Grade 6 Learning Experiences: Biodiversity and its impact on our environment

Experience 1: What is Biodiversity?

Long Range Plan: Grade 6 Model 1

Students will develop their knowledge of biodiversity and how to classify biodiversity using a classification system. In addition, they will engage in various scientific processes such as designing and building a bee box, coding an animal classification game, and investigating the impact of the lack of tree cover in cities.

Overview of learning experiences	Students will be engaged in active meaning-making and knowledge construction as they develop an understanding of biodiversity. They will learn about the contributions of Black and Indigenous scientists and how the loss of biodiversity often impacts marginalized communities disproportionately. The learning experiences outlined here can be found in: Long Range Plan: Grade 6 Model 1
Prior Knowledge / Prior Skill Set(s)	**Background Knowledge and Concepts (Teacher)** - Aware of culturally relevant responsive pedagogy (CRRP) - Understanding of the Learning For All Document - Understanding of the Supporting English Language Learners document - Understanding of how to engage in the Engineering Design and Research Process - Understanding of safety procedures - Understanding of block-based coding concepts and platforms like Scratch **Background Knowledge and Skills (Students)** - Aware of collaboration norms - Aware of various collaboration strategies - Use of technology and suites (e.g. Google Workspace) - Aware of using the internet for research purposes - Aware of safety procedures

	- Knowledge of habitats and interactions between species - Prior and knowledge of coding concepts (e.g. loops, conditional statements) - Prior knowledge and experience using basic block-coding and the use of Scratch
Strand A - STEM Investigation and Communication Skills	**STEM Investigation and Communication Skills:**  **A1.1** use a scientific research process and associated skills to conduct investigations  **A1.3** use an engineering design process and associated skills to design, build, and test devices, models, structures, and/or systems  **A1.4** follow established health and safety procedures during science and technology investigations, including wearing appropriate protective equipment and clothing and safely using tools, instruments, and materials  **A1.5** communicate their findings, using science and technology vocabulary and formats that are appropriate for specific audiences and purposes  **A2.1** write and execute code in investigations and when modelling concepts, with a focus on producing different types of output for a variety of purposes  **A3 Applications, Connections and Contributions:** demonstrate an understanding of the practical applications of science and technology, and of contributions to science and technology from people with diverse lived experiences
Overview / Big Ideas/Fundamental Concepts	**Overview** Students will learn about biodiversity through a series of activities that help them see the organization of life on earth. They will use observational and communication skills to identify and classify different living things. Using coding skills, they will create an animal classification game and learn about the importance of bees by designing and building their own bee box.

	Students will also think critically about how the loss of biodiversity can affect people differently based on their identities. **Big Ideas** Different natural systems need different species in order to reach biodiversity Biodiversity provides benefits to all living things. Not everyone experiences the loss of biodiversity equally. **Systems and Interactions:** A system is a collection of living and/or non-living things and processes that interact to perform some function. **Sustainability and Stewardship:** Sustainability is the concept of meeting the needs of the present without compromising the ability of future generations to meet their needs. Stewardship involves understanding that we need to use and care for the natural environment in a responsible way and making the effort to pass it on to future generations no less than what we have access to ourselves. **Structure and Function:** This concept focuses on the interrelationship between the function or use of a natural or human-made object and the form that the object takes.
Learning Goals / Success Criteria	**Learning Goal (Minds On):** We are learning about the contributions of people with diverse lived experiences to science. **Success Criteria** ● I can read and share my thoughts about diverse peoples who have contributed to science ● I can explain why their contributions are important and needed **Learning Goal:** We are learning about biodiversity and why it is important to all life on earth. **Success Criteria** ● I can describe the distinguishing characteristics of organisms ● I can identify, define, and explain all the characteristics of biodiversity (e.g. species, communities, habitat) ● I can use characteristics to classify organisms using a classification system ● I can code a program that can classify animals

