

ANSWER GUIDE



Term 2, 2022

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Part 1: Island life

PAGE 2

Activity title	Answers
Biodiversity buzzwords	
Biodiversity basics	<p>Many living organisms, but few different types = low biodiversity</p> <p>Many living organisms, and many different types = high biodiversity</p> <p>Few living organisms, and few different types = low biodiversity</p> <p>Few living organisms, but many different types = high biodiversity</p>

PAGE 3

Activity title	Answers
Isolated continent	birds – they are able to fly between Australia and other landmasses
Biodiversity brainstorm	student's own response

PAGE 4

Activity title	Answers
Living or non-living?	<p>student's own response</p> <p>possible answers: living: bird, tree, lizard; non-living: rock, water, cloud</p>

PAGE 5

Activity title	Answers
WA wildlife	true true false – there are hundreds of thousands false – there are over 1600 true false true
Colour me in	plants: Marri, Grass tree, Kangaroo Paw, Banksia animals: Fairy Wren, Carnaby's Cockatoo, Western Brush Wallaby, Bush Curlew, Dibbler, Numbat, Western Swamp tortoise, White-bellied frog,

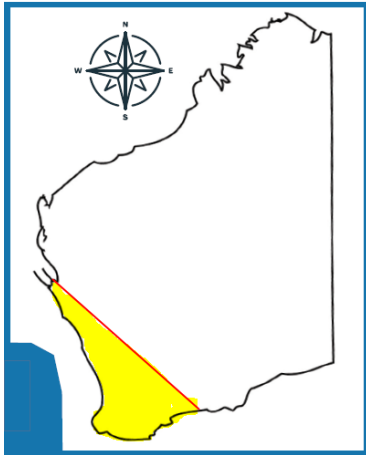
PAGE 6

Activity title	Answers
Who am I?	Quokka, Perentie, Black Swan, Motorbike Frog, Little Penguin, Ghost Bat
Top 10	student's own response

PAGE 7

Activity title	Answers
Animal Fact File	student's choice of animals with research to confirm answers

PAGE 8

Activity title	Answers
Isolated oasis	Nearly 90% of the eucalyptus woodlands have been cleared. More than half of the 6759 identified plant species are endemic. 12 of the 280 native bird species are endemic 12 of the approximately 60 native mammal species are endemic, 175 reptile species are found here Nearly two thirds of the 30 amphibians here are endemic.
Evaluate	student's own response consider that if we don't know about these areas we might lose species before we realise they need protection
Explore	

Activity title	Answers												
Scrambled Species	<p>Gilbert's Potoroo, Critically Endangered</p> <p>Turtle Frog, Least Concern</p> <p>Red Tingle Tree, Near Threatened</p> <p>Australian Pitcher Plant, Vulnerable</p> <p>Woylie, Critically Endangered</p>												
Investigate	<p>student's choice between Gilbert's Potoroo and Woylie</p> <table border="1"> <tr> <th colspan="2">Species: Gilbert's Potoroo</th></tr> <tr> <th>Threats</th><th>What is being done</th></tr> <tr> <td> <ul style="list-style-type: none"> wildfire introduced predators dieback (plant disease which destroys habitat and food sources) lack of genetic diversity climate change gaps in human knowledge about their ecology, habitat requirements and fertility </td><td> <ul style="list-style-type: none"> establishing backup populations on islands implementing fire management strategies controlling feral predators monitoring populations <p>Gilbert's Potoroo Action Group is a volunteer community group which work to raise public awareness about the plight of this species, assist research and recovery programs, and fundraise to pay for these programs.</p> </td></tr> </table> <table border="1"> <tr> <th colspan="2">Species: Woylie</th></tr> <tr> <th>Threats</th><th>What is being done</th></tr> <tr> <td> <ul style="list-style-type: none"> Historical habitat clearing for agriculture ongoing habitat loss and fragmentation predation by feral cats and foxes disease and stress </td><td> <ul style="list-style-type: none"> removed from threatened species list in 1996 due to successful conservation programs a dramatic decline in numbers from just three years later saw them re-listed in 2008 verifying the causes of the declining population minimise fox and feral cat predation establish back up populations in other areas (translocation) public awareness about the plight of this species </td></tr> </table>	Species: Gilbert's Potoroo		Threats	What is being done	<ul style="list-style-type: none"> wildfire introduced predators dieback (plant disease which destroys habitat and food sources) lack of genetic diversity climate change gaps in human knowledge about their ecology, habitat requirements and fertility 	<ul style="list-style-type: none"> establishing backup populations on islands implementing fire management strategies controlling feral predators monitoring populations <p>Gilbert's Potoroo Action Group is a volunteer community group which work to raise public awareness about the plight of this species, assist research and recovery programs, and fundraise to pay for these programs.</p>	Species: Woylie		Threats	What is being done	<ul style="list-style-type: none"> Historical habitat clearing for agriculture ongoing habitat loss and fragmentation predation by feral cats and foxes disease and stress 	<ul style="list-style-type: none"> removed from threatened species list in 1996 due to successful conservation programs a dramatic decline in numbers from just three years later saw them re-listed in 2008 verifying the causes of the declining population minimise fox and feral cat predation establish back up populations in other areas (translocation) public awareness about the plight of this species
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Activity title	Answers
Home is where the habitat is	student's own response
Designer homes	student's choice of animals with logical wish list items for the species' chosen
Innovate	student's own response
Evaluate	student's own response possible answers: frogs, turtles, insects

