

Concept-Based Curriculum Unit

Unit Title:	Sharing the Planet: Living Things, Big and Small	Subject:	Science
Conceptual Lens:	Responsibility	Teacher(s):	Vanessa Keenan and Jessica Humble-Crofts
Grade Level:	Early Years (5-6 year olds)	Duration:	6 weeks

Unit overview:

How do you know if something is living and what can you do to take care of living things? Who is responsible for taking care of living things at home and in nature? In this unit we will be looking at the differences between adult and young animals, and the different ways babies tell their parents what they need. Together we will find out what a scientist does and conduct our own scientific investigations!

Notes for teachers:

- Critical Content taken from NGSS and Raha International School PYP Scope and Sequence
- POSITION STATEMENT- Responsible Use of Live Animals and Dissection in the Science Classroom
<https://www.nsta.org/nstas-official-positions/responsible-use-live-animals-and-dissection-science-classroom>

Standards:

- All animals need food in order to live and grow. They obtain their food from plants or from other animals. Plants need water and light to live and grow. (K-LS1-1)
- Plants and animals can change their environment. (K-ESS2-2)
- Living things need water, air, and resources from the land, and they live in places that have the things they need. Humans use natural resources for everything they do. (K-ESS3-1)
- Things that people do to live comfortably can affect the world around them. But they can make choices that reduce their impacts on the land, water, air, and other living things. (K-ESS3-3)



Unit Web

Strand: Living Things		Strand: Interaction
Plants	Growth	Needs
Animals	Survival	Responsibility
Humans	Food	Choice
Living things	Water	Decision
Non-living things	Shelter	Caring for young
Form	Needs	Parents
		Offspring
		Survival

Unit Title: Sharing the Planet: Living Things, Big and Small

Conceptual Lens: Responsibility

Strand: Habitat	Strand: Scientific Practices
Environment Shelter Food Water Light Protection Caring for young Survival	Observation Interpretation of data Measurement Evaluation Drawing conclusions Gathering data



Generalizations and Guiding Questions

Generalizations	Guiding Questions Z=Concept Formation, F=Factual, C=Conceptual, D=Debatable
U1. Plants need water, light, air, nutrients and space to live and grow.	<p>Q1a. What are the signs that a plant is alive? (C)</p> <p>Q1b. What might happen to this plant if _____? (F)</p> <p>Q1c. What do you think could be wrong with this plant? (F)</p> <p>Q1d. Where do plants get the things they need to survive? (C)</p> <p>Q1e. What do plants need to live and grow? (C)</p>
U2. Animals need food, water , air and shelter to survive.	<p>Q2a. Are animals living? How do you know? (Z)</p> <p>Q2b. What could happen to (insert specific animal) if they don't get _____? (F)</p> <p>Q2c. Where do animals get the things they need to survive? (C)</p> <p>Q2d. Are humans animals? (F)</p> <p>Q2e. Do all living things have the same needs? Why/ why not? (P)</p> <p>Q2f. What do animals need to survive? (C)</p>
U3. Parents can help their young to survive.	<p>Q3a. What is the difference between adult animals and young animals?(Z)</p> <p>Q3b. How does an adult _____ help their young? (F)</p> <p>Q3c. How do your parents help to look after you? (F)</p> <p>Q3d. What might happen to young _____ if its parents didn't take care of it? (F)</p> <p>Q3e. What are the signals that young _____ make when they don't get _____? (F)</p> <p>Q3f. Why do parents help their offspring? (C)</p>
U4. Animals live in habitats that meet their basic needs.	<p>Q4a. What are the features of your home that help you survive? (F)</p> <p>Q4b. What is a habitat? (Z)</p> <p>Q4c. Why does a _____ (animal) live in a _____(eg. ocean, forest, desert)? (F)</p> <p>Q4d. How does a _____ (animal/plant) find food, get water, find shelter, camouflage and survive? (F)</p> <p>Q4e. Why do animals live in particular habitats? (C)</p>
U5. When people take living things out of their natural habitat, they become responsible for their needs.	<p>Q5a. What kinds of things could people do to help this animal/plant? (F)</p> <p>Q5b. What might happen to this animal/plant if it was not given _____? (F)</p> <p>Q5c. Who is responsible for feeding/walking/watering this _____? (F)</p> <p>Q5d. Do all living things need people to care for them in order to survive? (P)</p> <p>Q5e. What happens when people take living things out of their natural habitat? (C)</p>
U6. Scientists make observations to gather information.	<p>Q6a. What is a scientist? (Z)</p> <p>Q6b. What do you notice about this _____? (F)</p> <p>Q6c. What do scientists use to make observations? (C)</p> <p>Q6d. How do scientists gather information? (C)</p>
U7. Scientists measure things in order to compare them.	<p>Q7a. Does the plant look the same or different from how it looked at the beginning of experiment? (F) How do you know?</p> <p>Q7b. What is comparing? (Z)</p> <p>Q7c. How might we measure the changes in the plant? (F)</p> <p>Q7d. Why do scientists need to measure things? (C)</p>



