
P4 Adaptation and Elaboration: Habitats and Language

A Cross-Curricular Approach
A BEN Workshop presented by Tiffany Bean and
Sally Baines, 9 February 2022



Tiffany Bean



I am a wife, mother of two young boys, lover of coffee and traveling. I have a BA.Arts From St.Mary's University, a PGCE from Sunderland University, and I am currently enrolled in their Masters program. I have been a teacher with BPSS for 7 years, and I am currently a P4 teacher at Purvis Primary School.

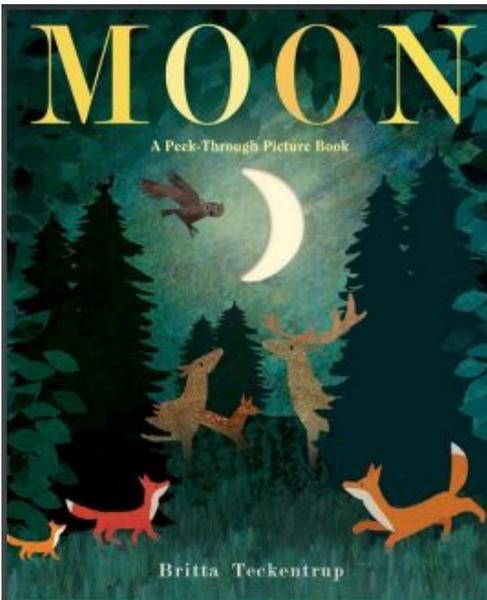
I have taken advantage of the many learning journeys BEN has offered over the years, and have enjoyed partnering with BEN to collaborate with other teachers to make teaching and learning exciting.

Sally Baines



I am a keen traveller and have a BA (Hons) from the University of Durham, a PGCE from St Martins and an M.Ed in Human Development & Psychology from the Harvard Graduate School of Education. For over ten years I have been teaching in public and private schools in the UK, China, Singapore, the US and Australia and have taught all levels from P1 to P6.

I first worked with BEN in 2019 as part of the Teacher Wellness Retreat and love working on creative curriculum design to enhance learning and enjoyment. Collaborating with teachers is a key component to my own professional development.



P4 Cross-curricular Workshop

**4PM – 5PM WEDNESDAY 9TH FEBRUARY
ON ZOOM**

Email admin@ben.bm to register.
Spaces are limited to 12 participants.
Enrollment closes 7 February so that
books can be delivered prior to the workshop

Horizons

DISCOVERING SCIENCE AND HISTORY THROUGH STORIES AND EXCURSIONS

Activities and Ideas to enrich your child's learning

Visit BEN's website to register for more Horizons resources

WWW.BEN.BM



P4 **CROSS-CURRICULAR WORKSHOP**

LINKING SCIENCE WITH ELA

ALL PARTICIPANTS RECEIVE COPIES
OF 'MOON' BY BRITTA TECKENTRUP

CURRICULUM STANDARDS COVERED:
BIOLOGY 4BEE: INVESTIGATE HOW
DIFFERENT ANIMALS ARE FOUND IN
DIFFERENT HABITATS AND ARE SITED
TO THE ENVIRONMENT IN WHICH
THEY ARE FOUND
EL04-WRO2 3A: USE A RANGE OF
SPECIFIC, POWERFUL VERBS AND
ADJECTIVES TO HELP THE READER
BETTER VISUALIZE AND
ENHANCE MEANING
4BEE3: RECOGNIZE WAYS THAT
HUMAN ACTIVITY AFFECTS
THE ENVIRONMENT

BUEI

Teaching Biology in P4: a collaboration with BUEI!

Hannah Horsefield, Education Program Coordinator @ BUEI

In Term 1, BUEI offered P4s two lessons for P4 classes:

1 on Bermuda's habitats and animals

1 on threats to habitats - mainly plastic pollution

Please contact Hannah if you missed this opportunity and would like to arrange for these virtual lessons for your class!

BUEI and BEN collaborated in the distribution of a book entitled *Planet Full of Plastic*, by Neal Layton; some of you may have received copies for your class.

For those of you who didn't, we will be ordering more copies for next year! Here is a link to Neal reading his wonderful book:

[Planet Full of Plastic](#)

School Programmes

BUEI School Programmes are designed to offer a wide variety of topics that connect the marine environment to your curriculum.

BUEI Curriculum Enrichment Classes and Labs – We offer hands-on lessons and labs to reinforce curriculum topics and the scientific process. See over the page to read about the classes we offer for Primary and Secondary levels.