PAGE 11

Activity title	Answers
Habitats in WA	Top left to bottom right: urban, desert, woodland, wetland, mangrove, forest
Habitat diversity	

Activity title	Answers
A picture is worth a thousand words	<p>The diagram consists of three rows of boxes. The top row contains three purple boxes with white text: 'Australian Raven', 'Tawny Frogmouth', and 'Red Wattlebird'. The middle row contains three photographs of birds, each with a small green 'FOCUS' label in the top left corner. The bottom row contains three purple boxes with white text: 'Insectivore (insects)', 'nectivore (nectar)', and 'opportunistic carnivore (meat, eggs)'. Colored lines connect the top boxes to the bottom boxes: a yellow line from 'Australian Raven' to 'Insectivore (insects)', a blue line from 'Tawny Frogmouth' to 'nectivore (nectar)', and a red line from 'Red Wattlebird' to 'opportunistic carnivore (meat, eggs)'. Additionally, there are three circular nodes between the top and middle rows, and three between the middle and bottom rows, with lines connecting them to the top and bottom boxes respectively.</p>
Food is life	An animal that has no natural predators is considered to be at the top of its food chain. For example, Orcas (Killer Whales) are the top of their food chain, they are predators who eat other animals but no animal hunts and eats Orcas.

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Functional feeding	producers consumers decomposers																										
Wetlands food web	<p>arrows go from the first column to point to each species listed in the second column</p> <table> <tr> <th>What is eaten</th><th>Who eats it</th></tr> <tr> <td>Pond weed and algae</td><td>Western Pygmy Perch Black Swan Mosquito larvae Tadpoles</td></tr> <tr> <td>Moaning Frog</td><td>Musk Duck Oblong Turtle Swamp Harrier Tiger Snake</td></tr> <tr> <td>Little Pied Cormorant</td><td>Swamp Harrier Tiger Snake</td></tr> <tr> <td>Mosquito larvae</td><td>Musk Duck Oblong Turtle Western Pygmy Perch Dragonfly nymph Moaning Frog Little Pied Cormorant</td></tr> <tr> <td>Musk Duck</td><td>Tiger Snake Swamp Harrier</td></tr> <tr> <td>Oblong Turtle</td><td>Swamp Harrier</td></tr> <tr> <td>Tadpoles</td><td>Tiger Snake Little Pied Cormorant Musk Duck Oblong Turtle</td></tr> <tr> <td>Western Pygmy Perch</td><td>Swamp Harrier Tiger Snake Little Pied Cormorant Musk Duck Oblong Turtle</td></tr> <tr> <td>Swamp Harrier</td><td>none</td></tr> <tr> <td>Dragonfly nymph</td><td>Moaning Frog Little Pied Cormorant Musk Duck Oblong Turtle Western Pygmy Perch</td></tr> <tr> <td>Black Swan</td><td>none</td></tr> <tr> <td>Tiger Snake</td><td>Swamp Harrier</td></tr> </table>	What is eaten	Who eats it	Pond weed and algae	Western Pygmy Perch Black Swan Mosquito larvae Tadpoles	Moaning Frog	Musk Duck Oblong Turtle Swamp Harrier Tiger Snake	Little Pied Cormorant	Swamp Harrier Tiger Snake	Mosquito larvae	Musk Duck Oblong Turtle Western Pygmy Perch Dragonfly nymph Moaning Frog Little Pied Cormorant	Musk Duck	Tiger Snake Swamp Harrier	Oblong Turtle	Swamp Harrier	Tadpoles	Tiger Snake Little Pied Cormorant Musk Duck Oblong Turtle	Western Pygmy Perch	Swamp Harrier Tiger Snake Little Pied Cormorant Musk Duck Oblong Turtle	Swamp Harrier	none	Dragonfly nymph	Moaning Frog Little Pied Cormorant Musk Duck Oblong Turtle Western Pygmy Perch	Black Swan	none	Tiger Snake	Swamp Harrier
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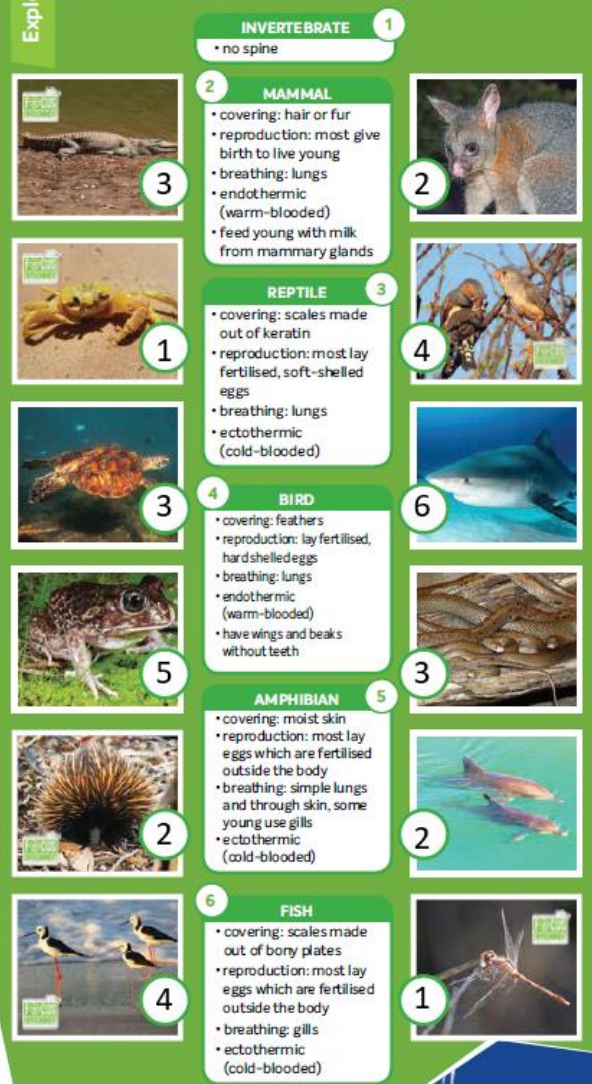
Activity title	Answers
Extinctions over time: Explore	European settlement
Extinctions over time: Evaluate	student's own response possible answers: humans using more natural resources, introducing non-native species, clearing areas of habitat to make farms and housing
Gone but not forgotten	Thylacine
Threatened species	C D F G E B A
S.O.S.	All except for: look cute, foot size, colour, fewer tourists



