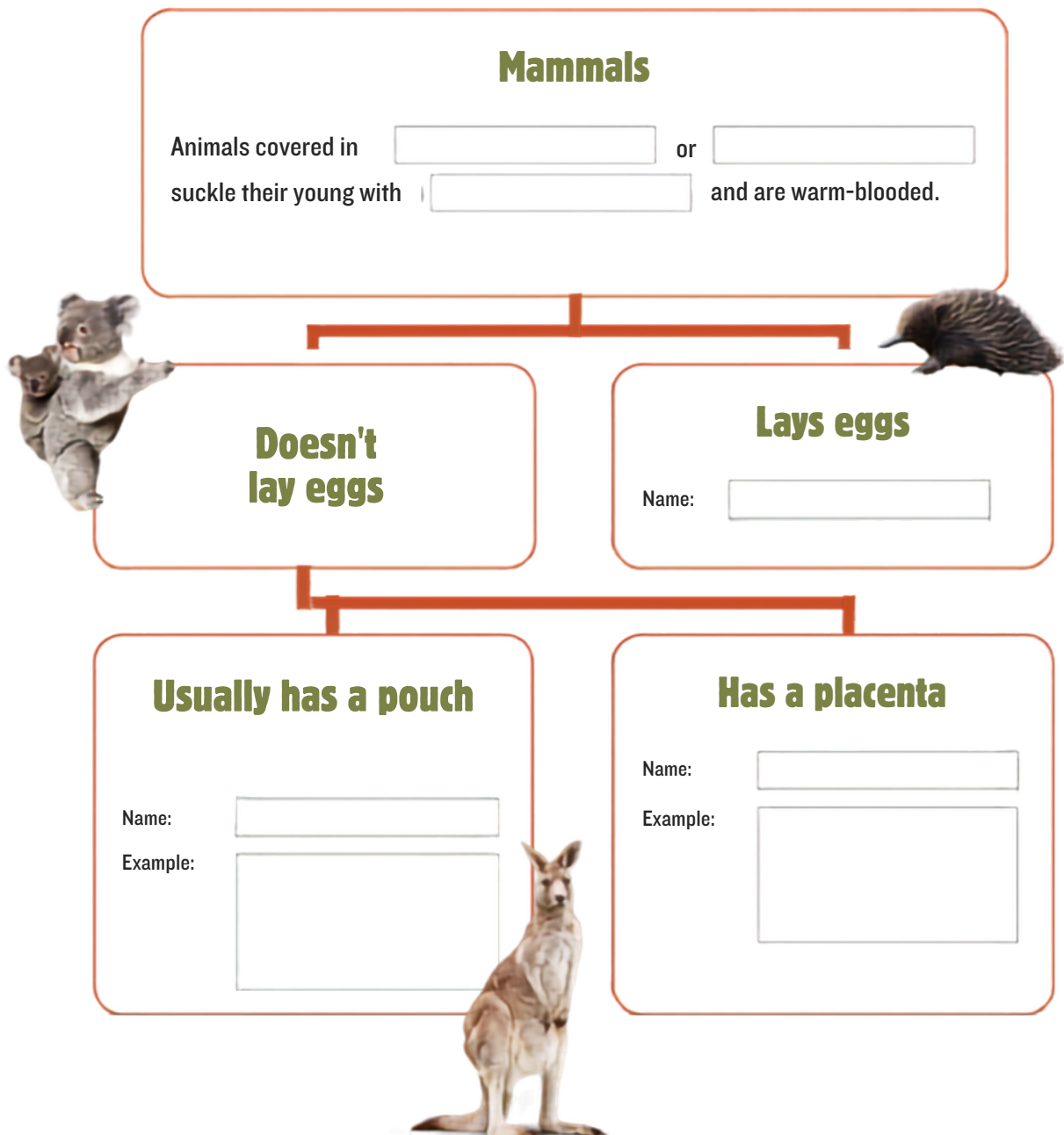
Section 5

Animal Focus: Mammals

Mammals can be classified into three smaller groups (monotremes, marsupials and placentals). A mammal's reproductive features are used to determine which group it belongs to.

An unfinished flow chart key is provided below. It classifies mammals into one of three groups. Complete this key.

Word bank: Fur, Hair, milk



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Section 6

Animal Focus: Wombats

Read the following passage about wombats and use the word bank to help fill in the missing words.

Word bank:

common

herbivores

round

intruders

Ringo

sedges

burrows

backside

forests

survival

avid

Our wombat is a _____ wombat named _____. The Common Wombat, or Bare-nosed Wombat, is found within the _____ of south-eastern Australia. These large burrowing _____ feed mostly at night on a variety of grasses, _____, forbs, roots and bulbs. Wombats are _____ diggers and spend much of their time creating extensive underground homes.

The main threats to their _____ include habitat loss, collisions with vehicles, and persecution by people and farmers. Wombats are the lovable layabouts of the Aussie bush with their _____ bodies and shuffling walk. Southern Hairy-nosed Wombats live in _____, which can give them protection from predators and the elements.

Temperatures within their habitat can regularly soar to over 35 degrees Celsius in summer, but the temperatures within the burrow stay at around 25 degrees Celsius, making it the perfect place for escaping the heat.

Any animal that tries to enter had better watch out! Smaller _____ and predators can be squashed against the side of the burrow with the wombat's bony-plated _____, and the wombat's powerful claws can make short work of most threats.



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In the space provided, draw the wombat's burrow and its surrounding environment.