	Ministry of Education Key Points: **STEM Skills and Connections:** Perspectives and approaches that provide opportunities for students to investigate and apply concepts and skills from all areas of learning. **Research and Experimentation Processes**: Provides students with the scientific literacy skills needed to approach scientific questions that are becoming a part of everyday life. **Engineering Design Process**: Provides students with support to plan and build solutions to problems or address needs that connect to the curriculum and the world around them. **Hands-on, Experiential Learning**: Includes hands-on, experiential learning opportunities to support classroom activities that encourage curiosity. **Coding**: Allows students to explore a wide variety of science and technology concepts and contexts through coding, while also learning valuable skills related to the automation and control of systems. **Skilled Trades**: Students consider the practical application of skills and concepts within the skilled trades and related occupations. **Contributions to Science and Technology**: Showcases the important contributions made to science and technology by people with diverse lived experiences. **Climate Change**: Students will develop the skills and knowledge needed to understand the causes and potential solutions and mitigation strategies related to climate change and other environmental issues, and how they can make the most environmentally responsible decisions possible, given the choices they have.
Learning Experiences	**Minds On** “Teachers can give students a variety of opportunities to learn about diversity and diverse perspectives. By drawing attention to the contributions and perspectives of historically marginalized groups, and by creating opportunities for their experiences to be affirmed and valued,

 **A1.1, A1.5, A3**	teachers can enable students from a wide range of backgrounds to see themselves reflected in the curriculum. It is essential that learning activities and materials used to support the curriculum reflect the diversity of Ontario society. In addition, teachers should differentiate instruction and assessment strategies to take into account the background and experiences, as well as the interests, aptitudes, and learning needs of all students." (Ontario Grades 1-8 Science Curriculum, 2022) **Part 1** Share with students the article on Black Canadian conservationist Peter Soroye (see Appendix A: Peter Soroye Article). Students can read the article in pairs or individually. Students are instructed to think about the following questions as they read. Project/write the following guiding questions on the screen: 1) What is Peter studying, and why do you think it is important? 2) Why do you think we need to have diverse voices included in science & conservation? Students will do a think-walk-random pair-share with their partners (see Appendix B: Instructional Strategies). Take up the responses with the class. **Optional Activity:** Students can share other examples of Black, Indigenous, and People of Colour (BIPOC) scientists that they are aware of, or they can work with a partner to research using the internet and share them with the class. Students can also post their responses on a Jamboard or Padlet so they can refer back to it in the future **(Skill Trades).** Here is a list of Black & Indigenous Scientists, Environmentalists and/or Conservationists: ● Charles Henry Turner ● Gladys West ● Elijah McCoy ● Alice Ball Remarkable Indigenous Scientists and Researchers in Canada | The Canadian Encyclopedia

	Part 2 Ask students what they visualize when they see the word biodiversity. Students will then engage in an activity called “Two On a Crayon” (see Appendix B: Instructional Strategies). Have students walk around and view each other's creations. Review as a class the definition of biodiversity.
A.1.4 **A.1.5**	**Option 2.1:** Students go outside for a short walk around their recess yard or nearby park. Students can explore the variety of species they discover (plants vs animals) and create a tally of their findings. Students can use Google Lens to identify the plants on their walk. Or create a list of plants and accompanying pictures, allowing students to find them. Review safety procedures for taking a community walk. Guiding Questions after going for a neighbourhood walk: a) Do you think our neighbourhood demonstrates biodiversity? Why? b) How has human activity impacted the biodiversity of ecosystems in our neighbourhood? **Option 2.2:** Students can examine different Canadian biomes using pictures or the internet. They can list the names of animals and plants that live in these biomes. See attached graphic organizer where students can record their information. **Guiding Questions:** Do you think these biomes show biodiversity? What are some human activities that could impact the biodiversity of these biomes?
	ACTION **What is Biodiversity?** This following activity will help students understand biodiversity and the diversity of organisms within species, among species in a community, and among communities and the habitats that support them. This will help them better understand their learning from the walk and their minds' on discussions. Please use this slide deck about biodiversity for this portion of the activity.