Activity title	Answers
Breed for release	ABC B C A ABC B
Sanctuaries saving species: Explore	to move from one place to another
Sanctuaries saving species: Evaluate	student's own response
Giving frogs a fighting chance	they need to know how to catch their own food once released
What's on the menu?	Top left to bottom right: Western Swamp tortoise, Frogs, Dibbler, Numbat

Activity title	Answers		
Introduced species	<div><div><div>INTENTION</div><div><div>control rodents</div><div>be food for livestock</div><div>control destructive beetles in sugarcane crops</div><div>be a food source for an insect used to create red dye used in making soldiers coats</div><div>transport goods</div><div>provide milk and meat</div><div>be hunted for sport</div></div><div><div>European fox</div><div>Camels</div><div>Goats</div><div>Prickly pear (Opuntia)</div><div>Buffel grass</div><div>Cane Toad</div><div>Rabbits</div><div>Feral cats</div></div><div><div>CONSEQUENCE</div><div><div>Eat almost any vegetation, destroying plants when eating in groups, and dirty waterholes making them unsuitable for other animals.</div><div>Produce a toxin which has led to decline and extinction of several native predator species.</div><div>Successful predator preying upon native wildlife, competes with native carnivores for food.</div><div>Overgraze native plants and trample soil, prevent plants regrowing, introduce weeds through carrying seeds in their dung, make waterholes dirty.</div><div>Compete with native plants for fertile areas. It grows well and seeds are easily spread making it more problematic.</div><div>Being drought-tolerant, they thrive and compete with native plants for space, nutrients and water.</div><div>Eat seeds and seedlings, preventing new plant growth, damage vegetation, compete with native wildlife for food, degrade the land making it difficult for plants to survive.</div></div></div></div><tr><td>Evaluate</td><td>student's own response</td></tr></div>	Evaluate	student's own response
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Does it belong: Explore	<p>Fox – Introduced species – non-native</p> <p>Red Kangaroo – Native to WA</p> <p>Magpie – Native to WA</p> <p>Numbat – Endemic</p> <p>Rainbow Lorikeet – Introduced species – native elsewhere in Australia</p> <p>Western Swamp Tortoise – Endemic</p> <p>Laughing Kookaburra – Introduced species – native elsewhere in Australia</p>												
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Who's tracks	Dingo												
Evaluate	student's own response												

