

# GREY BRUCE CHILDREN'S WATER FESTIVAL

Grey Bruce



## ACTIVITY DESCRIPTIONS AND LEARNING OUTCOMES



## Grey Bruce Children's Water Festival Activity Descriptions and Learning Outcomes

Activity Name	Theme	Description	Learning Expectations
<b>3 X's A DAY</b>	Water Conservation and Attitude	Using a model of two washroom sinks, students measure how much water is used by brushing their teeth with the water left running and by brushing their teeth with the water used only sparingly. Students are encouraged to ask questions and provide new insights on how we can save water in our homes.	<p><u><b>Grade 3 Sci and Tech (Forces and Motion)</b></u>  <b>C2.4</b> identify ways in which forces are used in their daily lives</p> <p><u><b>Grade 4 Mathematics Measurement</b></u>  <b>E2.1</b> explain the relationships between grams and kilograms as metric units of mass, and between litres and milliliters as metric units of capacity, and use benchmarks for these units to estimate mass and capacity  <b>E2.2</b> use metric prefixes to describe the relative size of different metric units, and choose appropriate units and tools to measure length, mass, and capacity</p> <p><u><b>Grade 5 Sci and Tech STEM Investigation and Communication Skills</b></u>  <b>A3.1</b> describe practical applications of science and technology concepts in various occupations, including skilled trades, and how these applications address real-world problems  <b>A3.2</b> investigate how science and technology can be used with other subject areas to address real-world problems</p> <p><u><b>Grade 5 Sci and Tech Human Health and Body Systems</b></u>  <b>B1.1</b> assess effects of a variety of social and environmental factors on human health, and describe ways in which individuals can reduce the harmful effects of these factors and take advantage of those that are beneficial</p> <p><u><b>Grade 5 Sci and Tech Conservation of Energy and Resources</b></u>  <b>E1.1</b> analyze long-term impacts of human uses of energy and natural resources, on society and the environment, including climate change, and suggest ways to mitigate these impacts</p>
<b>ABORIGINAL VOICES</b>	Water Protection	Students gather to find out the prominent role that water plays in native culture and practice now and in ages past. This activity is run by teacher/elders from Chippewa's of Nawash	<p><u><b>Gd 3 Social Studies Heritage and Identity: Communities in Canada, 1780–1850</b></u>  <b>A1.1</b> describe some of the similarities and differences in various aspects of everyday life (e.g., housing, clothing, food, religious/spiritual practices, work, recreation, the role of children) of selected groups living in Canada between 1780 and 1850 (e.g., First Nations, Métis, French, British, Black people; men and women; slaves, indentured servants, habitants, seigneurs, farmers; people from different classes)  <b>A1.2</b> compare some of the roles of and challenges facing people in Canada around the beginning of the nineteenth century with those in the present day (e.g., the roles of women, men, and children; challenges related to the environment, work, community life, the law)</p>



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<b>ABORIGINAL VOICES CONT'D</b>		Unceded First Nation.	<p><u>Grade 3 Sci and Tech Life Systems - Growth and Changes In Plants</u>  <b>B2.6</b> describe ways in which people, including Indigenous peoples, from various cultures around the world use plants for food, shelter, medicine, and clothing</p> <p><u>Grade 4 Social Studies Heritage and Identity: Early Societies To 1500 CE</u>  <b>A1.4</b> compare a few early societies, including at least one First Nation and one Inuit society, in terms of their relationship with the environment (e.g., with reference to seasonal rhythms, use of land and resources, differences between urban and rural communities, religious and spiritual practices/ beliefs with respect to the environment), and describe some key similarities and differences in environmental practices between these societies and present-day Canada  <b>A2.1</b> formulate questions to guide investigations into ways of life and relationships with the environment in a few early societies, including at least one First Nation and one Inuit society, with an emphasis on aspects of the interrelationship between the environment and life in those societies (e.g., connections between the local environment and settlement, art, medicine, religion, spirituality, types of work; the impact on the environment of agriculture or the development of towns, cities, settlements, communities, and/or villages)  <b>A2.5</b> evaluate evidence and draw conclusions about ways of life and relationships with the environment in a few early societies, including at least one First Nation and one Inuit society, with an emphasis on aspects of the interrelationship between the environment and life in those societies  <b>A3.3</b> describe significant aspects of daily life in a few early societies, including at least one First Nation and one Inuit society  <b>A3.4</b> describe significant physical features and natural processes and events in a few early societies, including at least one First Nation and one Inuit society  <b>A3.5</b> describe the importance of the environment for a few early societies, including at least one First Nation and one Inuit society, with a particular focus on how the local environment affected the ways in which people met their physical needs (e.g., food, housing, clothing)</p> <p><u>Grade 4 Sci and Tech Life Systems - Habitats and Communities</u>  <b>B1.1</b> assess positive and negative impacts of human activities on habitats and communities, while taking different perspectives into account</p> <p><u>Grade 5 Sci and Tech Conservation of Energy and Resources</u></p>



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<b>ABORIGINAL VOICES CONT'D</b>			<p><b>E1.3</b> analyze how First Nations, Métis, and Inuit communities use their knowledges and ways of knowing to conserve energy and resources</p> <p><u>Grade 5 Social Studies People and Environments: The Role of Government and Responsible Citizenship</u>  <b>B1.1</b> assess the effectiveness of actions taken by one or more levels of government, including Indigenous governments, to address an issue of national, provincial/territorial, and/or local significance</p>
<b>A DAY AT THE BEACH</b>	Water Protection	This activity demonstrates how water quality can change, public beach signage related to swimming, and why not to drink lake/surface water.	
<b>A-MAZE-ING WATER TREATMENT</b>	Water Science and Technology	Students pretend to be drops of water entering a simulated water treatment plant. Find out what happens to municipally provided water before it enters the pipes to come into your home. Students will gain an understanding of how much has to be done to each drop of water that comes out of our taps and sprinklers and that we should	<p><u>Grade 3 Sci and Tech Forces and Motion</u>  <b>C1.1</b> assess the effects of the action of forces from natural phenomena on natural and built environments, and identify ways in which human activities can reduce or enhance these effects  <b>C1.2</b> assess harmful effects of forces that may result from various human activities, and describe how health and safety devices can minimize these effects</p> <p><u>Grade 3 Sci and Tech Stem Skills and Connections</u>  <b>A3.1</b> describe practical applications of science and technology concepts in their home and community, and how these applications address real-world problems</p> <p><u>Grade 4 Social Studies Heritage and Identity: Early Societies To 1500 CE</u>  <b>A1.4</b> compare a few early societies, including at least one First Nation and one Inuit society, in terms of their relationship with the environment (e.g., with reference to seasonal rhythms, use of land and resources, differences between urban and rural communities, religious and spiritual practices/ beliefs with respect to the environment), and describe some key similarities and differences in environmental practices between these societies and present-day Canada</p> <p><u>Grade 4 Sci and Tech Life Systems - Habitats and Communities</u></p>



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<b>A-MAZE-ING WATER TREATMENT CONT'D</b>		conserve water as much as possible. Then tour an actual working Water Treatment Plant on site.	<p><b>B1.1</b> assess positive and negative impacts of human activities on habitats and communities, while taking different perspectives into account</p> <p><u>Grade 4 Sci and Tech Machines and Their Mechanisms</u>  <b>D1.1</b> assess the impacts of machines and their mechanisms on the daily lives of people in various communities</p> <p><u>Grade 5 Sci and Tech Human Health and Body Systems</u>  <b>B1.1</b> assess effects of a variety of social and environmental factors on human health, and describe ways in which individuals can reduce the harmful effects of these factors and take advantage of those that are beneficial  <b>B1.2</b> evaluate beneficial and harmful effects of various technologies on human health and body systems, while taking different perspectives into consideration</p>
<b>"AQ" THE AMAZING AQUIFER</b>	Water Protection	Students will be encouraged to investigate the source of groundwater, how it gets there and how it is extracted for our use. Find out how pollutants affect our groundwater and how pollution can be prevented.	<p><u>Grade 3 Sci and Tech Soils in The Environment</u>  <b>E1.1</b> assess the importance of soils for society and the environment  <b>E1.2</b> assess the impact of human activity on soils, and describe ways in which humans can improve the quality of soils and/or lessen or prevent harmful effects on soils  <b>E2.1</b> identify the living and non-living components of soil, and describe the characteristics of healthy soil  <b>E2.2</b> identify different substances that are commonly added to, or absorbed by, the soil, and describe their effects on soil health</p> <p><u>Grade 4 Social Studies People and Environments: Political and Physical Regions of Canada</u>  <b>B1.1</b> analyze some of the general ways in which the natural environment of regions in Canada has affected the development of industry  <b>B2.5</b> evaluate evidence and draw conclusions about issues and challenges associated with balancing human needs/wants and activities with environmental stewardship in Canada</p> <p><u>Grade 4 Sci and Tech Life Systems - Habitats and Communities</u>  <b>B1.1</b> assess positive and negative impacts of human activities on habitats and communities, while taking different perspectives into account</p>