A.1.5	**Part 1:** Please follow these steps: ● Project the image of the grasshoppers from the slide deck and ask students: ○ What do you notice and wonder? ○ Do all the grasshoppers look the same? ○ Why do the grasshoppers look different? Students can do a think-walk-random pair-share with their partners (see Appendix B: Instructional Strategies). Students should notice that all grasshoppers are one species, but there is quite a bit of diversity in the species. Then ask, "What could cause variation among these species?"
A1.1, A.1.5	**Assessment for Learning Opportunity:** (B 2.2) Listen and record using a checklist (see Appendix C: Experience 1 Checklist) to see what students can understand about the diversity of organisms within species. b) Students then work in pairs to explore "The Diversity of Canada's Marine Coastal Habitats" from Let's Talk Science. For this activity, students will explore this website and fill out this accompanying graphic organizer in pairs (see Appendix D: Canada's Coastal and Intertidal Zones). Students will be using the Rally Robin (see Appendix B: Instructional Strategies) strategy to fill out the graphic organizer. Please review the graphic organizer with students before they begin. For classrooms without computer access, the webpage and the graphic organizer need to be printed out. **Optional Activity:** Students can be asked to do further research and explain how Canada's marine coastal habitats support the fishing industry. They can research and find out how the fishing industry can be further impacted by climate change and overfishing. (***Food Literacy).*** **Optional Activity:** Students can be shown how emerging technologies are helping to repair some of the damage caused by humans. Teachers can show the video Cleaning Up Our Garbage and explore how plastic is being cleaned up in our oceans. (***Emerging Technologies).*** **Opportunities for Differentiation:** For our ELL learners and students with special needs, you can pre-teach the vocabulary from the website. Or

	encourage them to use the Google Define/Translate function to help them understand the vocabulary. **Assessment for Learning Opportunity:** (B 2.2) Listen, observe and record using a checklist to see that students can understand the diversity of organisms within species, among species, and among communities and habitats (see Appendix C: Experience 1 Checklist). You can also converse with individual students to check for understanding using the guiding questions from the graphic organizer.
A.1.4	**Part 2:** Leaves, Foxes and Rabbits (Outdoor Game) Students play this game to understand the diversity of species within a community and how they support each other. This game requires an open outdoor area or can also be played in a gymnasium. **NOTE:** Please note this game involves students linking arms with other students. Not all students may feel comfortable doing this. You may want to engage students in a discussion about consent and asking permission before touching others. For students who do not feel comfortable being touched, you can provide them with a pool noodle they can grab onto. **Instructions** 1. Have ⅓ of your students be plants, ⅓ as rabbits and 2-3 students as foxes. 2. Have the plants spread out in the playing area and put both of their hands up to represent plants. 3. All the students who are rabbits will be in a cordoned-off spot to represent their rabbit hole. You can use pylons to designate this area. 4. The foxes can place themselves anywhere they like in the playing area. 5. The goal of the rabbits is to run and grab a plant, link arms with them and bring them back to the rabbit hole. 6. The foxes will try to catch the rabbits by tagging them during this time. If a rabbit and the plant are caught, then they sit down. (They will both become plants for the next round). 7. Rabbits can hide from the foxes by crouching on the ground (plants with them can crouch too). Remind the foxes not to monkey guard

A.1.5	the rabbits on the ground and to go and chase other rabbits. 8. To survive the first round of the game, rabbits must be able to bring plants back successfully to the rabbit hole. Foxes must have caught at least one rabbit to survive the round. Any foxes who could not get food will die and become plants for the next round. 9. Play this game for 3-4 rounds so students can see patterns emerging. **End of game guiding questions:** a. What did you notice with the rabbit, foxes and plant populations in the different rounds? b. What is an example of a species in the game and describe how they interact in the community? c. Do you think this community of species in this game is biodiverse? Why or Why Not?
A1.1	**Consolidation** After finishing their graphic organizer on Canada's Coastal Zones, students can visit another pair and share what they have learned. Review the learning from Activity A using the Biodiversity slide deck. As you go through the slide deck, engage students in a think-walk-random pair-share (see Appendix B: Instructional Strategies) for the questions found on the slide deck. **Assessment for/as Learning Opportunity (B2.2):** Students complete an exit card to show their understanding of how biodiversity is organized in an ecosystem (Appendix E: Experience 1 Exit Card). They can also use a checklist to indicate their level of understanding for Activity 1 (see Appendix F: Biodiversity Student Self-Assessment Checklist).
Science and Technology Expectations (Beyond Strand A)	**Strand B: Life Systems** **Overall Expectations** B1 assess the importance of biodiversity, and describe ways of protecting biodiversity B1.1 assess the benefits of biodiversity and the consequences of the diminishing of biodiversity