Knowledge and Skills

Knowledge <i>Students will know...</i>	Skills <i>Students will be able to...</i>
Living Things <p>K1. Characteristics of living things. K2. What plants and animals need to survive. K3. Where plants and animals get the things they need to survive. K4. Humans are classified as animals.</p>	<p>S1. Make observations using all senses. S2. Gather data by making observations. S3. Recognize patterns to use as evidence. S4. Use a variety of informal tools to measure accurately. S5. Measure and compare objects by length, height and weight in authentic contexts. S6. Directly match objects to compare. S7. Consult a variety of sources to find information. S8. Compare and contrast things to draw conclusions. S9. Use drawings and labels to record observations. S10. Use graphic organizers to record information and organize thinking.</p>
Interactions <p>K5. The difference between adults and offspring. K6. How adults take care of/meet the needs of offspring. K7. Signals that offspring make (eg. crying, cheeping) when their needs are not being met and responses of parents (feeding, comforting) K8. Examples of actions that humans can take that help or harm animals/plants. K9. Examples of being responsible for other living things. Eg. pets</p>	
Habitats <p>K10. Examples of habitats. K11. Which animals live in which habitats.</p>	
Scientific Practices <p>K12. What a scientist is. K13. Examples of informal units of measurement. K14. Examples of informal measurement tools.</p>	



Assessment

How will we know students have achieved the learning goals?

	Summative Assessment Task(s)	UKS Assessed
Assessment Type and Task:	<p>School holidays are coming! What might a caretaker need to know about caring for the living things in your classroom/at home during the holidays?</p> <p>Students will draw a poster or record a video of themselves explaining how to meet the needs of the living things in the classroom/at home while they are away (eg. feeding the fish, watering the plants etc).</p>	U3 U4 U5
Assessment Tool (rubric, checklist, etc.)	Rubric	

	Pre-Assessment Task(s)	UKS Assessed
Assessment Type and Task:	<p>Step 1 observation : Provocation at the start of the unit involves a parent bringing in a baby or pet and discussing with the children how he/she takes care of the baby or pet.</p> <p>Step 2: Show pictures of living and non living and ask which it is, and why it is living or non living to pre assess their understanding of a living thing.</p>	U5 U1 U2 U6
Assessment Tool (rubric, checklist, etc.)	Observation Anecdotal record	



Learning Experiences

What learning engagements will drive inquiry and lead to the development of unit understandings?

Copy these icons into the next section of the planner to indicate the purpose of each of the learning engagements. Note: One learning engagement may represent more than one phase of inquiry.



