

Grade 4 Science - Earth Systems

Activity #4

Water is a Source of Life

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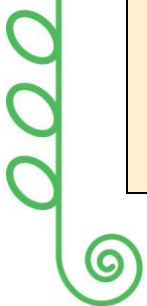
Activity #4

Water is a Source of Life

Duration: 120 minutes (2 or 3 classes)

Objective	Overview:
<p>By the end of the activity, students should be able to:</p> <ul style="list-style-type: none">- Understand how living organisms are using water- Understand how we can care and protect our water- Understand how to respect and appreciate our water (focusing on First Nations, Metis and Inuit perspective)	<ul style="list-style-type: none">- This activity introduces students to the concept of how water is so important in many factors of our world. Students will explore how living organisms use and live in water as well as how to protect and respect water. Through research, conversations and reflections students will gain a deeper understanding of the connection that water plays for living organisms and how we can protect it going forward.

Science Guiding Question	Learning Outcome
How does Earth sustain life?	Students investigate the systems of Earth and reflect on how their interconnections sustain life.
Knowledge	<ul style="list-style-type: none">- Water is a basic need for plants and animals.- Water provides habitat for many organisms.- First Nations, Métis, and Inuit laws of nature honour water as being sacred because water sustains life.- Laws of nature guide first nations, Metis and Inuit in their responsibility to protect water and sources of water.
Understanding	<ul style="list-style-type: none">- Caring for water and water sources is a shared responsibility.
Skills and Procedures	<ul style="list-style-type: none">- Discuss ways that plants and animals use water to meet their basic needs.- Identify plants and animals that exist in various bodies of water.- Demonstrate respect for water in the local environment.- Discuss the importance of water to First Nations, Métis, and Inuit.

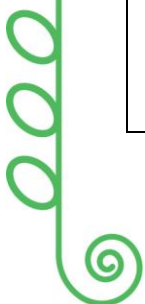


ELA Guiding Question	Learning Outcome
How can text organization influence communication?	Students examine how the form and structure of texts can support the communication of ideas and information.
Knowledge	<ul style="list-style-type: none"> - Literary forms of fiction and non-fiction texts include <ul style="list-style-type: none"> -novels -journal entries -media
Understanding	<ul style="list-style-type: none"> - Text form or structure can support the enjoyment and communication of ideas and information for a variety of purposes.
Skills and Procedures	<ul style="list-style-type: none"> - Explain how personal preferences for texts inspire, fascinate, or expand understandings.

Math Guiding Question	Learning Outcome
How can percentages standardize part-whole relationships?	Students interpret percentages.
Knowledge	<ul style="list-style-type: none"> - Percentage is represented symbolically with %.
Understanding	<ul style="list-style-type: none"> - Fractions, decimals, and percentages can represent the same part-whole relationship.
Skills and Procedures	<ul style="list-style-type: none"> - Investigate percentage in familiar situations. - Compare percentages within 100%.

Teacher Materials	Student Materials	Safety Concerns
Smartboard, Technology	Technology, poster paper, pencil	Inappropriate use of technology

Timing	Instructional Element	Student Tasks
Introduction (10 minutes)	<ul style="list-style-type: none"> - Talking circle: Teacher uses the prompt “What is our relationship with water” - Teacher gives a resume of what the class said. Helpful links: Indigenous Steam/Water Connection - Teacher explains how water is a source of life and that they will be doing a research 	<ul style="list-style-type: none"> - Students participate in classroom discussion and listen to the teacher.



	<p>project to reflect what they have learned about the importance of water.</p> <ul style="list-style-type: none"> - Teacher shares indigenous story with class: We Are Water Protectors Read Aloud Kids Book 	
Development (20 minutes)	<ul style="list-style-type: none"> - Teacher hands out and presents research project: Use accompanying “Research Project” and “Water Presentation (Example)” - Teacher explains the expectations and shares a few examples of the different ways students can show their learning. - Teacher divides the class into small groups to brainstorm different ways they will present the information they'll be researching. 	<ul style="list-style-type: none"> - Students listen to the teacher while they explain the research project. Students ask questions to clarify expectations. - Students divide into small groups to share and brainstorm ways they can demonstrate their learning.
Independent Work (60 minutes)	<ul style="list-style-type: none"> - Teacher gives students time to work on their research so that they can answer questions and complete their project (This may need extra time for students to work in order to complete project) 	<ul style="list-style-type: none"> - Students use technology to research questions found in the project. - Students present the information they learned in the format they have chosen.
Conclusion (30 minutes)	<ul style="list-style-type: none"> - Teacher forms random small groups of students to present their projects to one another - Teacher circulates to reinforce respectful listening skills and listen to student projects 	<ul style="list-style-type: none"> - Students divide into small groups and present their research to the other students in their group. - When students aren't presenting, they are practicing respectful listening skills.