Museum Exhibit Scavenger Hunt – With a School visit to the Ocean Discovery Centre we can provide scavenger hunts to get your students diving into the information in each exhibit.

Guided Exhibit Tours in the Ocean Discovery Centre – In person or virtually, we can guide you through any exhibit and interactive activities with a special focus at your request.

Films and Presentations – The Tradewinds Auditorium at BUEI is the perfect space for an educational movie viewing. Bring your own media or chose from our collection e.g. Ocean Vet.



Primary School

At this age, our classes focus on sensory based activities that shape an understanding of science.

Biology:

- Marine Plants
- The Environments of Bermuda
- Species Classification
- Human vs Shark Senses
- Vertebrates and Invertebrates
- Food Chains and Habitats

Chemistry:

- States of Matter
- The Water Cycle

Physics:

- Learning about Light
- Sounds in the ocean
- Understanding Electricity
- Rocks, Soil, and Fossil Record

Geography:

- Land Formations around Bermuda

Linking Science to ELA (and Geography) ... *why?*

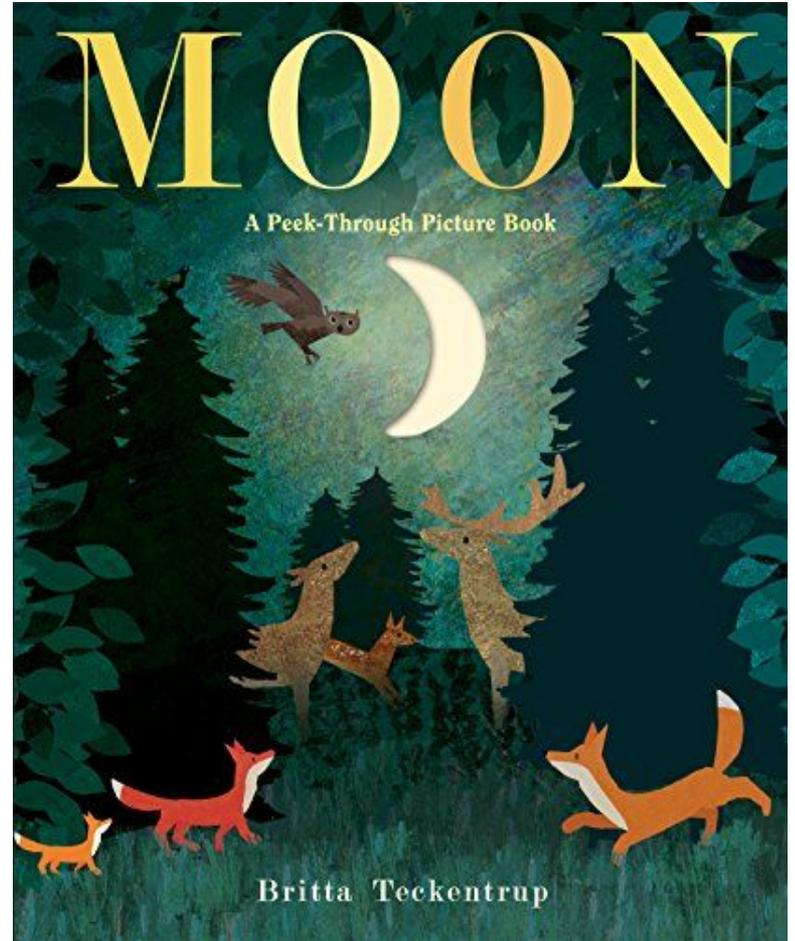


- Thematic teaching can enable deeper learning as key concepts in one subject area can be revisited in other subject areas
- Reading comprehension outcomes can be improved as students develop their concept awareness and language across subjects
- When we discuss science, different habitats and animals around the world, this helps “broaden horizons” and give students more background knowledge to draw on when they are reading
- Students can develop an understanding that a topic is never just one subject area!
- It’s a great opportunity to infuse some Science and Geography into our Language Arts

Introducing MOON by Britta Teckentrup

We are going to take a couple of minutes to read through the book and look at the vivid illustrations on our own.

What are your initial thoughts / responses?



