Learning resources

for teachers

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How ‘Beasts of the Basin’ relates to curriculum

By thinking about animals that live in our basin, their reliance on different habitats, and how human activity can affect them will cover a number of essential learnings for students including:

Across the science curriculum:

- Living things depend on the environment
- Living things are related to each other, such as mutually beneficial relationships or food web
- Survival of organisms depend on their adaptation to the environment (e.g. plants that store water in dry areas)
- Organisms interact with their environment and each other in order to survive (e.g. crabs scavenge in mangroves for food, but also clean surroundings)
- Changes in ecosystems have causes and consequences that may be predicted (e.g. birds return to dried up waterholes after rain).

Across the SOSE curriculum:

- Resources and environments can be used, conserved and protected by valuing and applying sustainable practices (e.g. pick up litter to protect wildlife)
- Maps have symbols and features to convey information about landmarks, locations, direction, latitude and longitude, scale and distance, legend keys etc.
- Interactions between people and places affect the physical features of the land, biodiversity, water and atmosphere.
- Sustainability can be influenced by positive and negatives attitudes and behaviours.
- Environments are defined by physical characteristics and processes and are connected to human activities and decisions about resource management.
- Sustainability requires a balance between using, conserving and protecting environments and involves decisions about how resources are used and managed.

Fact Sheet Missing Word Challenge: Answer Sheet

Australian snubfin dolphin missing word challenge:

Fill in the missing words or numbers.

The Australian Snubfin dolphin has a small 'snubby' dorsal fin.

It usually lives in water less than 15m deep.

It is the only dolphin that can move its head from side to side and up and down.

The mouth of the Fitzroy River is home to a small group of around 100 snubfin dolphins.

Fitzroy River Turtle missing word challenge

The Fitzroy River Turtle was discovered in 1980.

Young Fitzroy River Turtles have serrated edges on their shells.

Fitzroy River Turtles are sometimes known as a bum-breather.

This species is an omnivore, which means they eat both plant and animal matter.

Bridled Nailtail Wallaby missing word challenge

Before 1973, Bridle Nailtail Wallabies were thought to be already extinct.

Bridled Nailtail Wallabies mature at quite a young age, they are able to breed at anytime.

This species is a herbivore, they eat leafy plants, succulents, flowering plants and grasses.

Only small numbers of this specie can be found throughout central Queensland.

Black Breasted Button Quail missing word challenge

Black Breasted Button Quails rely on camouflage provided by their feathers to avoid danger.

These birds are territorial, which means they protect a particular area.

Male birds usually have a white face and throat while female birds have a black face and throat.

Black Breasted Button Quails may get attacked by dogs, cats and foxes.

Kroombit Tinker Frog missing word challenge

The Kroombit tinker Frog is only one step away from becoming extinct.

These frogs can grow up to 25mm in length.

Kroombit Tinker Frogs will eat insects, spiders and other bugs.

Surveys are often done by listening to the frogs croaking or calling out, as they are very hard to spot.

Living in the Fitzroy Basin - Learning activity 1:

Beastly fun

Resources needed:

Hand-outs of the 'Beast fact files' for students

Beasts 'Find-a-word'

Blank pieces of paper and pencils

Choose from any of these tasks:

1. **Beastly introductions**:
   - Get students to choose one beast (maybe the beast they coloured-in) and read the 'fact file'
   - Ask them to buddy up with a classmates who chose a different beast
   - Ask students to pretend they are the beast they read about.
   - They must take turns 'introducing' themselves to their classmate by telling them 3 important facts about themselves.

2. Ask students to complete the **missing word challenge** on the back of the fact file.

3. Ask students to do the Beasts **'Find-a-Word'**

4. **Crazy Beast drawing/listening skills**:
   - Ensure each student has a blank piece of paper and a pencil
   - Explain that they must listen very carefully. They must not talk to each other.
   - They are going to draw an imaginary beast called a **FitzGiggle** by hearing you describe it step by step.
   - Tell students you will read each feature, and then repeat it once.
   - Explain that you will not answer any questions and students must draw what they think you mean as best they can. Remember – no talking!

   How to draw a FitzGiggle instructions:

   1. I have a large plump body.
   2. I have an X-shaped mark on my back.
   3. I have a long tail with a spur at the end.
   4. I have a short neck with lumps on it.
   5. My head has a rounded forehead and snout.
   6. I have two small eyes.
   7. I have two legs and three toes on each foot.
   8. I have a small dorsal fin along my back.