	B1.2 analyse a local issue related to biodiversity while considering different perspectives; plan a course of action in response to the issue; and act on their plan **Overall Expectations** B2. demonstrate an understanding of biodiversity, its contributions to the stability of natural systems, and its benefits to humans B2.1 describe the distinguishing characteristics of different groups of organisms, and use these characteristics to further classify these organisms using a classification system B2.2 demonstrate an understanding of biodiversity as the diversity of life on Earth, including the diversity of organisms within species, among species in a community, and among communities and the habitats that support them B2.4 describe ways in which biodiversity within and among communities is essential for maintaining the resilience of these communities B2.5 describe interrelationships within species, between species, and between species and their natural environment, and explain how these interrelationships sustain biodiversity
Science and Technology Vocabulary	Biodiversity Species Community Habitat Ecosystem Interrelationship Interaction Loops Conditional Statements Engineering Process Research Process Coastal Zone Intertidal Zone
Equipment and Materials	Laptops w/ internet access Household items (cardboard, glue, popsicle sticks, rubber bands, straws, scissors) Pool noodles iPads w/ Google Lens

	Large play area Pylons LCD Projector Scratch
Timeline and Preparation	**Minds On** 20 mins **Action** Part 1 50 mins Part 2 20 mins **Consolidation** 20 mins
Safety Considerations	Review with students the appropriate use of technology. Review safety procedures for using a glue gun and scissors for the Bee Box activity. Students should be wearing goggles when creating the Bee Box Students should be under adult supervision when hanging and observing their Bee Box Review with students the appropriate behaviour when going for a neighbourhood walk Review with students appropriate play guidelines when students are playing the Foxes, Rabbits, and Leaves Refer to these safety resources: ● Safety in Elementary Science and Technology (STAO) ● Safe Activity Foundations in Education Document (SAFEdoc) Science and Technology, Grades 1-8 (OCTE) ● Ontario Curriculum Program Planning – Health and Safety
Opportunities For Assessment	**Assessment for/as Learning Opportunity (B2.2):** Students complete an exit card to show their understanding of how biodiversity is organized in an ecosystem (Appendix E: Experience 1 Exit Card). They can also use a