Lesson 1: Habitats and their inhabitants	Introduction	Main	Plenary / Reflection
<p>Learning Intentions:</p> <p>Biology 4Be1</p> <p>Score 2.0: <i>WALT: 1) Describe the features of an environment or habitat 2) identify common animals / plants as belonging in specific habitats</i></p> <p><i>TIB: It's important to understand that different animals are found in different habitats and are suited to the environment in which they are found</i></p> <p>SC: By the end of the lesson I can:</p> <ul style="list-style-type: none"> - Define a habitat - Give examples of habitats and their features - Name some animals that belong to specific habitats 	<p>Explain that the book you're about to read explores different habitats at night. Recap what a habitat is:</p> <p>A habitat is the home of an animal or a plant. Almost every place on Earth—from the hottest desert to the coldest ice pack—is a habitat for some kinds of animals and plants. Most habitats include a community of animals and plants along with water, oxygen, soil or sand, and rocks.</p> <p>https://kids.britannica.com/kids/article/habitat/399492</p> <p>Can students think of any habitats and name some animals that might live there? (as well as the usual ones, like ocean, students might say their backyard, or a local park, or even a shed - and they would be right!)</p> <p>Extension Question: Can students think about how a habitat might be different at night to during the day? (eg some animals are nocturnal, meaning they sleep during the</p>	<p>As the teacher reads MOON, students are to use the See, Think, Wonder routine (see <i>resource</i>), with these prompts written on the board:</p> <p>What do you see? What do you think about that? What does it make you wonder?</p> <p>Begin by using the routine with the front cover.</p> <p><i>Some students may be ready to use the routine in one go, ie respond to all the prompts at once. Others may answer just one prompt as a starting point.</i></p> <p><u>Read book</u> to the class. At the end of the reading, talk about the book - what did they see? Think? Wonder? Make a note on the flipchart. (For example, I see lots of different animals awake at night, so I think that some animals must be able to see well in the dark. This makes me wonder what animals sleep in the day and which ones sleep at night.)</p>	<p>Ask students to share with the class what they learned while working at their habitat <u>centre</u>.</p> <p>And / or,</p> <p>students could share anything that puzzled them, that they weren't sure about, and how they figured it out.</p> <p>----</p> <p>In preparation for next lesson, ask students to think about:</p> <p>What features do the animals have that help it live successfully in its environment?</p> <p>And would it survive in another habitat?</p> <p>Why / why not?</p> <p><i>(could be written on the board as a something to refer to before the next lesson)</i></p>

day and come out at night.
Sometimes it is cooler at night,
as there is no sun)

Explain that students are going to be moving around habitat centres, looking at - and learning about - different habitats and animals.

(opportunity for formative assessment)

These could include:

Animal/Habitat Match Up (see *resources provided*) - can students then name the animals?

Habitat Riddles (example. *I am a habitat that is made up of mostly water and plants..*)

Virtual Habitat Walkthrough - eg. zoos that have webcams for students to observe animals in their habitats e.g

<https://www.taronga.org.au/taronga-tv>

Other example websites:

<https://www.upmforestlife.com/path/p1>

<https://virtualfieldtrips.org/the-amazon-rainforest/>

(center will work if students have their chromebooks)

Complete a group See / Think / Wonder chart, using the copies of **MOON**

See / Think / Wonder routine

This 1 page resource will be provided on the BEN website after the workshop.

As it states, 'This routine encourages students to make careful observations and thoughtful interpretations. It helps stimulate curiosity and sets the stage for inquiry.'

This routine is powerful in any subject, can easily be scaffolded, and used in a variety of ways (ie, individual or group)

See / Think / Wonder

A routine for exploring works of art and other interesting things.



What do you **see**?

What do you **think** about that?

What does it make you **wonder**?

Purpose: What kind of thinking does this routine encourage?

This routine encourages students to make careful observations and thoughtful interpretations. It helps stimulate curiosity and sets the stage for inquiry.

Application: When and where can I use it?

Use this routine when you want students to think carefully about why something looks the way it does or is the way it is. Use the routine at the beginning of a new unit to motivate student interest or try it with an object that connects to a topic during the unit of study. Consider using the routine with an interesting object near the end of a unit to encourage students to further apply their knowledge and ideas.

Launch: What are some tips for starting and using this routine?

Ask students to make an observations about an object—it could be an artwork, image, artifact, or topic—and follow up with what they think might be going on or what they think this observations might be. Encourage students to back up their interpretation with reasons. Ask students to think about what this makes them wonder about the object or topic.

The routine works best when a student responds by using the three stems together at the same time, i.e., "I see..., I think..., I wonder..." However, you may find that students begin using one stem at a time, and that you need to scaffold each response with a follow-up question for the next stem. The routine works well in a group discussion but in some cases you may want to ask students to try the routine individually on paper or in their heads before sharing out as a class. Student responses to the routine can be written down and recorded so that a class chart of observations, interpretations, and wonderings are listed for all to see and return to during the course of study.