   When you have finished reading the instructions ask students to compare their drawing with each other in small groups.
   - Do their drawings look similar, or very different? Why?
   - Where do they think a FitzGiggle might live?
   - What do they think it might eat?

Living in the Fitzroy Basin - Learning activity 2:

Clean water brainstorm

You will need:

Enough handouts of the 'Living in the Fitzroy Basin' info sheet for students. A whiteboard or blackboard to record responses.

(Or you could ask students to brainstorm in small groups on sticky notes and then nominate one representative to report back to the group)

Process:

1. Read through the info sheet with students.
2. Remind students that water is essential for all life. All of the beasts of the basin need access to clean water to survive.
3. Ask students to consider: **apart from drinking, what other reasons do we need water?** Tell students to call out answers and capture them on the blackboard, whiteboard or note paper.

If students need prompting ask them to consider:

What do you use water for in your home? e.g., having showers, washing clothes and dishes, washing the car, swimming pools, fish tank, watering the garden, for pets.

How do animals use water apart from drinking it? e.g., for their homes, to find food, as a breeding area.

What things do we do for fun that involve water? e.g., swimming, fishing, jet skiing, boating, snorkeling, nice to look at.

How might farmers use water? e.g., for cattle, to grow crops and fruit and other plants.

Then ask students to consider: **What can you do to ensure water flowing through our basin is clean?** Tell students to call out answers and capture them on the blackboard, whiteboard or note paper.

Examples: don't litter, don't wash dangerous or toxic things down the drain, don't swim or muck around in water that are sensitive areas of habitat, don't waste water by turning off taps, re-use waste water for plants etc.

Living in the Fitzroy Basin - Learning activity 3:

Basin map

You will need:

To have read the 'Living in the Fitzroy Basin' info sheet with students.

Map of the Fitzroy Basin on the wall in the classroom, or printed out for students.

Enough 'Draw your own basin' handouts for each student.

Process:

Read the info sheet and discuss with students while looking at the map of the basin.

Some questions you might ask:

- Is there a stream or creek near your home or school? What larger waterway is it a tributary of?
- There's lots of towns in our basin - put your hand up if you've been to….(Emerald? Biloela? Mt Morgan? Baralaba?) – *Remind students these locations are all part of the Fitzroy Basin.*

Get students to think about how maps work by asking:

- When we look at the map, how do we know what is a river? (*Because of the legend shows it's a blue line, because it's labeled as a river*).
- Would we be able to understand everything on the map without the legend? What wouldn't we be able to understand?
- The map shows a compass with an N for north. What other directions are there?
- Can you think of other symbols that might be used on maps?

Hand out the 'Draw your own basin' sheet and ask students to complete.

Online resources about Beasts

Australian Snubfin dolphin:

FBA research: http://www.fba.org.au/programs/dolphin_survey_management_plan.html

Red list info: http://www.iucnredlist.org/apps/redlist/details/136315/0

WWF fact sheet: http://wwf.org.au/publications/snubfin-dolphin-fact-sheet/

Fitzroy River Turtle:

FBA research: http://www.fba.org.au/programs/communityengagementinturtleconservation.html

Red list info: http://www.iucnredlist.org/apps/redlist/details/19483/0

Bridled nailtail wallaby:

DERM: http://www.derm.qld.gov.au/wildlife-ecosystems/wildlife/threatened_plants_and_animals/endangered/bridled_nailtail_wallaby.html

Red list info: http://www.iucnredlist.org/apps/redlist/details/15330/0

AACE: http://www.aace.org.au/

Black breasted button quail:

Recovery plan: http://www.environment.gov.au/biodiversity/threatened/publications/recovery/black-breasted-button-quail.html

DERM: http://www.derm.qld.gov.au/wildlife-ecosystems/wildlife/az_of_animals/blackbreasted_button_quail.html

Red list info: http://www.iucnredlist.org/apps/redlist/details/141579/0

Kroombit Tinker Frog:

Australian Govt: http://www.environment.gov.au/cgi-bin/sprat/public/publicspecies.pl?taxon_id=1889

Red list: http://www.iucnredlist.org/apps/redlist/details/21533/0