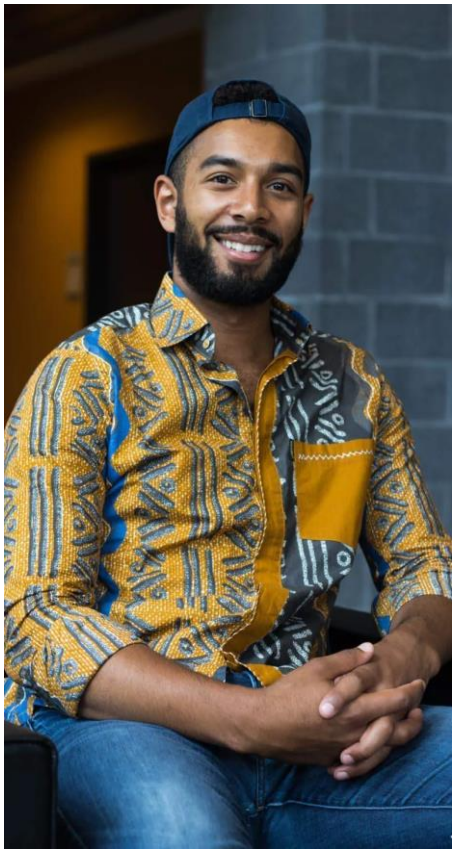
	checklist to indicate their level of understanding for Experience 1 (see Appendix F: Biodiversity Student Self-Assessment Checklist). **Using Assessment for Learning & As Learning to be Responsive:** If you notice based on the exit cards that some students have misunderstandings or need further clarification, you could review the concepts in a small group of students According to the Ministry of Education Growing Success Document (2010) assessment is about improving student learning! **Assessment FOR Learning:** Occurs frequently and in an ongoing manner during instruction, while students are still gaining knowledge and practicing skills and is used by teachers to monitor students' progress towards achieving the overall and specific expectations, so that teachers can provide timely and specific descriptive feedback to students, scaffold next steps, and differentiate instruction and assessment in response to student needs. **Assessment AS Learning:** Occurs frequently and in an ongoing manner during instruction, with support, modelling, and guidance from the teacher and is used by students to provide feedback to other students (peer assessment), monitor their own progress towards achieving their learning goals (self-assessment), make adjustments in their learning approaches, reflect on their learning, and set individual goals for learning. **Assessment OF Learning:** Occurs at or near the end of a period of learning, and may be used to inform further instruction and is used by the teacher to summarize learning at a given point in time. This summary is used to make judgements about the quality of student learning on the basis of established criteria, to assign a value to represent that quality, and to support the communication of information about achievement to students themselves, parents, teachers, and others **NOTE:** The assessment in the learning experiences are intentionally assessment for learning and assessment as learning. The assessment modality is intentionally conversations and observations. This is to help move away from only product based assessment. Throughout the learning experiences students will have many opportunities to demonstrate their understanding through doing, talking and engaging in self-assessment. By collecting assessment for/as learning data teachers can be responsive

	and provide meaningful feedback. Teachers have been provided with assessment tools to collect evidence of student learning. Assessment opportunities are embedded throughout the learning experiences.
Instructional Strategies and Adaptability	• Collaboration and communication are important skills for scientists and that is reflected throughout the learning experiences found in this resource • Teachers should aim to have a learning environment that is safe, respectful, and inclusive (community building should be ongoing). Please see the ETFO Inclusive Classrooms website. • Students should have an understanding of collaboration norms • There are many collaboration strategies that are employed in the ETFO resource and teachers are encouraged to review them before starting this lesson • Teachers should adapt the lessons based on the needs of the students in their class (Please refer to the Learning for All document) • Movement is important to learning. Students should be given opportunities to get up and move through games and active learning strategies • Teachers should value the lived experiences and stories of their students in the materials they use in the classroom through the use Culturally Relevant and Responsive Pedagogy (CRRP)
Additional Supporting Resources	Ontario Science Centre Curriculum Resources Science North Grade 6 Resources Let's Talk Science Educational Resources
Cross-Curricular Opportunities	**Language** - Students can use various reading strategies to help them understand the articles that are provided in this resource. For example, students can use monitoring comprehension strategies to decode information. (Reading Overall 1) **Writing**- Students can write a letter using writing traits and conventions urging their local MPP to make a change. (Writing Overall & 2) **Math** - Students will be applying their knowledge of coding skills to write and execute code. (Coding Overall 1 & 2)

Future Opportunities / Next Steps	Students can code this Invasive Species Game from Science North if they finish the classification activity early. Students can explore STEM careers from Let's Talk Science.

Appendix A: Peter Soroye Article

Peter Soroye



Peter Soroye is an environmental science up-and-comer and is best known for bees. I'm sure he'll be known for more soon, but his PhD thesis is about bees, so you could be forgiven for focusing on that. Still, that thesis is a big deal. The sort of big deal that's gotten published in Science Magazine despite not even being finished.

He's not even out of school yet and he's already making waves.

Peter is a student of Ecology and Evolution at the University of Ottawa. His work focuses on pollinators (bees) and how environmental change and land use is causing them to go extinct. It's not an upbeat topic, but it's one that has to be addressed.

One of the most impressive things about his work, however, isn't statistics, but rather tools. Specifically, a tool that he and the other writers have come up with that allows for predicting extinction rates among pollinators and possibly other species. The sort of tool that might let other scientists figure out the danger species are in long before they actually are in danger.