Share your experience with this thinking routine on social media using the hashtags #PZThinkingRoutines and #SeeThinkWonder.



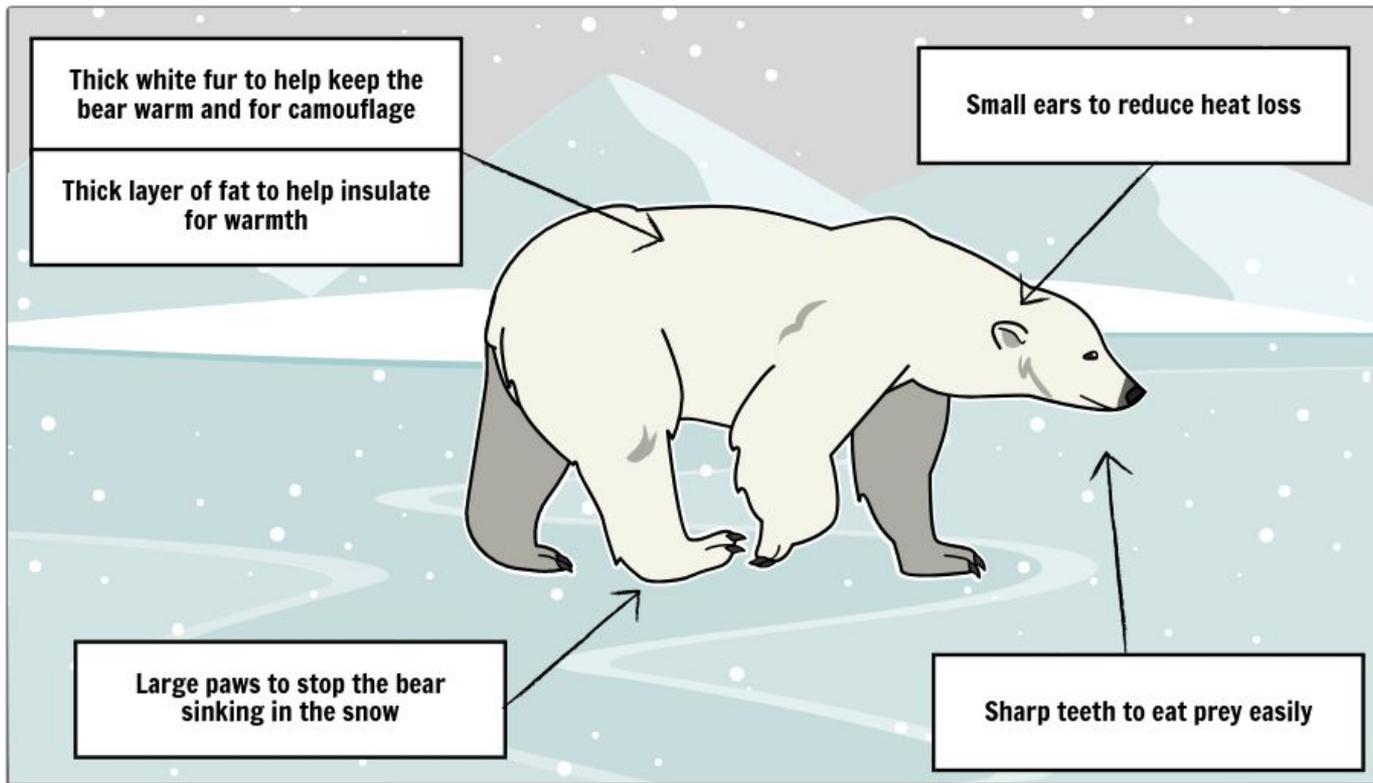
This thinking routine was developed as part of the Artful Thinking & Visible Thinking projects at Project Zero, Harvard Graduate School of Education. Explore more Thinking Routines at pz.harvard.edu/thinking-routines