Inquiry Phase	UKS Focus	Learning Experiences	Planning for Learner Variability/ Assessments
 	<p>U1. Plants need water, light, air, nutrients and space to live and grow.</p> <p>U2. Animals need food, water, air and shelter to survive.</p> <p>K1. Characteristics of living things.</p> <p>K4. Humans are classified as animals.</p> <p>S10. Use graphic organizers to record information and organize thinking.</p> <p>S3. Recognise patterns to use as evidence.</p>	<p>Group, Describe, Name Present several objects and images of plants, animals and non-living things. <i>What do you notice here?</i> This question helps students to connect to their prior knowledge and to start making initial observations that will support the next step.</p> <p>Ask students: <i>Do any of these objects/pictures seem to belong together?</i></p> <p>Encourage students to explain their logic and reasoning: <i>I'm interested in how you decided on putting those together. Can you tell me more?</i></p> <p>Invite students to name the groups formed: <i>Now we have our groups. What would you call this group?</i> This step aids students in the final step of classification, giving a group a special name that reflects its characteristics.</p> <p>Optional follow-up depending on whether further concept formation is needed around living and non-living:</p> <p>Is /Is Not T Chart Using a T-chart labelled "Is" and "Is Not", show students images of living and nonliving things (do not reveal what the categories mean at this time). Reveal the images in the order listed below. The teacher tells students where the example falls in the T-chart. After each group of images is revealed, pause and ask "Do you know what the 'Is' column represents?".</p> <p>Monkey, Moon, Bear, Rock Spider, Flower, Bicycle, Cloud, Human Bird, Bee, Motorbike, Tree</p>	<p>Formative assessment: Observe students' choice of grouping. This will provide an indication of prior knowledge. Check for any misconceptions.</p> <p>Support: If students sort using an unlikely attribute, support students in looking for other relationships: <i>Can we put some objects/images in other groups?</i></p> <p>Formative assessment: Note any misconceptions e.g. that a motorbike is living because it moves and/or needs fuel.</p>



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Engage



Focus



Investigate



Organiz



Generalize



Transfer



reflect

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 Engage	<p>S1. Make observations using all of their senses.</p> <p>S2. Gather data by making observations.</p> <p>K2. What plants and animals need to survive.</p> <p>K3. Where plants and animals get the things they need to survive.</p> <p>S10. Use graphic organizers to record information and organize thinking.</p>	<p>Keep adding examples until students have worked out that everything in the “Is” column is a living thing. Teacher asks more questions to prompt thinking:</p> <p><i>What are the signs a plant is alive? (Q1a)</i> <i>Are animals living? How do you know? (Q2a)</i> <i>Are humans animals? (Q2d)</i></p> <p><u>Provocative Statements</u> Ask students to stand up/sit down in response to the statements with which they agree or disagree and have a few students share their reasons after each response.</p> <ul style="list-style-type: none"> • People don’t have to care about animals and plants because they can take care of themselves! • People are more important than plants and other animals. • Plants and animals need the same things to survive! • Animals should not live in a zoo. <p>Look at an example of a dead/wilted plant. <i>What do you think could be wrong with this plant? (Q1c)</i> Look at an image of a tired/thirsty dog. <i>What could happen to animals if they don’t get _____? (Q2b)</i></p> <p><u>Investigation</u> Over a couple of weeks:</p> <ul style="list-style-type: none"> • Read a range of non-fiction texts • Watch videos • Observe plants and animals in the classroom and school garden • Visit the local zoo/ animal shelter/ farm • Invite students to bring pets to school <p>As a class, complete the <u>cross comparison chart</u>.</p> <table border="1"> <thead> <tr> <th>Living thing</th><th>What do they eat?</th><th>Where do they get their food from?</th><th>Where do they live?</th><th>Who looks after them?</th><th>What do they need to survive?</th></tr> </thead> <tbody> <tr> <td></td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table>	Living thing	What do they eat?	Where do they get their food from?	Where do they live?	Who looks after them?	What do they need to survive?							<p>Formative assessment: Observe student’s ability to take and defend a stance using examples to support their thinking. Record students’ ideas to revisit thinking later in the unit.</p> <p>Support: Prompt students to consider using all of their sense to make observations.</p>
Living thing	What do they eat?	Where do they get their food from?	Where do they live?	Who looks after them?	What do they need to survive?										



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   	<p>U6. Scientists make observations to gather information.</p> <p>K12. What a scientist is.</p> <p>S1. Make observations using all senses.</p> <p>S2. Gather data by making observations.</p> <p>S9. Use drawings and labels to record observations.</p>	<p>Observing/information gathering</p> <p>Before beginning with various experiments, ask, What is a scientist? (Q6a)</p> <p>Conduct a class discussion about what scientists do and how. Ask if they know any famous scientists and what they discovered. Discuss examples of how students can be scientists. Students can draw pictures of what scientists do. Display the pictures on the wall.</p> <p>Show students a healthy plant and place it in the centre of a large sheet of poster paper. Ask, What do you notice about this plant? (Q6b)</p> <p>Record individual student observations on poster paper around the plant. When you hear similar observations, record them in the same location on the poster paper. Ask, What do scientists use to make observations? (Q6c)</p> <p>Prompt students, if necessary, to think beyond only using their eyes to make observations. Ask them to look at the poster paper again. Did they record observations only made with their eyes? Are there other observations about the plant that could be made using other senses? (eg. What does the plant feel like? What does it smell like?)</p> <p>Complete the Sentence</p> <p>Students complete the sentence to show their generalization about observations.</p> <p>How do scientists gather information? (Q6d)</p> <p>Scientists _____ to gather information.</p> <p>.....</p> <p><i>U6. Scientists make observations to gather information.</i></p>	<p>Formative assessment: Observe students' drawings. This will provide an indication of prior knowledge. Check for any misconceptions. Make anecdotal notes on a checklist.</p> <p>Summative Assessment: Do students' responses show an understanding of the relationship between concepts in U6?</p> <p>Which students do you need to conference with to clarify their generalizations?</p>