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<p><b>"AQ" THE AMAZING AQUIFER CONT'D</b></p>			<p><u>Grade 4 Sci and Tech Rocks, Minerals, And Geological Processes</u>  <b>E1.1</b> analyze ways in which geological processes impact society and the environment   <b>E1.2</b> assess social and environmental impacts of extracting and refining rocks and minerals and of manufacturing, recycling, and disposing of products derived from rocks and minerals, while taking various perspectives into account</p>
<p><b>BOOTS, BUBBLES &amp; BUGS</b></p>	<p>Water Science and Technology</p>	<p>Students discover the differences between aquatic insects found in stream and pond habitats with emphasis on adaptations to their environment. Through the use of an interactive puppet show, participants follow Billy Water Boatman and a little girl named Polly as they wish for a better life underwater. Our characters meet a number of interesting creatures such as grasshoppers, damselfly nymphs, black fly larva, mayfly nymphs, water striders and</p>	<p><u>Grade 4 Sci and Tech Life Systems - Habitats and Communities</u>  <b>B1.1</b> assess positive and negative impacts of human activities on habitats and communities, while taking different perspectives into account  <b>B2.1</b> describe habitats as areas that provide organisms, including plants and animals, with the necessities of life, and identify ways in which a local habitat provides these necessities  <b>B2.2</b> describe a community as a group of interacting species sharing a common habitat, and identify factors that affect the ability of a community of plants and animals to survive in a local habitat  <b>B2.3</b> describe the relationship of organisms in a food chain, and classify organisms as producers, consumers, or decomposers  <b>B2.4</b> demonstrate an understanding of a food web as the interconnection of multiple food chains in a natural community  <b>B2.5</b> describe how animals are categorized according to their diet, and categorize various animals as carnivores, herbivores, or omnivores  <b>B2.6</b> describe structural adaptations of a variety of plants and animals and how these adaptations allow the organisms to survive in specific habitats</p>



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		whirligig beetles along their way learning that sometimes it is better not to get what you wish for!	
<b>BUCKET BRIGADE</b>	Water Protection	Students work together to simulate medieval & pioneer life, including firefighting methods. They also have the opportunity to talk to local firefighters and see modern firefighting technology such as fire trucks and fire hoses. Students line up and pass buckets full of water to put out a "fire".	<p><u>Grade 4 Social Studies Heritage and Identity: Early Societies To 1500 CE</u>  <b>A1.4</b> compare a few early societies, including at least one First Nation and one Inuit society, in terms of their relationship with the environment (e.g., with reference to seasonal rhythms, use of land and resources, differences between urban and rural communities, religious and spiritual practices/ beliefs with respect to the environment), and describe some key similarities and differences in environmental practices between these societies and present-day Canada</p> <p><u>Grade 4 Health and Physical Education - Movement Skills and Concepts</u>  <b>C1.3</b> perform different combinations of locomotor movements with and without equipment, alone and with others, moving at different speeds and levels, using different pathways, and going in different directions (e.g., travel under, over, around, and through equipment in an obstacle course; hop and skip in a zigzag pattern, following a specific rhythm; run and leap over a line; use different levels while performing folk, cultural, and creative dances; perform t'ai chi or yoga movements slowly and at a moderate pace; wheel their wheelchair through an obstacle course, turn, and wheel back)</p> <p><u>Grade 4 Mathematics Measurement</u>  <b>E2.1</b> explain the relationships between grams and kilograms as metric units of mass, and between litres and millilitres as metric units of capacity, and use benchmarks for these units to estimate mass and capacity</p> <p><b>E2.2</b> use metric prefixes to describe the relative size of different metric units, and choose appropriate units and tools to measure length, mass, and capacity</p>
<b>D.O. THE LIMBO</b>	Water Science and Technology	Dissolved oxygen is found in water in varying amounts. Many aquatic species use gills to	<p><u>Grade 4 Sci and Tech Life Systems - Habitats and Communities</u>  <b>B1.1</b> assess positive and negative impacts of human activities on habitats and communities, while taking different perspectives into account</p>



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<b>D.O. THE LIMBO CONT'D</b>		extract oxygen directly from the water to survive. Certain species require more of this dissolved oxygen than others. Different factors affect the amount of dissolved oxygen present in the water. Students participate in a limbo contest that helps share the importance of the dissolved oxygen present in the water.	<p><b>B2.1</b> describe habitats as areas that provide organisms, including plants and animals, with the necessities of life, and identify ways in which a local habitat provides these necessities</p> <p><b>B2.2</b> describe a community as a group of interacting species sharing a common habitat, and identify factors that affect the ability of a community of plants and animals to survive in a local habitat</p> <p><b>B2.3</b> describe the relationship of organisms in a food chain, and classify organisms as producers, consumers, or decomposers</p> <p><b>B2.4</b> demonstrate an understanding of a food web as the interconnection of multiple food chains in a natural community</p> <p><b>B2.5</b> describe how animals are categorized according to their diet, and categorize various animals as carnivores, herbivores, or omnivores</p> <p><b>B2.6</b> describe structural adaptations of a variety of plants and animals and how these adaptations allow the organisms to survive in specific habitats</p>
<b>DRIPIAL PURSUIT</b>	Water Conservation and Attitude	Teams of students engage in a friendly game of not so "trivial" water facts.	Variety of expectations addressed.
<b>DROP ZONE</b>	Water Science and Technology	Students discover water towers not only store the water we need for our homes, schools and businesses but also provide the pressure necessary to get that water to us. Participants	<p><u>Gd 3 Social Studies Heritage and Identity: Communities in Canada, 1780–1850</u></p> <p><b>A1.1</b> describe some of the similarities and differences in various aspects of everyday life (e.g., housing, clothing, food, religious/spiritual practices, work, recreation, the role of children) of selected groups living in Canada between 1780 and 1850 (e.g., First Nations, Métis, French, British, Black people; men and women; slaves, indentured servants, habitants, seigneurs, farmers; people from different classes)</p> <p><b>A2.5</b> evaluate evidence and draw conclusions about some of the major challenges facing different groups and communities in Canada during this period, and measures taken to overcome these challenges</p> <p><b>A3.3</b> identify some of the main factors that helped shape the development of settlements in Canada during this period (e.g., the establishment of trading posts based on trade routes and the knowledge of First Nations peoples; navigable lakes</p>



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<p><b>DROP ZONE CONT'D</b></p>		<p>actively get involved in learning that the tower's size, shape and height will help determine what amount of pressure is available. Look out for the drop zone!</p>	<p>and rivers for trade and transportation; climate; proximity to natural resources; the origins of settlers), and describe how the physical features of the land (e.g., topography, proximity to water, fertility of the soil) and the availability of goods and services (e.g., mills, churches, roads) can facilitate settlement and enhance community life</p> <p><b>A3.5</b> describe the impact of some different kinds of settlements (e.g., seasonal settlements of seminomadic First Nations, trading posts, resource towns, large-scale farms, large towns or developing cities) on the natural environment and on any existing settlements.</p> <p><u>Gd 3 Social Studies People and Environments: Living and Working in Ontario</u>  <b>B1.1</b> describe some major connections between features of the natural environment of a region and the type of land use and/or the type of community that is established in that region (e.g., ports on lakes or major rivers; farming on flat land with fertile soil; resource towns in areas with ore, trees, or other natural resources)</p> <p><u>Grade 3 Sci and Tech STEM Skills and Connections</u>  <b>A3.1</b> describe practical applications of science and technology concepts in their home and community, and how these applications address real-world problems  <b>A3.2</b> investigate how science and technology can be used with other subject areas to address real-world problems</p> <p><u>Grade 3 Sci and Tech Forces and Motion</u>  <b>C1.1</b> assess the effects of the action of forces from natural phenomena on natural and built environments, and identify ways in which human activities can reduce or enhance these effects  <b>C1.2</b> assess harmful effects of forces that may result from various human activities, and describe how health and safety devices can minimize these effects  <b>C2.2</b> describe different ways a force can be exerted on an object  <b>C2.3</b> describe how different forces applied to an object, including forces of varying magnitude, can cause the object to start, stop, or change its direction, speed, or shape  <b>C2.4</b> identify ways in which forces are used in their daily lives</p> <p><u>Grade 3 Sci and Tech Strong and Stable Structures</u>  <b>D1.1</b> assess effects on society and the environment of strong and stable structures</p>