Mountains



Lesson 2: Animal adaptations	Introduction	Main	Plenary / Reflection
<p>Learning Intentions: <input type="checkbox"/></p> <p>Biology 4Be1</p> <p>Score 3.0: <i>WALT: 1) Describe the features of a plant / animal that make it suited to this environment</i> <i>2) Describe how these features help the plant / animal survive</i></p> <p><i>TIB: It's important to understand that different animals are found in different habitats and are suited to the environment in which they are found.</i></p> <p><i>SC: By the end of the lesson I can:</i></p> <ul style="list-style-type: none">- Explain what adaptation means- Describe the different ways an animal has adapted to its environment <p>2 x 30 mins lessons</p>	<p>Last lesson we looked at different habitats and the animals that live in them. What did we learn?</p> <p>As scientists, we are going to investigate how animals are suited to the environment in which they are found. We call this adaptation - how animals have adapted to where they live.</p> <p>Here is an example (or two!): NatGeo Wild clips</p> <p><i>(these videos are amazing! Each one is less than 2mins on an adaptation an animal has made to help it survive).</i></p> <p><i>Possible idea: Could show one at the end of each day, if there is time, or before recess or lunch.</i></p>	<p>Explain that students are going to pick an animal from the book MOON, look it up on the computer (or use the book illustrations) and draw it very carefully in its habitat. Make sure the picture is quite large so that it can include the details.</p> <p>Then, label the different ways the animal has adapted to its environment. <i>(see resource pack provided for information on each animal).</i> <i>Could be a research lesson</i></p> <p><i>You can do this in a number of ways, whichever suits your students and their needs, eg.</i></p> <ul style="list-style-type: none">- Enlarge the resource and have students do a gallery walk: this ties in with grammar - summarising, note-taking etc.- Put students in groups according to their choice of animal, and together make large information posters <p><i>It is important that the teacher has an example they have done to show the class.</i></p>	<p>Students can do a pair share or the teacher can gather animal groups together and build on the learning.</p> <p>Possible homework activity (20 minute video from BBC Earth): Top 5 animal adaptations</p> <p>Extension activity: Advertise your habitat! As if you were trying to sell your home - how would you describe it?</p> 



MOON

Night-time around the world

Britta Teckentrup

4Be1: Investigate how different animals are found in different habitats and are suited to the environment in which they are found

Adaptations of animals to their habitats as found in Moon

Habitats

- Desert
- Ocean/Cold Climate
- Jungle/Rainforest
- Fields
- Mountains
- Grasslands



Desert

Scorpions' exoskeletons, hard body casing, and venomous stingers give them great protection.



Scorpions are arachnids that live in the desert and are nocturnal, meaning awake at night, to avoid the hot temperatures.

<https://bit.ly/3L7nPSk>

This is a fun clip on scorpions (~2min) from National Geographic for Kids.

The **scorpions'** low food and water needs allow them to survive in the harshest environments.

Snakes have adapted to the temperature by learning to burrow in dens to shelter from hot temperatures.

Snakes adapt to the desert by using light brown or grey camouflage to blend in with their surroundings.



Snakes also brumate (get sluggish) during the harsh and cold winter months.

<https://bit.ly/3GqZxG> - This is a really interesting website with further, though more complex, adaptations, like snakes don't urinate in the way we do - it is more acidic, with less water, thereby conserving water. They have also been known to drink the water that collects on their scales!!

The **barn owl's** unusual facial disc helps them locate their prey. It captures and focusses sound into its ears which are positioned, one slightly above the other, next to the eyes. Their hearing is so acute that they can capture a mouse in total darkness.

The **barn owl's** feathers are adapted for silent flight. The edges of their flight feathers are hairy and their body feathers are downy soft, so there is no rustling of feathers when they move. The hairy edges slow down their flight. The ability to make a surprise attack is far more important than speed.

When surprised in its roost or nest, **barn owls** react by crouching, spreading wings, fluffing feathers and hissing. If approached by an intruder they will stand bolt upright and look as slender as possible (like a stick) eyes slightly open - "I'm watching you".



Desert

The characteristic large, round ears of the **African wild dog** have a double purpose. They have excellent hearing for hunting prey, and their large ears help cool the dog off in the hot African climate.

The **African wild dogs'** speckled fur is good for camouflage.

<https://onnatgeo.com/3gs0VGZ>

This is an interesting page about the **African wild dogs**
<https://bit.ly/34fwGkf>

Another great site with videos from BBC Earth

The bones on the **African wild dog's** lower front legs are fused together to prevent breaking their legs while running.



Rabbits are generally known for their massive ears, but they actually do a lot more than just hear predators and friends. Rabbits ears are crucial for thermoregulation! Their large surface areas allow bunnies to release their heat and keep cool, that's why bunnies that live in hot areas tend to have the largest ears.