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 Investigate	U7. Scientists measure things in order to compare them. <ul style="list-style-type: none"> S1. Make observations using all senses. S2. Gather data by making observations. S9. Use drawings and labels to record observations. S6. Directly match objects to compare. S8. Compare and contrast things to draw conclusions. S5. Measure and compare objects by length, height and weight in authentic contexts. S4. Use a variety of informal tools to measure accurately. 	<p>Experiment</p> <p>Students conduct experiments in small groups to observe what happens to a plant if they do/don't give it the things it needs to survive. Each experiment investigates a similar question,</p> <p><i>What might happen to this plant if _____? (Q1b)</i></p> <p>Examples of investigations:</p> <ul style="list-style-type: none"> • What might happen if we put this plant in a dark cupboard and left this plant in the sun? • What might happen if we don't give this plant water, give this plant some water and give this plant too much water? • What might happen if this plant doesn't have soil in the pot? <p>Discuss with students how they might gather information during their experiments. (transfer from U6). Students draw diagrams of what happens to the plants over a series of days in their learning journals. The teacher also takes photos of the plants each day.</p> <p>After several days of recording observations, ask students to look at all of their drawings. Ask,</p> <p><i>Does the plant look the same or different from how it looked at the beginning of experiment? (Q7a) How do you know?</i></p> <p>For each experiment, students look at the first photograph and the last photograph of the plants. What is the same or different about the photographs? What do we call this process (when we look for similarities and differences)?</p> <p><i>What does it mean to compare things? (Q7b)</i></p> <p>Students then look at all of their drawings (or photographs) in order. Ask,</p> <p><i>How might we measure the changes in the plant? (Q7c)</i></p> <p>Students suggest ways that they can measure the changes in the plants (eg. using paperclips or other informal measuring tool) to if it grew or shrank), then they measure and record the measurements next to their daily drawings. Discuss the importance of measuring things as a scientist.</p>	<p>Formative assessment: Look at the drawings students do each day and check that they have added labels and details.</p> <p>Support: Prompt students to point to a part of the plant on both photos. <i>Are they the same or different? How?</i></p> <p>Stretch: Ask students how else the changes could be measured?</p>



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  	<p>S10. Use graphic organizers to record information and organize thinking.</p> <p>K2. What plants and animals need to survive.</p> <p>K3. Where plants and animals get the things they need to survive.</p> <p>S3. Recognize patterns to use as evidence.</p>	<p>Conceptual question Why do scientists need to measure things? (Q7d)</p> <p>Scientists _____ things in order to _____ them.</p> <p><i>U7. Scientists measure things in order to compare them.</i></p> <p>As a class, add to the cross comparison chart. (from Q2b)</p> <table border="1" data-bbox="514 982 1199 1108"> <tr> <th>Living thing</th> <th>What do they eat?</th> <th>Where do they get their food from?</th> <th>Where do they live?</th> <th>Who looks after them?</th> <th>What do they need to survive?</th> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </table> <p>After completing the experiments and the cross comparison chart, the teacher leads a discussion to help students find patterns within the cross comparison chart. Ask conceptual questions to support generalizing:</p> <p>Where do plants get the things they need to survive? (Q1d)</p> <p>Where do animals get the things they need to survive? (Q2c)</p> <p>Sentence frame</p> <p>Students complete the sentences to show their generalization about living things.</p> <p>What do plants need to live and grow? (Q1e) Plants need_____</p> <p><i>U1. Plants need water, light, air, nutrients and space to live and grow.</i></p> <p>What do animals need to survive? (Q2f) Animals need_____</p> <p><i>U2. Animals need food, water, air and shelter to survive.</i></p>	Living thing	What do they eat?	Where do they get their food from?	Where do they live?	Who looks after them?	What do they need to survive?							<p>Summative Assessment: Do students' responses show an understanding of the relationship between concepts in U7?</p> <p>Which students do you need to conference with to clarify their generalizations?</p> <p>Formative assessment: Check that the information in the cross comparison chart reflects knowledge of K2 and K3. Record on checklist.</p> <p>Summative Assessment: Do students' responses show an understanding of the relationship between concepts in U1 and U2?</p> <p>Which students do you need to conference with to clarify their generalizations?</p>
Living thing	What do they eat?	Where do they get their food from?	Where do they live?	Who looks after them?	What do they need to survive?										