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<p><b>DROP ZONE CONT'D</b></p>			<p><b>D1.2</b> assess the environmental impact of structures built by various animals, including structures built by humans</p> <p><b>D2.1</b> describe a structure as a supporting framework that holds a load and has a definite size, shape, and function, and identify structures in the natural environment and in the built environment</p> <p><b>D2.2</b> demonstrate an understanding of the relationship between form and function for various structures</p> <p><b>D2.3</b> identify the strength of a structure as its ability to support a load and describe ways to increase the strength of structures, including ways to increase the strength of different materials used to build them</p> <p><b>D2.4</b> describe the stability of a structure as its ability to keep its shape, maintain balance, float, and/or stay fixed in one spot when a force is applied to the structure, and describe ways to improve a structure's stability</p> <p><b>D2.5</b> identify properties of materials that need to be considered when building structures</p> <p><b>D2.6</b> describe ways in which different forces can affect the shape, balance, or position of structures</p> <p><b>D2.7</b> explain the role of struts and ties in structures under load.</p> <p><u>Grade 4 Social Studies Heritage and Identity: Early Societies To 1500 CE</u></p> <p><b>A1.4</b> compare a few early societies, including at least one First Nation and one Inuit society, in terms of their relationship with the environment (e.g., with reference to seasonal rhythms, use of land and resources, differences between urban and rural communities, religious and spiritual practices/ beliefs with respect to the environment), and describe some key similarities and differences in environmental practices between these societies and present-day Canada</p> <p><b>A2.1</b> formulate questions to guide investigations into ways of life and relationships with the environment in a few early societies, including at least one First Nation and one Inuit society, with an emphasis on aspects of the interrelationship between the environment and life in those societies (e.g., connections between the local environment and settlement, art, medicine, religion, spirituality, types of work; the impact on the environment of agriculture or the development of towns, cities, settlements, communities, and/or villages)</p> <p><b>A3.4</b> describe significant physical features and natural processes and events in a few early societies, including at least one First Nation and one Inuit society</p> <p><b>A3.5</b> describe the importance of the environment for a few early societies, including at least one First Nation and one Inuit society, with a particular focus on how the</p>



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<b>DROP ZONE CONT'D</b>			<p>local environment affected the ways in which people met their physical needs (e.g., food, housing, clothing)</p> <p><u>Grade 4 Social Studies People and Environments: Political and Physical Regions of Canada</u>  <b>B1.1</b> analyze some of the general ways in which the natural environment of regions in Canada has affected the development of industry  <b>B3.1</b> identify various physical regions in Canada (e.g., landform, vegetation, and climatic regions), and describe their location and some of the major ways in which they are distinct from and similar to each other  <b>B3.2</b> identify some of the main human activities, including industrial development and recreational activities, in various physical regions of Canada</p> <p><u>Grade 4 Sci and Tech Stem Investigation and Communication Skills</u>  <b>A1.3</b> use an engineering design process and associated skills to design, build, and test devices, models, structures, and/or systems  <b>A3.1</b> describe practical applications of science and technology concepts in various occupations, including skilled trades, and how these applications address real-world problems  <b>A3.2</b> investigate how science and technology can be used with other subject areas to address real-world problems</p> <p><u>Grade 5 Sci and Tech Conservation of Energy and Resources</u>  <b>E1.1</b> analyze long-term impacts of human uses of energy and natural resources, on society and the environment, including climate change, and suggest ways to mitigate these impacts  <b>E1.2</b> evaluate effects of various technologies on energy consumption, and describe ways in which individuals can use technology to reduce energy consumption</p>
<b>FEEL THE FLOW</b>	Water Science and Technology	Using the augmented reality sandbox, students learn about topographic maps and contour lines and how the shape of the earth's surface defines	<p><u>Grade 4 Social Studies Heritage and Identity: Early Societies To 1500 CE</u>  <b>A1.4</b> compare a few early societies, including at least one First Nation and one Inuit society, in terms of their relationship with the environment (e.g., with reference to seasonal rhythms, use of land and resources, differences between urban and rural communities, religious and spiritual practices/ beliefs with respect to the environment), and describe some key similarities and differences in environmental practices between these societies and present-day Canada  <b>A3.4</b> describe significant physical features and natural processes and events in a few early societies, including at least one First Nation and one Inuit society.</p>



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<b>FEEL THE FLOW CONT'D</b>		<p>watersheds. Students will learn what a contour map is and how these mapping tools aid in determining how water moves across a landscape. Students will also learn about processes like erosion and the impacts that changes to the environment can have on a watershed.</p>	<p><b>A3.5</b> describe the importance of the environment for a few early societies, including at least one First Nation and one Inuit society, with a particular focus on how the local environment affected the ways in which people met their physical needs (e.g., food, housing, clothing)</p> <p><u>Grade 4 Social Studies People and Environments: Political and Physical Regions of Canada</u></p> <p><b>B1.1</b> analyze some of the general ways in which the natural environment of regions in Canada has affected the development of industry.</p> <p><b>B1.2</b> assess aspects of the environmental impact of different industries in two or more physical and/or political regions of Canada</p> <p><b>B2.5</b> evaluate evidence and draw conclusions about issues and challenges associated with balancing human needs/wants and activities with environmental stewardship in Canada.</p> <p><b>B3.1</b> identify various physical regions in Canada (e.g., landform, vegetation, and climatic regions), and describe their location and some of the major ways in which they are distinct from and similar to each other.</p> <p><b>B3.2</b> identify some of the main human activities, including industrial development and recreational activities, in various physical regions of Canada.</p> <p><u>Grade 5 Sci and Tech Properties of And Changes in Matter</u></p> <p><b>C1.1</b> assess the impacts on society and the environment of various processes used in the manufacture of common products</p> <p><b>C1.2</b> assess how the use of specific materials in the manufacture of common products affects the environment, and identify actions that society and individuals can take to mitigate negative impacts</p> <p><u>Grade 5 Sci and Tech Conservation of Energy and Resources</u></p> <p><b>E1.1</b> analyze long-term impacts of human uses of energy and natural resources, on society and the environment, including climate change, and suggest ways to mitigate these impacts</p> <p><b>E1.2</b> evaluate effects of various technologies on energy consumption, and describe ways in which individuals can use technology to reduce energy consumption.</p>
<b>GO WITH THE FLOW</b>	Water Conservation and Attitude	Students will learn why saving water is important and	<p><u>Grade 3 Sci and Tech STEM Skills and Connections</u></p> <p><b>A3.1</b> describe practical applications of science and technology concepts in their home and community, and how these applications address real-world problems</p>



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<p><b>GO WITH THE FLOW CONT'D</b></p>		<p>how they can easily reduce the amount of water they use at home. They will also learn how much water they can save by comparing two different types of water-using devices (aerator and conventional tap).</p>	<p><b>A3.2</b> investigate how science and technology can be used with other subject areas to address real-world problems</p> <p><u>Grade 3 Sci and Tech Forces and Motion</u>  <b>C1.1</b> assess the effects of the action of forces from natural phenomena on natural and built environments, and identify ways in which human activities can reduce or enhance these effects  <b>C1.2</b> assess harmful effects of forces that may result from various human activities, and describe how health and safety devices can minimize these effects  <b>C2.2</b> describe different ways a force can be exerted on an object  <b>C2.3</b> describe how different forces applied to an object, including forces of varying magnitude, can cause the object to start, stop, or change its direction, speed, or shape  <b>C2.4</b> identify ways in which forces are used in their daily lives</p> <p><u>Grade 4 Social Studies Heritage and Identity: Early Societies To 1500 CE</u>  <b>A1.4</b> compare a few early societies, including at least one First Nation and one Inuit society, in terms of their relationship with the environment (e.g., with reference to seasonal rhythms, use of land and resources, differences between urban and rural communities, religious and spiritual practices/ beliefs with respect to the environment), and describe some key similarities and differences in environmental practices between these societies and present-day Canada  <b>A3.5</b> describe the importance of the environment for a few early societies, including at least one First Nation and one Inuit society, with a particular focus on how the local environment affected the ways in which people met their physical needs (e.g., food, housing, clothing)</p> <p><u>Grade 4 Sci and Tech Stem Investigation and Communication Skills</u>  <b>A1.3</b> use an engineering design process and associated skills to design, build, and test devices, models, structures, and/or systems  <b>A3.1</b> describe practical applications of science and technology concepts in various occupations, including skilled trades, and how these applications address real-world problems  <b>A3.2</b> investigate how science and technology can be used with other subject areas to address real-world problems</p> <p><u>Grade 4 Sci and Tech Machines and Their Mechanisms</u></p>



