

Bachelor of Education (Elementary) & Bachelor of Education (Secondary) STEM Lesson Plan

Lesson Title: “I Wonder” and Observations at the Park **Lesson #** 5 (from an 8 lesson unit) **Date:** April 9, 2002
Name: Melissa Green **Subject:** Science **Grade(s):** 4

Rationale:

This lesson allows students to reflect on what they have already learned in the unit and engage in the creation of their own individual “I Wonders”. Students then will have the opportunity to engage some of their senses in a time of observation at McArthur Island. These observations connect to previous lessons taught and will also connect to upcoming lessons. Inviting students to pause, observe and reflect is an important skill and activity to engage in when learning. Asking questions and wondering out loud, and to themselves, creates opportunities for deeper learning and inquiry.

Core Competencies:

Communication	Thinking	Personal & Social
<ul style="list-style-type: none"> • <i>Communicating</i> In this lesson students are communicating their “I Wonders” with the class, communicating their observations in an Observation Book and sharing with this class what they have observed and still wonder about. • <i>Collaborating</i> In this lessons students will do some collaborating with a partner as they begin to form their “I Wonders” about the observations and time at McArthur Island. Students will also collaborate and share together as they form “I Wonders” during the Hook connected to images shared with them. 	<ul style="list-style-type: none"> • <i>Creative Thinking</i> Creative thinking is very apparent within this unit because students are encouraged to engage in their “wonders” and curiosity about the natural world around them. They are constantly developing ideas, naming their wonders and then refining those things in their research and observations. One goal in this unit is to ignite the students' curiosity which will hopefully lead to a personal sense of wonder about the world around them for the rest of their lives! 	<ul style="list-style-type: none"> • <i>Personal awareness and responsibility</i> Because this unit includes inquiry-based learning, the students are required to take responsibility for their own learning while the teacher guides and facilitates the lessons. Students will then need to self-regulate and manage their time effectively in order to reach their goal in their learning. This unit also involves a few trips outside of the classroom including a visit to McArthur Island, students will be expected to be representing their school and classroom through respectful behaviour outside of the school space.

Big Ideas (Understand)

All living things sense and respond to their environment.

Learning Standards

(DO)

(KNOW)

Learning Standards - Curricular Competencies	Learning Standards - Content
<ul style="list-style-type: none"> • CC1 - Demonstrate curiosity about the natural world • CC2 - Observe objects and events in familiar contexts • CC4 - Make predictions based on prior knowledge 	<ul style="list-style-type: none"> • C1 - Sensing and responding: animals, plants

Instructional Objectives & Assessment

Instructional Objectives (students will be able to...)	Assessment
<ul style="list-style-type: none"> • TSWBAT communicate their “I wonders” about the natural world around them. 	<ul style="list-style-type: none"> • Formative <i>for</i> Learning What: Students will share their “I wonders”. How: Students will share their “I wonder” with their

<ul style="list-style-type: none"> • TSWBAT document their observations at the park through writing and/or drawing. 	<p>seat partner and then with the class. Students will be learning from one another.</p> <ul style="list-style-type: none"> • Formative <i>as Learning</i> <p>What: Students will record their observations in their “observation books”</p> <p>How: Observation books will be collected and reviewed by the teacher at the end of the lesson.</p>
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Prerequisite Concepts and Skills:

<ul style="list-style-type: none"> • Knowledge of classroom expected behaviours, specifically when leaving school grounds, including safety.

Indigenous Connections/ First Peoples Principles of Learning:

<ul style="list-style-type: none"> • Learning is holistic, reflexive, reflective, experiential, and relational (focused on connectedness, on reciprocal relationships, and a sense of place). <p>This lesson incorporates this First Peoples Principle of Learning as students will be experiencing the outdoors and local habitats that they will be learning about. This lesson is geared towards having the students connect their learning to the local biome of Kamloops, which will provide students with a sense of place. The students will be relating their learning to their personal experiences with the outdoors, making this lesson both reflective and relational.</p>

Universal Design for Learning (UDL):

<ul style="list-style-type: none"> • Instructions will be provided both verbally and written on the board • Visual learners will connect with the opportunities to observe the natural world outside • Students who learn best while they are moving will benefit from this unit as there are opportunities for moving outside • The teacher will use a variety of assessments in order to reach each student.
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Differentiate Instruction (DI):