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 	U4. Animals live in habitats that meet their basic needs. K6. The features of a habitat/environment. K7. Examples of habitats/environment. K2. What plants and animals need to survive. K3. Where plants and animals get the things they need to survive. S10. Use graphic organizers to record information and organize thinking. S3. Recognise patterns to use as evidence. S7. Consult a variety of sources to find information.	<p>Affinity Diagram Students draw pictures on note cards to show features of their homes that help them survive (for example, vegetable garden growing food, kitchen where food is prepared, parents to take care of them, bedroom to sleep in, house for shelter, tap for drinking water etc). Each new idea should be drawn on a separate note card.</p> <p>What are the features of your home that help you survive? (Q4a)</p> <p>All cards are placed in a central location, then students group similar ideas together and try to name each group (eg. water, shelter, food).</p> <p>Case studies The teacher shows the class various examples of different habitats (eg. forest, desert, lake, ocean, field etc) and asks, Where does a _____(animal) live? Which other animals might live there? Does anyone know the name of the places that animals/plants live? [habitat]</p> <p>Frayer Model Students work as a whole class to sort examples (eg. forrest, desert, lake, ocean, woodland etc) and non-examples (eg. cement dam, dog kennel etc) of habitats. Discuss why a dog kennel is not a habitat.</p> <p>What is a habitat? (Q4b) [definition for teacher: <i>A habitat is a place that an animal or plant lives. It provides the animal or plant with food, water and other needs.</i>] Students decide what the key attributes of habitats are and co-construct definition of a habitat.</p> <p>Case Studies The class reads several non-fiction texts and watches videos to find out where a range of animals live as well as how they find food, get water, find shelter, camouflage and survive.</p> <p>Why does a _____ (animal) live in a _____(eg. ocean, forest, desert)? (Q4c) How does a _____ find food, get water, find shelter, camouflage and survive? (Q4d)</p>	<p>Formative assessment: Observe students' drawings. This will provide an indication of prior knowledge.</p> <p>Support: Provide name labels for groups as needed.</p> <p>Formative assessment: Listen to students' responses. Address any misconceptions. Look for knowledge of K6 and K7. Make anecdotal notes on a checklist.</p> <p>Formative assessment: Observe student's ability to gather knowledge from multiple sources (S7). Make anecdotal notes on a checklist.</p>
			



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  	<p>S10. Use graphic organizers to record information and organize thinking.</p>	<p>Trading Cards Students record their findings about each habitat on large scale (A4) trading cards. They draw pictures and diagrams with labels to show information about each case study.</p> <p>Concept bank Students answer the question using the concept bank. Why do animals live in particular habitats? (Q4e)</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="padding: 5px;">habitats</td> <td style="padding: 5px;">basic needs</td> <td style="padding: 5px;">habitats</td> </tr> </table> <p>.....</p> <p><i>U4. Animals live in habitats that meet their basic needs.</i></p> <p>Transfer: Look after animals for several weeks (possibly a term or semester). Example: Mealworms. Students will need to look after the meal worms, make sure their habitat has everything they will need to stay alive, including food and water</p>	habitats	basic needs	habitats	<p>Formative assessment: Look at the trading cards to find evidence of K7, K2 and K3. Record on checklist.</p> <p>Summative Assessment: Do students' responses show an understanding of the relationship between concepts in U4?</p> <p>Which students do you need to conference with to clarify their generalizations?</p> <p>Stretch: Students can change the size of the box/food supply for the mealworms and observe how their behaviour changes.</p>
habitats	basic needs	habitats				
 	<p>U3. Parents can help their offspring to survive.</p> <p>K5. The difference between adults and offspring.</p>	<p>Group. Describe. Name The teacher provides students with a collection of pictures of animals and asks, <i>How might we sort these pictures into two groups</i>. Students work with peers to sort the pictures.</p> <p>The teacher then asks, <i>How did you decide which animals to put in which group? What do all the animals in this group have in common?</i> Students suggest ideas in a whole class discussion.</p> <p>Finally, the teacher asks, <i>What could we name these groups?</i> (adults and babies) What is the difference between adult animals and baby animals? (Q3a)</p> <p>Tell students that scientists have a special word for babies....offspring!</p>	<p>Formative assessment: Observe students' choice of grouping. This will provide an indication of prior knowledge. Check for any misconceptions.</p>			