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<p><b>GO WITH THE FLOW CONT'D</b></p>			<p><b>D1.1</b> assess the impacts of machines and their mechanisms on the daily lives of people in various communities  <b>D2.1</b> identify machines that are used in daily life, and describe their purposes  <b>D2.2</b> identify the parts of various mechanisms and describe the purpose of each part  <b>D2.4</b> describe how mechanisms transform motion, including how they can change the geometric plane in which the motion occurs and the speed and/or direction of motion  <b>D2.5</b> explain how forces are changed in a variety of machines</p> <p><u>Grade 5 Sci and Tech Conservation of Energy and Resources</u>  <b>E1.1</b> analyze long-term impacts of human uses of energy and natural resources, on society and the environment, including climate change, and suggest ways to mitigate these impacts  <b>E1.2</b> evaluate effects of various technologies on energy consumption, and describe ways in which individuals can use technology to reduce energy consumption</p>
<p><b>HEALTHY STREAMS... HAPPY PEOPLE</b></p>	<p>Water Protection</p>	<p>Students will review the food chain in a stream ecosystem. Using a "gravity puzzle", students will learn that all the organisms in the stream are connected and that humans are part of the chain. Ultimately, humans can have both a positive and negative influence on streams, so if the streams stay healthy, so will humans.</p>	<p><u>Grade 4 Sci and Tech Life Systems - Habitats and Communities</u>  <b>B1.1</b> assess positive and negative impacts of human activities on habitats and communities, while taking different perspectives into account  <b>B1.2</b> analyse the impact of the depletion or extinction of a species on its habitat and community, and describe possible actions to prevent such depletions or extinctions  <b>B2.1</b> describe habitats as areas that provide organisms, including plants and animals, with the necessities of life, and identify ways in which a local habitat provides these necessities  <b>B2.2</b> describe a community as a group of interacting species sharing a common habitat, and identify factors that affect the ability of a community of plants and animals to survive in a local habitat  <b>B2.3</b> describe the relationship of organisms in a food chain, and classify organisms as producers, consumers, or decomposers  <b>B2.4</b> demonstrate an understanding of a food web as the interconnection of multiple food chains in a natural community  <b>B2.5</b> describe how animals are categorized according to their diet, and categorize various animals as carnivores, herbivores, or omnivores  <b>B2.6</b> describe structural adaptations of a variety of plants and animals and how these adaptations allow the organisms to survive in specific habitats  <b>B2.7</b> explain why all habitats have limits to the number of plants and animals they can support</p>







## Grey Bruce Children’s Water Festival Activity Descriptions and Learning Outcomes

Activity Name	Theme	Description	Learning Expectations
			<p><u>Grade 4 Sci and Tech Life Systems - Habitats and Communities</u>  <b>B1.1</b> assess positive and negative impacts of human activities on habitats and communities, while taking different perspectives into account  <b>B2.1</b> describe habitats as areas that provide organisms, including plants and animals, with the necessities of life, and identify ways in which a local habitat provides these necessities  <b>B2.2</b> describe a community as a group of interacting species sharing a common habitat, and identify factors that affect the ability of a community of plants and animals to survive in a local habitat</p> <p><u>Grade 5 Sci and Tech Properties of And Changes in Matter</u>  <b>C1.1</b> assess the impacts on society and the environment of various processes used in the manufacture of common products.  <b>C1.2</b> assess how the use of specific materials in the manufacture of common products affects the environment, and identify actions that society and individuals can take to mitigate negative impacts.</p>
<b>KEEPING IT CLEAN</b>	Water Protection	Using a hands-on model of an urban and rural landscape, students will discover how we can affect the groundwater and surface water in our environment through non-environmentally friendly practices, in our own backyards. Students also learn how to prevent pollution problems near our homes using more environmentally	<p><u>Grade 4 Sci and Tech Life Systems - Habitats and Communities</u>  <b>B1.1</b> assess positive and negative impacts of human activities on habitats and communities, while taking different perspectives into account  <b>B2.1</b> describe habitats as areas that provide organisms, including plants and animals, with the necessities of life, and identify ways in which a local habitat provides these necessities  <b>B2.2</b> describe a community as a group of interacting species sharing a common habitat, and identify factors that affect the ability of a community of plants and animals to survive in a local habitat</p> <p><u>Grade 4 Sci and Tech Machines and Their Mechanisms</u>  <b>D1.1</b> assess the impacts of machines and their mechanisms on the daily lives of people in various communities  <b>D1.2</b> assess and compare the environmental impacts of using different machines designed for similar purposes</p> <p><u>Grade 5 Social Studies People and Environments: The Role of Government and Responsible Citizenship</u>  <b>B1.1</b> assess the effectiveness of actions taken by one or more levels of government, including Indigenous governments, to address an issue of national, provincial/territorial, and/or local significance</p>









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Activity Name	Theme	Description	Learning Expectations
<p><b>OIL SLICK! CONT'D</b></p>		<p>in a natural habitat? Students have a brief discussion of this phenomenon in the context of a large scale (as in oil tanker spill at sea) and on a smaller scale (such as when oil travels through storm drains into our local lakes and rivers). Students use a model to see how real oil and water mix (or don't) and how the animal's habitats, including vegetation, are adversely affected. An actual technique of cleaning up the oil is demonstrated. Students also take the role of wildlife biologists observing feathers when they are wet, dry or soaked in oil; giving oral descriptions of their observations. Then they attempt</p>	<p><b>B3.5</b> describe major types of land use (e.g., for agriculture, industry, commerce, housing, recreation, transportation, conservation) and how they address human needs and wants (e.g., agricultural lands)</p> <p><u>Grade 3 Sci and Tech STEM Skills and Connections</u>  <b>A3.1</b> describe practical applications of science and technology concepts in their home and community, and how these applications address real-world problems  <b>A3.2</b> investigate how science and technology can be used with other subject areas to address real-world problems</p> <p><u>Grade 3 Sci and Tech Soils in The Environment</u>  <b>E1.1</b> assess the importance of soils for society and the environment  <b>E1.2</b> assess the impact of human activity on soils, and describe ways in which humans can improve the quality of soils and/or lessen or prevent harmful effects on soils  <b>E2.2</b> identify different substances that are commonly added to, or absorbed by, the soil, and describe their effects on soil health</p> <p><u>Grade 4 Sci and Tech Life Systems - Habitats and Communities</u>  <b>B1.1</b> assess positive and negative impacts of human activities on habitats and communities, while taking different perspectives into account  <b>B1.2</b> analyse the impact of the depletion or extinction of a species on its habitat and community, and describe possible actions to prevent such depletions or extinctions  <b>B2.1</b> describe habitats as areas that provide organisms, including plants and animals, with the necessities of life, and identify ways in which a local habitat provides these necessities  <b>B2.2</b> describe a community as a group of interacting species sharing a common habitat, and identify factors that affect the ability of a community of plants and animals to survive in a local habitat  <b>B2.4</b> demonstrate an understanding of a food web as the interconnection of multiple food chains in a natural community  <b>B2.6</b> describe structural adaptations of a variety of plants and animals and how these adaptations allow the organisms to survive in specific habitats</p> <p><u>Grade 5 Social Studies People and Environments: The Role of Government and Responsible Citizenship</u></p>



## Grey Bruce Children's Water Festival Activity Descriptions and Learning Outcomes

Activity Name	Theme	Description	Learning Expectations
<b>OIL SLICK! CONT'D</b>		to actually clean the feathers. Students are encouraged to think about actions such as pouring used oil and other contaminants down storm drains or household drains and how these cause pollution and discuss why prevention is a better strategy than remediation.	<p><b>B1.1</b> assess the effectiveness of actions taken by one or more levels of government, including Indigenous governments, to address an issue of national, provincial/territorial, and/or local significance</p> <p><b>B1.3</b> create a plan of action to address an environmental issue of local, provincial/territorial, and/or national significance</p> <p><b>B3.8</b> explain why different groups may have different perspectives on specific social and environmental issues significance</p> <p><u>Grade 5 Sci and Tech Human Health and Body Systems</u></p> <p><b>B1.1</b> assess effects of a variety of social and environmental factors on human health, and describe ways in which individuals can reduce the harmful effects of these factors and take advantage of those that are beneficial</p> <p><u>Grade 5 Sci and Tech Properties of And Changes In Matter</u></p> <p><b>C1.1</b> assess the impacts on society and the environment of various processes used in the manufacture of common products</p> <p><b>C1.2</b> assess how the use of specific materials in the manufacture of common products affects the environment, and identify actions that society and individuals can take to mitigate negative impacts</p> <p><u>Grade 5 Sci and Tech Conservation Of Energy And Resources</u></p> <p><b>E1.1</b> analyze long-term impacts of human uses of energy and natural resources, on society and the environment, including climate change, and suggest ways to mitigate these impacts</p> <p><b>E1.3</b> analyze how First Nations, Métis, and Inuit communities use their knowledges and ways of knowing to conserve energy and resources</p>
<b>PIONEER WATER RACE</b>	Water Protection	How did pioneers collect all of the water that they needed for their daily lives? Students participate in a race using buckets of water and pose questions and make observations	<p><u>Gd 3 Social Studies Heritage and Identity: Communities in Canada, 1780–1850</u></p> <p><b>A1.1</b> describe some of the similarities and differences in various aspects of everyday life (e.g., housing, clothing, food, religious/spiritual practices, work, recreation, the role of children) of selected groups living in Canada between 1780 and 1850 (e.g., First Nations, Métis, French, British, Black people; men and women; slaves, indentured servants, habitants, seigneurs, farmers; people from different classes)</p> <p><b>A1.2</b> compare some of the roles of and challenges facing people in Canada around the beginning of the nineteenth century with those in the present day (e.g., the roles of women, men, and children; challenges related to the environment, work, community life, the law)</p>