Activity title	Answers
Sorting species	student's own response
Classifying creatures	<p>answers from video: size, shape, diet, habitat, type of babies</p> <p>other possible answers: covering (fur, scales, feathers etc.), limbs (arms, legs, tail, fins etc.), method of movement (walk, crawl, fly, swim etc.)</p>
Flora or fauna?	<p>Possible answers: animals must eat to survive, whereas plants are able to produce their own nutrition from air, water and sunlight; plants do not move themselves from place to place; most animals are mobile as they need to find food</p>

Activity title	Answers
Invertebrates	Hydrostatic skeleton: bodies have cavities filled with fluid surrounding the muscles Exoskeleton: rigid outer casing that covers the body protecting the organs; has joints to help the animal move
Vertebrate classification	Across 2. feathers 5. coldblooded 6. five 8. mammals 9. reptiles Down 1. birds 2. fur 3. amphibians 4. vertebrate 7 fish
What am I?	<div><div>Explore</div><div><div>INVERTEBRATE</div><div>1</div><div>• no spine</div></div><div><div>2</div><div>MAMMAL</div><div>• covering: hair or fur • reproduction: most give birth to live young • breathing: lungs • endothermic (warm-blooded) • feed young with milk from mammary glands</div></div><div><div>3</div><div>REPTILE</div><div>• covering: scales made out of keratin • reproduction: most lay fertilised, soft-shelled eggs • breathing: lungs • ectothermic (cold-blooded)</div></div><div><div>4</div><div>BIRD</div><div>• covering: feathers • reproduction: lay fertilised, hard-shelled eggs • breathing: lungs • endothermic (warm-blooded) • have wings and beaks without teeth</div></div><div><div>5</div><div>AMPHIBIAN</div><div>• covering: moist skin • reproduction: most lay eggs which are fertilised outside the body • breathing: simple lungs and through skin, some young use gills • ectothermic (cold-blooded)</div></div><div><div>6</div><div>FISH</div><div>• covering: scales made out of bony plates • reproduction: most lay eggs which are fertilised outside the body • breathing: gills • ectothermic (cold-blooded)</div></div><div></div></div>

Activity title	Answers
Cocka-who?	left: C right: B
Scientific names	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Western Grey Kangaroo <u>Macropus fuliginosus</u></p> </div> <div style="text-align: center;">  <p>Red Kangaroo <u>Macropus rufus</u></p> </div> </div> <p>Unique to Western Grey Kangaroo:</p> <ul style="list-style-type: none"> light to dark brown fur; finely-haired muzzle; paws, feet and tail tips vary from brown to black; smaller size and weight; found across southern Australia; Habitat: forests and grasslands <p>Unique to Red Kangaroo:</p> <ul style="list-style-type: none"> reddish-brown fur with a white belly; black and white markings on muzzle; white tipped tail; larger size and weight; found all over Australia; Habitat: arid areas <p>Shared features:</p> <ul style="list-style-type: none"> marsupials; carry young in their pouch; forward opening pouch; short fur; powerful hind legs; small forelimbs; big feet; long tail; crepuscular: most active between dawn and dusk; herbivore conservation status: least concern only found in Australia
Looks like a...	Left to right: White-faced Heron, Red-backed Fairywren, Blue-billed Duck

PAGE 21

Activity title	Answers
Plenty of plants	Top left to bottom right: Swamp Banksia, Grass Tree, Donkey Orchid, Illyarrie, Karri She-oak, Poison Pea
Flora facts	student's choice of plant and accurate facts

PAGE 22

Activity title	Answers
Give it a shot	student's own response

PAGE 23

Activity title	Answers
Caption this	student's own response (the actual winning caption is the second one)

PAGE 24

Activity title	Answers
You can do it!	possible answers: <ul style="list-style-type: none"> • keep to marked paths when bushwalking; • don't litter, and pick up rubbish (if safe to do so) • don't feed or touch wildlife; • be a responsible pet owner: keep dogs on leads and cats inside, never release an unwanted pet into the wild; • don't pick wild flowers – let them grow • leave fallen logs, sticks and rocks in nature – they are probably part of an animals habitat • join in planting days or citizen science projects • plant a native garden or make a frog pond at school or home • donate money to a conservation group or do a fundraiser for them • share your knowledge about protecting biodiversity with others
Helping hands	Top to bottom: conservation, preservation, sustainability
Anyone can be a scientist	Type of wildlife you can record (from top to bottom): frogs, aquatic macroinvertebrates, all plants and animals, all plants
National Threatened Species Day	student's own response