Water is essential for keeping cool when temperatures soar, and jackrabbits have developed ways of conserving water in a habitat where it is often a scarce resource. Along with getting most of their required water from the foods they eat (cacti, leaves, grasses and twigs), jackrabbits have also developed another water-retaining adaptation. After their food has been digested, jackrabbits will often eat their feces. In this way they are able to digest their food twice, getting as much moisture from it as possible with little extra effort.

While you might think that extra fur would make the **jackrabbit** warmer, it actually protects and insulates the delicate soles from the heat of the ground. ... The light silver-and-tan fur provides plenty of desert camouflage, in addition to absorbing less heat than dark fur would.

Ocean/Cold Climate

Puffins live most of the year on the open ocean

In winter the face of the **Puffin** is darker and the bill rather dull in colour, but they become more colourful in the spring in preparation for the mating season.



The **puffin's** large beak and mouth has backward pointing spikes which enable it to catch as many as ten small fish one after the other, without swallowing them, and hold them crosswise.

To catch food, the **puffin** dives from the water's surface, using its wings like paddles to 'fly' down to great depths to catch sand eels or other fish.

<https://bit.ly/3sdlplb>
A Good site on **Puffins**

Puffins are specially adapted to living on the open sea. Waterproof feathers allow them stay warm as they float at the ocean's surface or swim underwater. It keeps its feathers waterproof by applying oil, from a gland near its tail, as it preens.

Penguins have webbed feet for powerful swimming.

Penguin's wings, shaped like flippers, also help them "fly" underwater at speeds up to 15 mph

Penguins' bodies are streamlined to reduce drag in water.

The dark coloured feathers of a **penguin's** back surface absorb heat from the sun, so helping them to warm up too.



Jungle/Rainforest

Parrots use their beaks to cover their feathers with a powdery substance, produced by their down feathers. This powdery substance is waxy and makes feathers flexible and waterproof.

The evenly distributed powder keeps them warm. It also makes them strong enough to withstand flight. Grooming is the most essential process for parrots besides eating.

Flocking behavior makes it difficult for enemies to attack, as the **parrots** draw strength from their numbers while also making it possible for one to spot a predator and alert the rest before it is too late.

Many of the bones in a bird's body are hollow, making **parrots** lightweight and better adapted to flying.



The strong beak of the **parrots** is ideal for breaking hard nuts and enhancing the bird's grip when climbing trees. With their thick beaks and big feet and claws, they can open up the thousands of tropical nuts and seed pods found in the Rain Forests.

Wouldn't it be cool to be able to see all around you without even moving your head? **Frogs** have bulging eyes or large, round eyes that sit on top of their head. They can see in front of them, to the sides, and even partly behind them just by moving their eyes! Having their eyes on top of their head also lets them keep their body under water and stay mostly hidden. This is important because it makes it easier for frogs to keep a look out for predators and sneak up on their prey. Two important things needed to stay alive!

The earliest known **frog** appeared on Earth about 200 million years ago. Since they are still around today, you have to say they are doing a good job of surviving! Frogs have certain adaptations that have allowed them to be around for such a long time. Adaptations are behaviors or characteristics a plant or animal has that makes it better able to live in a certain place or situation.



Many **frogs** that live in forests and rainforests have sticky toe discs that help them climb and keep them in place when resting on leaves and branches.

Over time, **frogs** have adapted their eyes, legs, and skin to be able to survive in their environment. Not all frogs have the same adaptations though, there are over 6,000 different types of frogs that live in many different environments. Some frogs spend more time in water, while others have adapted to living on land better.

Fields

The back feet of the **field mouse** (also known as a wood mouse) are large which give it a good spring for leaping.

Field mice also have a good sense of smell and whiskers which they use to feel surface textures and air movements.



Field mice are equipped with large, cup shaped ears to help sense sound vibrations.

How are field **frogs** different to rainforest frogs? Why?

Frogs are especially adapted for the places they live in and their colouring is often dependent on their habitat.

Frogs that live in arid areas have tough tubercles (nodules) on their back feet to help them dig into the earth when burrowing.



Glow-worms contain a poison (called lucibufagin) which protects them from predators like lizards, and the larva uses its light and its distinctive markings to warn the predators to leave it alone.

Deception: Female Photuris fireflies (**glow worms**) mimic the mating flashes of other "lightning bugs" to attract them, whereupon they are pounced on and eaten.

Each adult female lives for only a few weeks until she mates, and dies soon after laying her 75-100 eggs in the ground. The eggs hatch into larvae after a few weeks, and remain as larvae for 1 or 2 summers, feeding on slugs and snails they paralyze before sucking them empty. There can be a 2-3 year gap between mating and the appearance of adult **glow worms**.