## Grey Bruce Children's Water Festival Activity Descriptions and Learning Outcomes

Activity Name	Theme	Description	Learning Expectations
<p><b>PIONEER WATER RACE CONT'D</b></p>		<p>to gain an understanding of the difference between Canadian communities in the early 1800s and modern life in their community. How did people function differently without our technology?</p>	<p><u>Grade 4 Social Studies Heritage and Identity: Early Societies To 1500 CE</u>  <b>A1.4</b> compare a few early societies, including at least one First Nation and one Inuit society, in terms of their relationship with the environment (e.g., with reference to seasonal rhythms, use of land and resources, differences between urban and rural communities, religious and spiritual practices/ beliefs with respect to the environment), and describe some key similarities and differences in environmental practices between these societies and present-day Canada</p> <p><u>Grade 4 Mathematics Measurement</u>  <b>E2.1</b> explain the relationships between grams and kilograms as metric units of mass, and between litres and milliliters as metric units of capacity, and use benchmarks for these units to estimate mass and capacity  <b>E2.2</b> use metric prefixes to describe the relative size of different metric units, and choose appropriate units and tools to measure length, mass, and capacity</p> <p><u>Grade 4 Health and Physical Education - Movement Skills and Concepts</u>  <b>C1.3</b> perform different combinations of locomotor movements with and without equipment, alone and with others, moving at different speeds and levels, using different pathways, and going in different directions (e.g., travel under, over, around, and through equipment in an obstacle course; hop and skip in a zigzag pattern, following a specific rhythm; run and leap over a line; use different levels while performing folk, cultural, and creative dances; perform t'ai chi or yoga movements slowly and at a moderate pace; wheel their wheelchair through an obstacle course, turn, and wheel back)</p>
<p><b>RIVER RUNNERS</b></p>	<p>Water Science and Technology</p>	<p>Different types of pollution can alter the quality of life of the river and its inhabitants. Students role play being fish affected by several factors that could harm them and learn what we can do to help aquatic</p>	<p><u>Grade 4 Sci and Tech Life Systems - Habitats and Communities</u>  <b>B1.1</b> assess positive and negative impacts of human activities on habitats and communities, while taking different perspectives into account  <b>B1.2</b> analyze the impact of the depletion or extinction of a species on its habitat and community, and describe possible actions to prevent such depletions or extinctions  <b>B2.1</b> describe habitats as areas that provide organisms, including plants and animals, with the necessities of life, and identify ways in which a local habitat provides these necessities  <b>B2.2</b> describe a community as a group of interacting species sharing a common habitat, and identify factors that affect the ability of a community of plants and animals to survive in a local habitat</p>







## Grey Bruce Children's Water Festival Activity Descriptions and Learning Outcomes

Activity Name	Theme	Description	Learning Expectations
			<p><b>C2.4</b> identify ways in which forces are used in their daily lives</p> <p><u>Grade 4 Social Studies Heritage and Identity: Early Societies To 1500 CE</u>  <b>A1.4</b> compare a few early societies, including at least one First Nation and one Inuit society, in terms of their relationship with the environment (e.g., with reference to seasonal rhythms, use of land and resources, differences between urban and rural communities, religious and spiritual practices/ beliefs with respect to the environment), and describe some key similarities and differences in environmental practices between these societies and present-day Canada</p> <p><u>Grade 4 Mathematics Measurement</u>  <b>E2.1</b> explain the relationships between grams and kilograms as metric units of mass, and between litres and millilitres as metric units of capacity, and use benchmarks for these units to estimate mass and capacity  <b>E2.2</b> use metric prefixes to describe the relative size of different metric units, and choose appropriate units and tools to measure length, mass, and capacity</p> <p><u>Grade 5 Sci and Tech Human Health and Body Systems</u>  <b>B1.1</b> assess effects of a variety of social and environmental factors on human health, and describe ways in which individuals can reduce the harmful effects of these factors and take advantage of those that are beneficial</p> <p><u>Grade 5 Sci and Tech Conservation of Energy and Resources</u>  <b>E1.1</b> analyze long-term impacts of human uses of energy and natural resources, on society and the environment, including climate change, and suggest ways to mitigate these impacts  <b>E1.2</b> evaluate effects of various technologies on energy consumption, and describe ways in which individuals can use technology to reduce energy consumption</p>
<b>RUNOFF OR RECHARGE?</b>	Water Protection	Using a model, students investigate the importance of vegetation in helping to fight against water erosion. Students compare how	<p><u>Grade 3 Sci and Tech Soils in The Environment</u>  <b>E1.1</b> assess the importance of soils for society and the environment  <b>E1.2</b> assess the impact of human activity on soils, and describe ways in which humans can improve the quality of soils and/or lessen or prevent harmful effects on soils  <b>E2.1</b> identify the living and non-living components of soil, and describe the characteristics of healthy soil  <b>E2.2</b> identify different substances that are commonly added to, or absorbed by, the soil, and describe their effects on soil health</p>





## Grey Bruce Children's Water Festival Activity Descriptions and Learning Outcomes

Activity Name	Theme	Description	Learning Expectations
<p><b>TREATING TRASH</b></p>	<p>Water Protection</p>	<p>How does a modern landfill operate? Students explore for themselves how we treat our trash today and compare this to the unsafe practices that were done in the past. A landfill model provides a breakdown of the different stages of the treatment process and demonstrates the effect on the groundwater if our trash is not disposed of properly.</p>	<p><u>Grade 4 Social Studies Heritage and Identity: Early Societies To 1500 CE</u>  <b>A1.4</b> compare a few early societies, including at least one First Nation and one Inuit society, in terms of their relationship with the environment (e.g., with reference to seasonal rhythms, use of land and resources, differences between urban and rural communities, religious and spiritual practices/ beliefs with respect to the environment), and describe some key similarities and differences in environmental practices between these societies and present-day Canada  <b>A2.1</b> formulate questions to guide investigations into ways of life and relationships with the environment in a few early societies, including at least one First Nation and one Inuit society, with an emphasis on aspects of the interrelationship between the environment and life in those societies (e.g., connections between the local environment and settlement, art, medicine, religion, spirituality, types of work; the impact on the environment of agriculture or the development of towns, cities, settlements, communities, and/or villages)  <b>A3.4</b> describe significant physical features and natural processes and events in a few early societies, including at least one First Nation and one Inuit society  <b>A3.5</b> describe the importance of the environment for a few early societies, including at least one First Nation and one Inuit society, with a particular focus on how the local environment affected the ways in which people met their physical needs (e.g., food, housing, clothing)</p> <p><u>Grade 4 Social Studies People and Environments: Political and Physical Regions of Canada</u>  <b>B1.1</b> analyze some of the general ways in which the natural environment of regions in Canada has affected the development of industry  <b>B1.2</b> assess aspects of the environmental impact of different industries in two or more physical and/or political regions of Canada  <b>B2.5</b> evaluate evidence and draw conclusions about issues and challenges associated with balancing human needs/wants and activities with environmental stewardship in Canada  <b>B3.2</b> identify some of the main human activities, including industrial development and recreational activities, in various physical regions of Canada</p>
<p><b>TREATING TRASH CONT'D</b></p>			<p><u>Grade 5 Sci and Tech Human Health and Body Systems</u>  <b>B1.1</b> assess effects of a variety of social and environmental factors on human health, and describe ways in which individuals can reduce the harmful effects of these factors and take advantage of those that are beneficial</p>





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Activity Name	Theme	Description	Learning Expectations
			<p>local environment affected the ways in which people met their physical needs (e.g., food, housing, clothing)</p> <p><u>Grade 4 Social Studies People and Environments: Political and Physical Regions of Canada</u>  <b>B1.1</b> analyze some of the general ways in which the natural environment of regions in Canada has affected the development of industry  <b>B1.2</b> assess aspects of the environmental impact of different industries in two or more physical and/or political regions of Canada  <b>B2.5</b> evaluate evidence and draw conclusions about issues and challenges associated with balancing human needs/wants <b>B3.1</b> identify various physical regions in Canada (e.g., landform, vegetation, and climatic regions), and describe their location and some of the major ways in which they are distinct from and similar to each other and activities with environmental stewardship in Canada  <b>B3.2</b> identify some of the main human activities, including industrial development and recreational activities, in various physical regions of Canada</p> <p><u>Grade 5 Sci and Tech Properties of And Changes in Matter</u>  <b>C1.1</b> assess the impacts on society and the environment of various processes used in the manufacture of common products  <b>C1.2</b> assess how the use of specific materials in the manufacture of common products affects the environment, and identify actions that society and individuals can take to mitigate negative impacts</p> <p><u>Grade 5 Sci and Tech Conservation of Energy and Resources</u>  <b>E1.1</b> analyze long-term impacts of human uses of energy and natural resources, on society and the environment, including climate change, and suggest ways to mitigate these impacts  <b>E1.2</b> evaluate effects of various technologies on energy consumption, and describe ways in which individuals can use technology to reduce energy consumption</p>
<b>WATER CYCLE MADNESS</b>	Water Science and Technology	Students learn about the water cycle first hand by watching it cycle before their eyes. Unique working	<p><u>Gd 3 Social Studies People and Environments: Living and Working in Ontario</u>  <b>B1.1</b> describe some major connections between features of the natural environment of a region and the type of land use and/or the type of community that is established in that region (e.g., ports on lakes or major rivers; farming on flat land with fertile soil; resource towns in areas with ore, trees, or other natural resources)</p>