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  	<p>K6. How adults take care of/meet the needs of offspring.</p> <p>K7. Signals that offspring make (eg. crying, cheeping) when their needs are not being met and responses of parents (feeding, comforting).</p>	<p>Sorting hoops The teacher arranges several hula hoops on the floor and labels each one with an animal need (shelter, love, food, water, cleaning, protection etc).</p> <p>How does an adult ____ help their young? (Q3b) Students then consider images of adult animals with their offspring (eg. humans, bears, birds etc) addressing one of the needs. For each image ask, <i>What do you see in this picture?</i> Students place the pictures in the labelled hoop.</p> <p>The teacher leads a whole class discussion about the images they just sorted into the hoops, specifically focussing on the needs of offspring and take care of them. The discussion is then focussed on humans. The teacher asks, How do your parents help to look after you? (Q3c) Students walk around the room, pausing at each hoop to consider if their parents take care of each of their needs, for example, Do they provide shelter? Do they feed you? etc.</p> <p>Further support if needed: picture books or non-fiction texts</p> <p>Read aloud Are You My Mother? (PD Eastman) Monkey Puzzle (Julia Donaldson)</p> <p>As a class discuss what might have happened if the baby hadn't found its mother in the stories. The teacher asks, What might happen to young ____ if its parents didn't take care of it? (Q3d) Students suggest ideas in a whole class discussion.</p> <p>Simulation/Dramatization In groups of 3 or 4, students take on the roles of parents and baby/babies. Each group is given a card with a need on it (eg. hungry, thirsty, cold, sad, in danger/scared, dirty). Students create a role play/simulation of how the babies might communicate their need to their parents (for example, if the babies are hungry they rub their tummies and cry) and how the parents respond (for example, give them food).</p>	<p>Formative assessment: Take a photo of student sort for their portfolio.</p>
	<p>S7. Consult a variety of sources to find information.</p>		
	<p>K6. How adults take care of/meet the needs of offspring.</p> <p>K7. Signals that offspring make (eg. crying, cheeping) when their needs are not being met and responses of parents (feeding, comforting).</p>		<p>Formative assessment: Make anecdotal notes on student's ability to work collaboratively in groups and conference in small groups with any group who were not able to accurately demonstrate how the babies might communicate their need to their parents.</p>



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 	<p>S7. Consult a variety of sources to find information.</p> <p>K6. How adults take care of/meet the needs of offspring.</p> <p>K7. Signals that offspring make (eg. crying, cheeping) when their needs are not being met and responses of parents (feeding, comforting).</p>	<p>The teacher shows students several videos and images of young animals communicating their needs to their parents (eg. human babies crying, birds cheeping etc). After each video or image, the teacher asks,</p> <p><i>What are the signals that young ____ make when they don't get ____? (Q3e)</i></p> <p>Students turn and talk to an elbow partner about how the young animals was communicating its needs. Then the teacher asks, <i>How did the parents respond to its baby?</i> Again students turn and talk to an elbow partner. Students then share their ideas with the whole class and the teacher records responses on the board or wall chart.</p> <p><u>Community Connections</u> Ask parents to talk about what students were like as babies and if there were any funny or interesting ways that they communicated their needs to their parents. Share with the class.</p> <p><u>Sentence frame</u> Students complete the sentence to answer the question. <i>Why do parents help their offspring? (Q3f)</i> Parents can help _____</p> <p><i>U3. Parents can help their offspring to survive.</i></p>	<p>Summative Assessment: Do students' responses show an understanding of the relationship between concepts in U3?</p> <p>Which students do you need to conference with to clarify their generalizations?</p>
	<p>U5. When people take living things out of their natural habitat, they become responsible for their needs.</p> <p>K9. Examples of being responsible for other living things eg pets.</p>	<p><u>Case studies - Children's own plants and animals</u> Parents bring in pets and plants to show the class.</p> <p><i>What kinds of things could people do to help this animal/plant? (Q5a)</i></p> <p><i>Who is responsible for feeding/walking/watering this _____? (Q5c)</i></p> <p>The student (and parent) talks about how they care for their pet/plant at home.</p>	