The common **glow worm** reproduces in the following way. The female finds a plant stalk to climb. When she is clear of most of the vegetation, she bends her abdomen upwards showing her glowing organs to attract males, which fly about a meter above her.



Mountains

Mountains often have extreme climates, and the animals that live there have some amazing adaptations.

Grizzly bears living in the mountains of North America survive the cold winters by hibernating—hiding out in dens and resting—to conserve energy when food is hard to find.

When **grizzly bears** hibernate, their body temperature drops by about 12 degrees, and they take a breath only once about every 45 seconds.

Animals living in the mountains have also developed thick coats of fur that protect them from the cold as they travel higher in elevation.



Grasslands



Giraffes also have a dark, thick prehensile tongue, meaning it can twist and wrap around, and grab things.

Giraffes' famously long necks allow them to browse leaves off the tops of grassland trees, helping them avoid food competition from other herbivores.

Their long necks also provide a height advantage for spotting predators, so other grassland prey species look to **giraffes** as sentinels for danger.

The skin patterns of **giraffes** may help camouflage them from predators.

As they move, **elephants** push over trees to get to their branches and roots, helping maintain the grasslands, and they use their tusks and trunks to dig for water, creating pools that many other animals need to survive.

In addition to using their trunks to pick up their food, **elephants** have learned to use their trunks to squirt either cold water or dirt on themselves. The cold water can cool them down, and the dirt or mud can work as a layer to protect their skin from sunburn.

Elephants have tusks made of ivory that can help them eat and protect themselves.



Grasslands

Open land without dense vegetation is advantageous to the **cheetah** because these big cats rely on speed for successful hunting. The cheetah, as a carnivorous animal, must survive by feeding on other animals. Its body features enable it to survive on the few prey in the savanna. It has a long and slim body, muscular legs and a small head, compared to its body, streamlining it to run after prey. Cheetahs can reach a speed of 70 miles per hour and can cover 115 feet in just about two seconds. This makes it the fastest animal on earth. Few of its prey, except perhaps the gazelle, can keep up with this speed.



The **cheetah** has fur that is golden yellow to pale orange in color. This allows the cheetah to camouflage easily in the brown grasslands of the savanna while stalking its prey. Their brown spots also keep them camouflaged while stalking prey.

The **cheetah** has very narrow and fully retractable claws that can come out of its paws and go back in whenever it needs to use them. This adaptation is useful for sprinting as the claws dig deep into the earth for better grip while the cheetah runs after its prey. The claws are also slightly curved so that when it catches up with the fleeing prey, the cheetah can easily dig its claws into the hind of the animal, bringing it to the ground. It then grasps the prey's neck with its strong jaws, causing the animal to suffocate.

Additional Ideas

Double page spread of 'hundreds of turtles swim to land, To lay their eggs in soft white sand.'

Students could learn about the way that turtles return the SAME BEACH they hatched at, to lay their eggs! Also might want to learn about how the moon plays a role when the turtles hatch.

The hatchlings begin their climb out of the nest in a coordinated effort. Once near the surface, they will often remain there until the temperature of the sand cools, usually indicating nighttime, when they are less likely to be eaten by predators or overheated. Once the baby turtles emerge from the nest, they use cues to find the water including the slope of the beach, the white crests of the waves, and the natural light of the ocean horizon.

Double page spread of birds flying:

Students could learn about why some birds fly at night
Students could learn about the Northern lights (same page as Puffins)

Double page spread of the ocean:

'Waves roll gently to and fro... The moon commands their ebb and flow.'
<https://bit.ly/3rrRyNY> - really interesting!

Dreaming:

The last page is about dreaming - students could talk about their dreams / something they have dreamed etc.