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Activity Name	Theme	Description	Learning Expectations
<p><b>WATER CYCLE MADNESS CONT'D</b></p>		<p>model shows the processes of evaporation, transpiration, condensation, precipitation, and runoff all with the help of a miniature sun (lamp) and other materials. Learn how the water cycle impacts our daily lives.</p>	<p><b>B1.2</b> describe some major connections between features of the natural environment and the type of employment that is available in a region, with reference to two or more municipal regions in Ontario</p> <p><b>B2.1</b> formulate questions to guide investigations into some of the short- and/or long-term effects on the environment of different types of land and/or resource use in two or more municipal regions of Ontario (e.g., the impact of mining, forestry, agriculture, suburban land development) and measures taken to reduce the negative impact of that use</p> <p><b>B2.5</b> evaluate evidence and draw conclusions about some of the short- and long-term effects on the environment of different types of land use in municipal regions of Ontario and about key measures to reduce the negative impact of that use</p> <p><b>B3.5</b> describe major types of land use (e.g., for agriculture, industry, commerce, housing, recreation, transportation, conservation) and how they address human needs and wants (e.g., agricultural lands)</p> <p><u>Grade 3 Sci and Tech Forces and Motion</u></p> <p><b>C1.1</b> assess the effects of the action of forces from natural phenomena on natural and built environments, and identify ways in which human activities can reduce or enhance these effects</p> <p><u>Grade 3 Sci and Tech Soils in The Environment</u></p> <p><b>E1.1</b> assess the importance of soils for society and the environment</p> <p><b>E1.2</b> assess the impact of human activity on soils, and describe ways in which humans can improve the quality of soils and/or lessen or prevent harmful effects on soils</p> <p><b>E2.2</b> identify different substances that are commonly added to, or absorbed by, the soil, and describe their effects on soil health</p> <p><b>E2.4</b> explain the process of erosion, including its causes and its impact on soils</p> <p><u>Grade 4 Social Studies Heritage and Identity: Early Societies To 1500 CE</u></p> <p><b>A3.4</b> describe significant physical features and natural processes and events in a few early societies, including at least one First Nation and one Inuit society</p> <p><b>A3.5</b> describe the importance of the environment for a few early societies, including at least one First Nation and one Inuit society, with a particular focus on how the local environment affected the ways in which people met their physical needs (e.g., food, housing, clothing)</p>





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Activity Name	Theme	Description	Learning Expectations
<p><b>WATER - GO - ROUND CONT'D</b></p>		<p>wastewater treatment and biosolids disposal/use. This activity ties in well with a number of other activities at the festival.</p>	<p>environment), and describe some key similarities and differences in environmental practices between these societies and present-day Canada</p> <p><b>A2.1</b> formulate questions to guide investigations into ways of life and relationships with the environment in a few early societies, including at least one First Nation and one Inuit society, with an emphasis on aspects of the interrelationship between the environment and life in those societies (e.g., connections between the local environment and settlement, art, medicine, religion, spirituality, types of work; the impact on the environment of agriculture or the development of towns, cities, settlements, communities, and/or villages)</p> <p><b>A3.4</b> describe significant physical features and natural processes and events in a few early societies, including at least one First Nation and one Inuit society</p> <p><b>A3.5</b> describe the importance of the environment for a few early societies, including at least one First Nation and one Inuit society, with a particular focus on how the local environment affected the ways in which people met their physical needs (e.g., food, housing, clothing)</p> <p><u>Grade 4 Social Studies People and Environments: Political and Physical Regions of Canada</u></p> <p><b>B1.1</b> analyze some of the general ways in which the natural environment of regions in Canada has affected the development of industry</p> <p><b>B1.2</b> assess aspects of the environmental impact of different industries in two or more physical and/or political regions of Canada</p> <p><b>B2.5</b> evaluate evidence and draw conclusions about issues and challenges associated with balancing human needs/wants and activities with environmental stewardship in Canada</p> <p><b>B3.1</b> identify various physical regions in Canada (e.g., landform, vegetation, and climatic regions), and describe their location and some of the major ways in which they are distinct from and similar to each other</p> <p><b>B3.2</b> identify some of the main human activities, including industrial development and recreational activities, in various physical regions of Canada</p> <p><u>Grade 4 Sci and Tech – Light and Sound</u></p> <p><b>C2.1</b> identify a variety of natural and artificial light sources</p> <p><b>C2.3</b> describe properties of light, including that light travels in a straight path and that light can be absorbed, reflected, and refracted</p>



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Activity Name	Theme	Description	Learning Expectations
			<p><b>C2.6</b> describe how different objects and materials interact with light and sound energy</p> <p><u>Grade 4 Sci and Tech Machines and Their Mechanisms</u>  <b>D1.1</b> assess the impacts of machines and their mechanisms on the daily lives of people in various communities  <b>D1.2</b> assess and compare the environmental impacts of using different machines designed for similar purposes  <b>D2.1</b> identify machines that are used in daily life, and describe their purposes</p> <p><u>Grade 5 Sci and Tech Human Health and Body Systems</u>  <b>B1.1</b> assess effects of a variety of social and environmental factors on human health, and describe ways in which individuals can reduce the harmful effects of these factors and take advantage of those that are beneficial  <b>B1.2</b> evaluate beneficial and harmful effects of various technologies on human health and body systems, while taking different perspectives into consideration  <b>B2.4</b> identify various diseases and medical disorders in humans and the organs and/or body system or systems that they affect</p> <p><u>Grade 5 Sci and Tech Properties of And Changes in Matter</u>  <b>C1.1</b> assess the impacts on society and the environment of various processes used in the manufacture of common products  <b>C1.2</b> assess how the use of specific materials in the manufacture of common products affects the environment, and identify actions that society and individuals can take to mitigate negative impacts</p> <p><u>Grade 5 Sci and Tech Conservation of Energy and Resources</u>  <b>E1.1</b> analyze long-term impacts of human uses of energy and natural resources, on society and the environment, including climate change, and suggest ways to mitigate these impacts  <b>E1.2</b> evaluate effects of various technologies on energy consumption, and describe ways in which individuals can use technology to reduce energy consumption</p>
<b>WATER MAIN BREAK!</b>	Water Science and Technology	Students will have the opportunity to see how groundwater is pumped from the	<p><u>Gd 3 Social Studies Heritage and Identity: Communities in Canada, 1780–1850</u>  <b>A1.1</b> describe some of the similarities and differences in various aspects of everyday life (e.g., housing, clothing, food, religious/spiritual practices, work, recreation, the role of children) of selected groups living in Canada between 1780 and 1850 (e.g.,</p>



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Activity Name	Theme	Description	Learning Expectations
<b>WATER MAIN BREAK! CONT'D</b>		<p>aquifer to a reservoir, treated (chlorinated) and piped through a distribution system to be delivered to homes and businesses in the community. This will emulate the systems currently in use in many communities that have municipal water systems in place.</p>	<p>First Nations, Métis, French, British, Black people; men and women; slaves, indentured servants, habitants, seigneurs, farmers; people from different classes)</p> <p><b>A3.3</b> identify some of the main factors that helped shape the development of settlements in Canada during this period (e.g., the establishment of trading posts based on trade routes and the knowledge of First Nations peoples; navigable lakes and rivers for trade and transportation; climate; proximity to natural resources; the origins of settlers), and describe how the physical features of the land (e.g., topography, proximity to water, fertility of the soil) and the availability of goods and services (e.g., mills, churches, roads) can facilitate settlement and enhance community life</p> <p><u>Gd 3 Social Studies People and Environments: Living and Working in Ontario</u></p> <p><b>B1.1</b> describe some major connections between features of the natural environment of a region and the type of land use and/or the type of community that is established in that region (e.g., ports on lakes or major rivers; farming on flat land with fertile soil; resource towns in areas with ore, trees, or other natural resources)</p> <p><b>B1.2</b> describe some major connections between features of the natural environment and the type of employment that is available in a region, with reference to two or more municipal regions in Ontario</p> <p><b>B2.1</b> formulate questions to guide investigations into some of the short- and/or long-term effects on the environment of different types of land and/or resource use in two or more municipal regions of Ontario (e.g., the impact of mining, forestry, agriculture, suburban land development) and measures taken to reduce the negative impact of that use</p> <p><u>Grade 3 Sci and Tech STEM Skills and Connections</u></p> <p><b>A3.1</b> describe practical applications of science and technology concepts in their home and community, and how these applications address real-world problems</p> <p><b>A3.2</b> investigate how science and technology can be used with other subject areas to address real-world problems</p> <p><u>Grade 3 Sci and Tech Forces and Motion</u></p> <p><b>C1.1</b> assess the effects of the action of forces from natural phenomena on natural and built environments, and identify ways in which human activities can reduce or enhance these effects</p> <p><b>C1.2</b> assess harmful effects of forces that may result from various human activities, and describe how health and safety devices can minimize these effects</p>