These programs are focused on one primary thing: helping black, indigenous, people of colour (BIPOC for short) researchers of ecology and evolution be heard throughout Canada and receive resources to aid their research. Researchers in this program will be paid to produce videos about their work, which will be spread throughout Grade K-12 schools in Canada, both to teach students about the important scientific work they do, but also to provide black, indigenous and people of colour role models to students, who might not get such role models.

Article Adapted from: (https://thestarfish.ca/journal/2020/08/five-black-conservationists-making-change-in-the-world-2)

Appendix B: Instructional Strategies

Instructional Strategies

Think-Walk-Random Pair-Share: Whenever a guiding question is asked all students need at least 20-30 seconds to think of the answer. This wait time helps all students process the response. Then using a visibly random pairing system, pair up the students. Consider randomizing the groups instead of asking students to pick their partners. Research from Peter Lijedenhal, *Building Thinking Classrooms* (2015) shows that randomizing groups/pairs leads to better student cohesion and improved cooperation over time. Instead of having students sharing with someone at their desk, have them physically get up and move to find their random partner. Movement helps the brain function better. Students should be sharing their ideas while standing up.

Two On A Crayon - Have students buddy up using a random pairing and pass out one crayon and one piece of paper for each pair. Tell everyone they both have to hold the crayon the entire time and color until the song is over and that there is no talking about what to draw. Once everyone is situated, turn on a song and begin coloring. When the song ends, get the students' attention, look at the art and talk about how there are leaders and followers and it's okay to be either. This activity is a chance to talk about fighting for dominance, being too passive, and ideally sharing the power. It teaches and helps the students understand that we all need to work together to get the right picture. Sometimes we will be leaders, sometimes we should follow, and that is okay either way. (https://inside.ewu.edu/managementtoolbox/2-on-a-crayon-2/)

One Stray One Stay - One of the group members stays (expert) and explains what they have learned during the activity to others. The other pair joins another pair to see what they have learned. Half way through the activity the students switch roles. The student visiting the expert should be actively listening. Here is another version of this (English/French).

Gallery Walk - Gives students an opportunity to walk around the classroom and view what others have created.

Rally Coach - With Rally Coach, students fulfill two meaningful roles. Firstly, they are at no point in the learning process able to retreat from a situation. Whether they are the writer, speaker, or coach, that student is considered an essential member of the partner pair or small group. If that student is not writing down a response, he or she is expected to be “coaching” a peer; this coaching might involve searching for textual evidence from a text, revising an error, or simply offering positive encouragement. Palmer (1997) notes that the teacher in a classroom holds a pivotal position in fostering a “safe space and trusting relationship” (p. 20) with students and among students to promote these positive interactions. While this mutual trust may take

time and effort to build, the potential academic yield is tremendous. I have found from personal experience in the classroom that my students not only enjoy Rally Coach, they prefer it to completing worksheets or writing assignments alone. It enables them to socialize with a partner, promoting their social skills, while also seeking help and a second set of eyes for review and support when needed. (Excerpt from https://ryanarciero.weebly.com/cooperative-teaching-strategies-blog/rally-coach-kagan-strategy)

Rally Robin- Partner A talks about what they have learned and they write it down. They pass it to Partner B, who checks over their work, provides them a compliment and then adds on to the question.

Stand up-hands up- pair up: Students stand up, put their hand up and quickly find a partner with whom to share or discuss by giving them a high five. This structure is perfect for classbuilding, processing and reviewing information, energizing the class, forming random pairs or teams, lesson starts or wraps. (Review consent for this activity with students and follow covid protocols)

Appendix C: Experience 1 Checklist

Experience 1 Checklist

Teachers are strongly encouraged to read this page on Assessment for Learning page and this page on Assessment and Evaluation before using the checklist below.

Assessment for Learning (Observations & Conversations)
The purpose of this checklist is to collect evidence of student learning over time. The assessment data can be used to provide feedback and be responsive to student needs. This data can also be used for the assessment of learning. During the activities, teachers can observe and converse with students and their ability to meet specific expectations. Teachers can include multiple assessment points for each column since there will be multiple opportunities throughout the activity for the students to show their understanding of each expectation. Teachers can use the assessment coding provided below or your own. A sample is provided.