Learning Experiences

What learning engagements will drive inquiry and lead to the development of unit understandings?

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Engage



Focus



Investigate



Organiz



Generalize



Transfer



Reflect

Inquiry Phase	UKS Focus	Learning Experiences	Planning for Learner Variability/ Assessments
 Organize	<p>S1. Make observations using all senses.</p> <p>S2. Gather data by making observations.</p> <p>S9. Use drawings and labels to record observations.</p> <p>S3. Recognize patterns to use as evidence.</p>	<p>The class prepares to make a book about caring for living things. Each student records how they take care of a living thing (plant or animal) each day at home for two weeks.</p> <p>The students record daily activities in a graphic organizer. At the end of two weeks, students color code each of the things they did:</p> <ul style="list-style-type: none"> Green - feeding Blue - watering Red - love/affection/comfort Purple - cleaning Yellow - shelter <p>All the graphic organisers are combined into a class book. The class looks through the book together and the teacher asks, <i>What is the connection between all of the things labelled green?</i> The class discusses the similarities of feeding their living thing.</p> <p><u>Microgeneralize</u></p> <p>The teacher asks, <i>What can people do to help other living things?</i> Students complete the sentence: People can _____ other living things. (e.g feed/ exercise/ love)</p>	<p>Support:</p> <p>Note any students who needed additional support to articulate their ideas or use a graphics organizer to record their experiences.</p>
 Generalize	<p>K8. Examples of actions that humans can take that help or harm animals/plants.</p> <p>K9. Examples of being responsible for other living things. Eg pets</p>	<p>The class repeats this discussion and microgeneralization process for each of the colour-coded items in the book. Work in groups to illustrate each of the pages.</p> <p>Consider each of the living things in the class book.</p> <p><i>What might happen to this animal/plant if it was not given _____? (Q5b)</i></p> <p>Discuss with the whole class what might happen to pets or plants if it was not given food, water, shelter etc.</p>	<p>Formative assessment:</p> <p>Make anecdotal notes on students' ability to work collaboratively on an illustration.</p>
 Focus			



Learning Experiences

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Inquiry Phase	UKS Focus	Learning Experiences	Planning for Learner Variability/ Assessments
  	<p>K8. Examples of actions that humans can take that help or harm animals/plants.</p> <p>K9. Examples of being responsible for other living things. Eg pets.</p> <p>S10. Use graphic organizers to record information and organize thinking.</p>	<p>Spectrum sort Students look at images of animals and plants printed on cards. Examples of animals should include domesticated animals, such as those kept as pets or circus animals, and animals in the wild, including predators. Examples of plants should include potted plants in homes and trees/plants growing in the desert/rainforest etc</p> <p>Do all living things need people to care for them in order to survive? (Q5d) Students sort the images along a spectrum, labelled 'living things that need to be taken care of' and 'living things that can survive on their own'. The teacher then leads small group discussions about the placement of the cards on the spectrum.</p> <p>Sentence Frame Students complete the sentence to answer the question.</p> <p>What happens when people take living things out of their natural habitat? (Q5g) When people take living things out of their natural habitat... <i>U5. When people take living things out of their natural habitat, they become responsible for their needs.</i></p>	<p>Formative assessment: Take a photo of student sort for their portfolio. The justification is more important here than the placement of the cards. Note if students are able to justify their response and</p> <p>Summative Assessment: Do students' responses show an understanding of the relationship between concepts in U5? Which students do you need to conference with to clarify their generalizations?</p>