## Grey Bruce Children's Water Festival Activity Descriptions and Learning Outcomes

Activity Name	Theme	Description	Learning Expectations
<p><b>WATER MAIN BREAK! CONT'D</b></p>			<p><b>C2.2</b> describe different ways a force can be exerted on an object  <b>C2.3</b> describe how different forces applied to an object, including forces of varying magnitude, can cause the object to start, stop, or change its direction, speed, or shape  <b>C2.4</b> identify ways in which forces are used in their daily lives</p> <p><u>Grade 3 Sci and Tech Strong and Stable Structures</u>  <b>D1.1</b> assess effects on society and the environment of strong and stable structures  <b>D1.2</b> assess the environmental impact of structures built by various animals, including structures built by humans  <b>D2.1</b> describe a structure as a supporting framework that holds a load and has a definite size, shape, and function, and identify structures in the natural environment and in the built environment  <b>D2.2</b> demonstrate an understanding of the relationship between form and function for various structures  <b>D2.3</b> identify the strength of a structure as its ability to support a load and describe ways to increase the strength of structures, including ways to increase the strength of different materials used to build them  <b>D2.4</b> describe the stability of a structure as its ability to keep its shape, maintain balance, float, and/or stay fixed in one spot when a force is applied to the structure, and describe ways to improve a structure's stability  <b>D2.5</b> identify properties of materials that need to be considered when building structures  <b>D2.6</b> describe ways in which different forces can affect the shape, balance, or position of structures  <b>D2.7</b> explain the role of struts and ties in structures under load</p> <p><u>Grade 4 Social Studies Heritage and Identity: Early Societies To 1500 CE</u>  <b>A1.4</b> compare a few early societies, including at least one First Nation and one Inuit society, in terms of their relationship with the environment (e.g., with reference to seasonal rhythms, use of land and resources, differences between urban and rural communities, religious and spiritual practices/ beliefs with respect to the environment), and describe some key similarities and differences in environmental practices between these societies and present-day Canada  <b>A2.1</b> formulate questions to guide investigations into ways of life and relationships with the environment in a few early societies, including at least one First Nation and one Inuit society, with an emphasis on aspects of the interrelationship between the</p>



## Grey Bruce Children's Water Festival Activity Descriptions and Learning Outcomes

Activity Name	Theme	Description	Learning Expectations
<b>WATER MAIN BREAK! BREAK! CONT'D</b>			<p>environment and life in those societies (e.g., connections between the local environment and settlement, art, medicine, religion, spirituality, types of work; the impact on the environment of agriculture or the development of towns, cities, settlements, communities, and/or villages)</p> <p><b>A3.4</b> describe significant physical features and natural processes and events in a few early societies, including at least one First Nation and one Inuit society</p> <p><b>A3.5</b> describe the importance of the environment for a few early societies, including at least one First Nation and one Inuit society, with a particular focus on how the local environment affected the ways in which people met their physical needs (e.g., food, housing, clothing)</p> <p><u>Grade 4 Social Studies People and Environments: Political and Physical Regions of Canada</u></p> <p><b>B1.1</b> analyze some of the general ways in which the natural environment of regions in Canada has affected the development of industry</p> <p><b>B3.1</b> identify various physical regions in Canada (e.g., landform, vegetation, and climatic regions), and describe their location and some of the major ways in which they are distinct from and similar to each other</p> <p><b>B3.2</b> identify some of the main human activities, including industrial development and recreational activities, in various physical regions of Canada</p> <p><u>Grade 5 Sci and Tech Conservation of Energy and Resources</u></p> <p><b>E1.1</b> analyze long-term impacts of human uses of energy and natural resources, on society and the environment, including climate change, and suggest ways to mitigate these impacts</p> <p><b>E1.2</b> evaluate effects of various technologies on energy consumption, and describe ways in which individuals can use technology to reduce energy consumption</p>
<b>WATER VITAL TO HEALTH</b>	Water Science and Technology	How is water used in our body? Students will engage in an interactive activity to discover the necessity of water to our body's organs and life systems.	<p><u>Grade 4 Sci and Tech Life Systems - Habitats and Communities</u></p> <p><b>B1.1</b> assess positive and negative impacts of human activities on habitats and communities, while taking different perspectives into account</p> <p><b>B2.1</b> describe habitats as areas that provide organisms, including plants and animals, with the necessities of life, and identify ways in which a local habitat provides these necessities</p> <p><u>Grade 5 Sci and Tech Human Health and Body Systems</u></p>



## Grey Bruce Children's Water Festival Activity Descriptions and Learning Outcomes

Activity Name	Theme	Description	Learning Expectations
<p><b>WATER VITAL TO HEALTH CONT'D</b></p>			<p><b>B1.1</b> assess effects of a variety of social and environmental factors on human health, and describe ways in which individuals can reduce the harmful effects of these factors and take advantage of those that are beneficial</p> <p><b>B1.2</b> evaluate beneficial and harmful effects of various technologies on human health and body systems, while taking different perspectives into consideration</p> <p><b>B1.3</b> explain how food literacy can support decisions that affect physical and mental health</p> <p><b>B2.1</b> identify systems of the human body, and describe their basic function</p> <p><b>B2.2</b> describe the basic structure and function of vital organs in various systems in the human body</p> <p><b>B2.3</b> describe interrelationships between human body systems</p> <p><b>B2.4</b> identify various diseases and medical disorders in humans and the organs and/or body system or systems that they affect</p>
<p><b>WELL DRILL IT</b></p>	<p>Water Protection</p>	<p>Students discover the importance of the water table as it exists underground, investigating how we access the water from aquifers. How do we get the water out of the ground once we've located an aquifer? Students "drill" their own wells, pump out water in models as well as use a hand pump to discover the work involved in getting water from underground. A model of a modern drilled well helps</p>	<p><u>Gd 3 Social Studies Heritage and Identity: Communities in Canada, 1780–1850</u></p> <p><b>A1.1</b> describe some of the similarities and differences in various aspects of everyday life (e.g., housing, clothing, food, religious/spiritual practices, work, recreation, the role of children) of selected groups living in Canada between 1780 and 1850 (e.g., First Nations, Métis, French, British, Black people; men and women; slaves, indentured servants, habitants, seigneurs, farmers; people from different classes)</p> <p><b>A3.3</b> identify some of the main factors that helped shape the development of settlements in Canada during this period (e.g., the establishment of trading posts based on trade routes and the knowledge of First Nations peoples; navigable lakes and rivers for trade and transportation; climate; proximity to natural resources; the origins of settlers), and describe how the physical features of the land (e.g., topography, proximity to water, fertility of the soil) and the availability of goods and services (e.g., mills, churches, roads) can facilitate settlement and enhance community life</p> <p><u>Gd 3 Social Studies People and Environments: Living and Working in Ontario</u></p> <p><b>B1.1</b> describe some major connections between features of the natural environment of a region and the type of land use and/or the type of community that is established in that region (e.g., ports on lakes or major rivers; farming on flat land with fertile soil; resource towns in areas with ore, trees, or other natural resources)</p> <p><b>B2.1</b> formulate questions to guide investigations into some of the short- and/or long-term effects on the environment of different types of land and/or resource use in two or more municipal regions of Ontario (e.g., the impact of mining, forestry, agriculture,</p>



## Grey Bruce Children's Water Festival Activity Descriptions and Learning Outcomes

Activity Name	Theme	Description	Learning Expectations
<p><b>WELL DRILL IT CONT'D</b></p>		<p>students to visualize the layers of different materials underfoot.</p>	<p>suburban land development) and measures taken to reduce the negative impact of that use  <b>B2.5</b> evaluate evidence and draw conclusions about some of the short- and long-term effects on the environment of different types of land use in municipal regions of Ontario and about key measures to reduce the negative impact of that use</p> <p><u>Grade 3 Sci and Tech STEM Skills and Connections</u>  <b>A3.1</b> describe practical applications of science and technology concepts in their home and community, and how these applications address real-world problems  <b>A3.2</b> investigate how science and technology can be used with other subject areas to address real-world problems</p> <p><u>Grade 3 Sci and Tech Forces and Motion</u>  <b>C1.1</b> assess the effects of the action of forces from natural phenomena on natural and built environments, and identify ways in which human activities can reduce or enhance these effects  <b>C1.2</b> assess harmful effects of forces that may result from various human activities, and describe how health and safety devices can minimize these effects</p> <p><u>Grade 3 Sci and Tech Soils in The Environment</u>  <b>E1.1</b> assess the importance of soils for society and the environment  <b>E1.2</b> assess the impact of human activity on soils, and describe ways in which humans can improve the quality of soils and/or lessen or prevent harmful effects on soils  <b>E2.2</b> identify different substances that are commonly added to, or absorbed by, the soil, and describe their effects on soil health</p> <p><u>Grade 3 Mathematics Measurement</u>  <b>E2.2</b> explain the relationships between millimetres, centimetres, metres, and kilometres as metric units of length, and use benchmarks for these units to estimate lengths  <b>E2.3</b> use non-standard units appropriately to estimate, measure, and compare capacity, and explain the effect that overfilling or underfilling, and gaps between units, have on accuracy</p> <p><u>Grade 4 Social Studies Heritage and Identity: Early Societies To 1500 CE</u></p>