<ul style="list-style-type: none"> • Students will have the option of where to work in the classroom, flexible seating • Body and brain breaks alongside fidget tools will be available in the classroom and are already known to students • Headphones will be available for students who require • Students who are struggling will be given extra support by the EA or teacher, the activity requirements will be reduced to meet their individual needs where necessary. • Inside outside learning - learning is not limited to the classroom, ie: visit to McArthur Island
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Materials and Resources

<ul style="list-style-type: none"> • Photos for the “hook” – either on projector or printed as full page images (depending on classroom resources) • Sticky notes for “I Wonders” • Observation books • Extra writing utensils for outdoor learning • Clipboards • Ball

Lesson Activities:

Teacher Activities	Student Activities	Time
Introduction (anticipatory set – “HOOK”): <ul style="list-style-type: none"> • Show images of the local/natural environment and invite students, as a class, to create an “I wonder” for each image. 	<ul style="list-style-type: none"> • Students raise their hand if they have an “I wonder” to share and speak when called upon. 	5 min
Body:		

<ul style="list-style-type: none"> • Remind students that we are going to McArthur Island today. Invite students to work with their seat partner and each write on a sticky note one “I wonder” about the environment that we might see at McArthur Island and the animals and birds that we might see there. • Ring the chime. • Invite students to share their “I wonder” with the class while they put it on the white board in the designated area when their name is called as it is pulled out of the jar of popsicle sticks with student names. • Share with students that we will be going to McArthur Island as a class and will stop at three different locations to find a spot by ourselves and pause to look and listen and record observations about what they hear, see, discover, and continue to wonder about. • Ask students what the expectations are when we are at McArthur Island. Expand and add to expectations that students share to make sure all are covered. • Have students grab a pencil and put on their outdoor clothes as they are handed a clipboard with an observation book and then line up at the door. • Guide students to McArthur Island with a second teacher at the end of the line and an EA around the middle. • Settle at the first chosen area of the park (grasslands) and invite students to find a spot on their own and to pause and listen and look and record their observations and wonderings. Taking note of the things they notice that connect to what they’ve learned over the past week about biomes and the connectedness of life and nature. • After ten minutes or so, ring the chime and have students line up, walk to the next observation area (by the river). • Repeat previous steps. After ten minutes or so, ring the chime and have students line up. • Head to the playground and allow for ten minutes of free play! • Ring the chime, have students gather their belongings and line up. • Head back to the school. 	<ul style="list-style-type: none"> • Students work with their seat partner to brainstorm and each write an “I wonder” on their sticky note. • Students stop and listen for instructions. • Students share their “I wonder” as their name is called and place it on the board. • Students are listening • Students raise their hand to share an expectation and speak when called upon • When given a clipboard and observation book students get their pencil and put on their outdoor clothes and then line up. • Students follow the teacher in a single file line. • Students find a place to sit and observe. • Students give attention to teacher and then line up. • Students find a place to sit and observe. Then give attention to teacher and line up. • Students play!! • Students freeze, collect belongings and line up • Students follow teacher 	<p>5 min</p> <p>7 min</p> <p>3 min</p> <p>4 min</p> <p>40 min (for whole McArthur Island trip)</p>
<p>Closure:</p> <ul style="list-style-type: none"> • Before entering the school, gather in a circle on the field near the entrance. A ball is passed in a random order, student to student. When a student receives the ball they share one thing they observed while at McArthur Island and one thing they still wonder about. Students sit down after they’ve shared. 	<ul style="list-style-type: none"> • Students gather in a circle and share as they receive the ball. Students sit down after they’ve shared. 	<p>10 min</p>

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| • Thank the class for their work! | | |
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Organizational Strategies:

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| <ul style="list-style-type: none">• Chime to gain student attention• Student names on popsicle sticks for calling upon students• Have sticky notes for “I wonders” on desks before lesson begins• Hand out observation supplies as a way to having students get ready to line up to head to McArthur Island |
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Proactive, Positive Classroom Learning Environment Strategies:

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| <ul style="list-style-type: none">• Teacher will move around the room during the “I Wonders” and provide encouragement and support to students.• Students who are one task will be praised.• Challenges will be dealt with in a respectful manner and not publically wherever possible.• Expectations around behaviour will be reviewed before the trip to McArthur Island.• Wait seven seconds after asking a question to allow time for students to process and think about their answer or question.• Teacher will spend more time near students who are distracting one another or off task and provide ongoing support. If necessary, students who are distracting one another will be moved to different work areas. |
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Extensions:

This lesson could be extended to include a focus on Indigenous plants and animals and include having an Elder or other speaker join the lesson. This lesson will be expanded upon in upcoming lessons within the unit.
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Reflections (if necessary, continue on separate sheet):

N/A