Learning Experience: Biodiversity

Learning Goal (Overall Ex. B1): We are learning to assess the importance of biodiversity, and describe ways of protecting biodiversity

Learning Goal (Overall Ex. B2): We are learning to demonstrate an understanding of biodiversity, its contributions to the stability of natural systems, and its benefits to humans.

Specific Expectations Addressed:

B1.1 : assess the benefits of biodiversity and the consequences of the diminishing of biodiversity (Activity C)

B2.1 : describe the distinguishing characteristics of different groups of organisms, and use these characteristics to further classify these organisms using a classification system (Activity B)

B2.2 : demonstrate an understanding of biodiversity as the diversity of life on Earth, including the diversity of organisms within species, among species in a community, and among communities and the habitats that support them (Activity A)

A2.1 write and execute code in investigations and when modelling concepts, with a focus on obtaining input in different ways for a variety of purposes

Assessment Coding: N- Not Yet A - Almost G - Got It

Student Name	B2.2	B2.1	B1.1	A2.1	Anecdotal Notes
Matthews, Auston	G, G, A, N				Auston showed a very good understanding of being able to differentiate between species, habitats and communities. He showed this understanding by providing concrete examples of each.
Student Name	**B2.2**	**B2.1**	**B1.1**	**A2.1**	**Anecdotal Notes**

Appendix D: Canada's Coastal and Intertidal Zones

Canada's Coastal and Intertidal Zones

Learning Goal: We are learning to demonstrate an understanding of biodiversity, its contributions to the stability of natural systems, and its benefits to humans.

Go to this website: https://letstalkscience.ca/educational-resources/backgrounders/diversity-canadas-marine-coastal-habitats

You will be using the website above to complete the activities below.

Step 1: Working with your partner, using the internet or a dictionary/other resource provided by your teacher, find out the definitions of each of the following words: **Species**, **Communities**, **Habitats**, **Ecosystems** and **Biodiversity**. Make sure you and your partner understand these definitions before beginning this activity.
Step 2: With your partner, skim and scan the website. Share with your partner some things that you might learn from this website about Canada's coastal and intertidal zones.
Step 3: Search the website for examples of **three species.** Record the name and describe the characteristic of each of the species you found below
Species 1: Species 2: Species 3: How do you know that these species are different from each other?

Step 4: Find an example of a coastal or intertidal **community.** Describe the characteristics of the community below. You can also include pictures or drawings of the community.
Step 5: Describe the coastal habitat and the features that make this habitat unique. What are the things available in this habitat that make this suitable for the organisms that live there? Do a think pair share with your partner.
Step 4: Choose a **community** or **habitat** that is mentioned in this website. Be prepared to explain to another group why you think the habitat or community you chose is biodiverse.

	Not Yet	**Almost**	**Got It**
We can understand the difference between species, communities, habitat and biodiversity.			
We can explore, describe and explain the biodiversity of Canada's coastal and intertidal zones.			
We can take turns,			

share our thinking and stay on task.			

Appendix E: Experience 1 Exit Card

Experience 1 Exit Card

Name:_____

Choose a biome of your choice and explain how living things in your biome are organized. Use words like species, community, habitat and ecosystem. You can draw or explain your ideas below.

Appendix F: Biodiversity Student Self-Assessment Checklist

Biodiversity Student Self-Assessment Checklist

N- Not Yet **GT**- Getting There **A**-Almost **G**- Got It!

Success Criteria	**N**	**GT**	**A**	**G**
I can describe the benefits of biodiversity.				
I can explain the consequences of diminishing biodiversity.				
I can demonstrate an understanding of biodiversity.				
I can explain diversity within species, among communities and habitats that support them.				
I can use the characteristics of living things to create a classification system.				
I can use the engineering process to design and build a bee box.				
I can use the scientific research process to see how the loss of trees affects communities.				
I can write and execute code for a program that classifies animals based on user input.				