Lesson 3: Descriptive language	Introduction	Main	Plenary / Reflection
<p>Learning Intentions:</p> <p>EL04-WR102 3a:</p> <p><i>WALT: Use a range of specific, powerful verbs and adjectives to help the reader better visualize and enhance meaning</i></p> <p><i>TIB: It's important to look for alternatives for overused words and expressions</i></p> <p><i>SC: By the end of the lesson I can:</i></p> <ul style="list-style-type: none"> - Identify interesting verbs and adjectives in 'Moon' - Describe animals from 'Moon' using interesting verbs and adjectives 	<p>Explain that as the teacher reads MOON again, students are to think about the effect of descriptive language (powerful verbs and adjectives).</p> <p>Teacher can stop at the first double page spread and after reading 'How every creature, plant and tree is subject to its mystery...'</p> <p>Why doesn't the author just say that the creatures, plants and trees are affected by the moon? The word 'mystery' draws in the reader ...</p> <p>What are some sparkling sentences? What makes them sparkle?</p> <ul style="list-style-type: none"> - A breeze blows softly... - A scorpion scuttles... <p><i>We can really imagine these events, because of the pictures created vividly in our minds by the powerful verbs and adjectives.</i></p>	<p>Take an example of work from the last lesson - a picture of an animal and the labels outlining its adaptations to the habitat in which it lives.</p> <p>Using inspiration from the book, as a class, write one or two sparkling sentences about the animal and how it has adapted to its environment.</p> <p><i>Eg. The field mouse scampers here and there, its large, cup-shaped ears help it to hear sounds travelling across the quiet grass.</i></p> <p>Students write their own sparkling sentences underneath their picture of their animal in its habitat.</p> <p>See if they can write more than one sentence, and experiment with their verbs and adjectives!</p> <p><i>You could use dictionaries and thesauruses to help.</i></p>	<p>Students read out their work, but leave out the animal. Can other students guess what animal they are talking about? How were they able to guess?</p> <p>What adaptations has this animal made to its environment?</p>

Lesson 4: Caring for the Environment	Introduction	Main	Plenary / Reflection
<p>Learning Intentions:</p> <p>SC04-BIO02</p> <p>4Be3: <i>WALT: Recognize ways that human activity affects the environment</i></p> <p><i>TIB: We need to understand how reducing our carbon footprint can help our environment.</i></p> <p>SC: By the end of the lesson I can:</p> <ul style="list-style-type: none"> - Identify what the 3 R's are - Explain why the 3 R's are important 	<p>Watch the clip of Neal reading his book 'Planet Full of Plastic' and talk about it as a class.</p> <p>Planet Full of Plastic</p> <p>Talk about the 3R's - reduce, reuse, recycle, and what they mean.</p> <p><i>Reduce</i> - cut back on the amount of trash we generate</p> <p><i>Reuse</i> - find new ways to use things that otherwise would have been thrown out</p> <p><i>Recycle</i> - turn something old and useless (like a plastic milk jug) into something new and useful (like picnic benches, playground equipment, recycling bins)</p>	<p>Create a 3 column poster using anchor chart paper and label each column: reduce, reuse, recycle.</p> <p>Students will take turns adding to the anchor chart their ideas of things they can reduce, reuse, or recycle.</p> <p><i>For example, a student might decide to put plastic forks and knives in the reduce column</i></p> <p>At home project:</p> <p>Have students 'calculate their impact' (cross curricular with math) Calculate how much trash your household generates in a week/month (teacher can make a chart for this) OR can make it an in school project: Calculate how much trash the school generates in a day. How can we <i>reduce</i> our food waste? How does our food waste affect the environment/ certain animal habitats?</p>	<p>Projects can be displayed on a board for all students to see, or even perhaps shared at an assembly?</p> <p>Make a plan for how the school can reduce waste - turning off lights, reusing paper, having an efficient lost property system (!) and think of ways to promote it. </p> <p>Could have a school environmental mascot that gets awarded to a different class each week.</p>

Additional resources

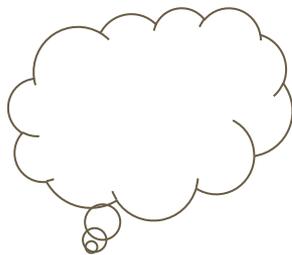
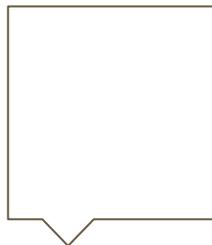
The lesson plans, slides, resources and See / Think / Wonder routine will be shared on the BEN website as of tomorrow:

<http://www.bermudaeducationnetwork.com/what-we-do/lesson-plans/>

To share any learning in action from this cross-curricular unit, please email photos to Steph at admin@ben.bm - and let her know if you want to be tagged! Photos will then be posted on Instagram and FB. [note: pls make sure waivers are checked, or take photos of work]



Keep in touch!



We will be asking for your feedback on this unit:

- what went well;
- what challenges there were;
- where you brought in your own ideas and resources; and
- learning that you saw in your class and in what ways.

This will help us for next year.

We will be in touch in March.

Thank you for attending. Please can you complete this Google Form providing feedback on our workshop.