## Grey Bruce Children's Water Festival Activity Descriptions and Learning Outcomes

Activity Name	Theme	Description	Learning Expectations
<p><b>WELL DRILL IT CONT'D</b></p>			<p><b>A1.4</b> compare a few early societies, including at least one First Nation and one Inuit society, in terms of their relationship with the environment (e.g., with reference to seasonal rhythms, use of land and resources, differences between urban and rural communities, religious and spiritual practices/ beliefs with respect to the environment), and describe some key similarities and differences in environmental practices between these societies and present-day Canada</p> <p><b>A2.5</b> evaluate evidence and draw conclusions about ways of life and relationships with the environment in a few early societies, including at least one First Nation and one Inuit society, with an emphasis on aspects of the interrelationship between the environment and life in those societies</p> <p><b>A3.3</b> describe significant aspects of daily life in a few early societies, including at least one First Nation and one Inuit society</p> <p><b>A3.4</b> describe significant physical features and natural processes and events in a few early societies, including at least one First Nation and one Inuit society</p> <p><b>A3.5</b> describe the importance of the environment for a few early societies, including at least one First Nation and one Inuit society, with a particular focus on how the local environment affected the ways in which people met their <b>physical needs (e.g., food, housing, clothing)</b></p> <p><b>A3.6</b> identify and describe some of the major scientific and technological developments in the ancient and medieval world, including some from at least one First Nation and one Inuit society (e.g., calendars; the printing press; developments in agriculture, architecture, medicine, transportation, weaponry, navigation)</p> <p><u>Grade 4 Social Studies People and Environments: Political and Physical Regions of Canada</u></p> <p><b>B1.1</b> analyze some of the general ways in which the natural environment of regions in Canada has affected the development of industry</p> <p><b>B2.2</b> gather and organize information and data from various sources to investigate issues and challenges associated with balancing human needs/wants and activities with environmental stewardship in one or more of the political and/or physical regions of Canada</p> <p><b>B2.5</b> evaluate evidence and draw conclusions about issues and challenges associated with balancing human needs/wants and activities with environmental stewardship in Canada</p> <p><u>Grade 4 Sci and Tech STEM Investigation and Communication Skills</u></p>



## Grey Bruce Children's Water Festival Activity Descriptions and Learning Outcomes

Activity Name	Theme	Description	Learning Expectations
<p><b>WELL DRILL IT CONT'D</b></p>			<p><b>A3.1</b> describe practical applications of science and technology concepts in various occupations, including skilled trades, and how these applications address real-world problems  <b>A3.2</b> investigate how science and technology can be used with other subject areas to address real-world problems  <b>A3.3</b> analyze contributions to science and technology from various communities</p> <p><u>Grade 4 Sci and Tech Life Systems - Habitats and Communities</u>  <b>B1.1</b> assess positive and negative impacts of human activities on habitats and communities, while taking different perspectives into account  <b>B2.1</b> describe habitats as areas that provide organisms, including plants and animals, with the necessities of life, and identify ways in which a local habitat provides these necessities</p> <p><u>Grade 4 Sci and Tech Machines and Their Mechanisms</u>  <b>D1.1</b> assess the impacts of machines and their mechanisms on the daily lives of people in various communities  <b>D1.2</b> assess and compare the environmental impacts of using different machines designed for similar purposes  <b>D2.1</b> identify machines that are used in daily life, and describe their purposes</p> <p><u>Grade 4 Sci and Tech Rocks, Minerals, And Geological Processes</u>  <b>E1.1</b> analyze ways in which geological processes impact society and the environment  <b>E1.2</b> assess social and environmental impacts of extracting and refining rocks and minerals and of manufacturing, recycling, and disposing of products derived from rocks and minerals, while taking various perspectives into account  <b>E2.2</b> describe the physical properties of igneous, sedimentary, and metamorphic rocks  <b>E2.6</b> demonstrate an understanding of First Nations, Métis, and Inuit geological knowledges that are used in the selection of different rocks and minerals for specific purposes</p>
<p><b>WE USE THAT MUCH?</b></p>	<p>Water Conservation and Attitude</p>	<p>Students use an interactive activity to discover how much water is used in everyday</p>	<p><u>Grade 3 Mathematics Data</u>  <b>D1.</b> Data Literacy manage, analyze, and use data to make convincing arguments and informed decisions, in various contexts drawn from real life  <b>D2.</b> Probability - describe the likelihood that events will happen, and use that information to make predictions</p>



## Grey Bruce Children's Water Festival Activity Descriptions and Learning Outcomes

Activity Name	Theme	Description	Learning Expectations
<p><b>WE USE THAT MUCH? CONT'D</b></p>		<p>activities in relation to a known reference (2L pop bottles). Water conservation from various sources can also be examined.</p>	<p><u>Grade 3 Mathematics Measurement</u>  <b>E2.3</b> use non-standard units appropriately to estimate, measure, and compare capacity, and explain the effect that overfilling or underfilling, and gaps between units, have on accuracy</p> <p><u>Grade 4 Mathematics - Numbers</u>  <b>B1.1</b> read, represent, compose, and decompose whole numbers up to and including 10 000, using appropriate tools and strategies, and describe various ways they are used in everyday life  <b>B1.2</b> compare and order whole numbers up to and including 10 000, in various contexts</p> <p><u>Grade 4 Mathematics - Data Literacy</u>  <b>D1.1</b> describe the difference between qualitative and quantitative data, and describe situations where each would be used  <b>D1.6</b> analyze different sets of data presented in various ways, including in stem-and-leaf plots and multiple-bar graphs, by asking and answering questions about the data and drawing conclusions, then make convincing arguments and informed decisions</p> <p><u>Grade 4 Mathematics Measurement</u>  <b>E2.1</b> explain the relationships between grams and kilograms as metric units of mass, and between litres and millilitres as metric units of capacity, and use benchmarks for these units to estimate mass and capacity  <b>E2.2</b> use metric prefixes to describe the relative size of different metric units, and choose appropriate units and tools to measure length, mass, and capacity</p> <p><u>Grade 4 Sci and Tech Life Systems - Habitats and Communities</u>  <b>B1.1</b> assess positive and negative impacts of human activities on habitats and communities, while taking different perspectives into account  <b>B2.1</b> describe habitats as areas that provide organisms, including plants and animals, with the necessities of life, and identify ways in which a local habitat provides these necessities</p> <p><u>Grade 5 Sci and Tech Conservation of Energy and Resources</u></p>





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Activity Name	Theme	Description	Learning Expectations
<p><b>WHAT IS A WATERSHED? CONT'D</b></p>			<p><b>A3.1</b> describe practical applications of science and technology concepts in their home and community, and how these applications address real-world problems  <b>A3.2</b> investigate how science and technology can be used with other subject areas to address real-world problems            Grade 3 Sci and Tech Forces and Motion  <b>C1.1</b> assess the effects of the action of forces from natural phenomena on natural and built environments, and identify ways in which human activities can reduce or enhance these effects  <b>C1.2</b> assess harmful effects of forces that may result from various human activities, and describe how health and safety devices can minimize these effects</p> <p><u>Grade 3 Mathematics Measurement</u>  <b>E2.3</b> use non-standard units appropriately to estimate, measure, and compare capacity, and explain the effect that overfilling or underfilling, and gaps between units, have on accuracy</p> <p><u>Grade 4 Social Studies Heritage and Identity: Early Societies To 1500 CE</u>  <b>A1.4</b> compare a few early societies, including at least one First Nation and one Inuit society, in terms of their relationship with the environment (e.g., with reference to seasonal rhythms, use of land and resources, differences between urban and rural communities, religious and spiritual practices/ beliefs with respect to the environment), and describe some key similarities and differences in environmental practices between these societies and present-day Canada  <b>A2.5</b> evaluate evidence and draw conclusions about ways of life and relationships with the environment in a few early societies, including at least one First Nation and one Inuit society, with an emphasis on aspects of the interrelationship between the environment and life in those societies  <b>A3.4</b> describe significant physical features and natural processes and events in a few early societies, including at least one First Nation and one Inuit society  <b>A3.5</b> describe the importance of the environment for a few early societies, including at least one First Nation and one Inuit society, with a particular focus on how the local environment affected the ways in which people met their <b>physical needs (e.g., food, housing, clothing)</b></p> <p><u>Grade 4 Social Studies People and Environments: Political and Physical Regions of Canada</u></p>



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Activity Name	Theme	Description	Learning Expectations
<p><b>WHAT IS A WATERSHED? CONT'D</b></p>			<p><b>B2.2</b> gather and organize information and data from various sources to investigate issues and challenges associated with balancing human needs/wants and activities with environmental stewardship in one or more of the political and/or physical regions of Canada</p> <p><b>B2.5</b> evaluate evidence and draw conclusions about issues and challenges associated with balancing human needs/wants and activities with environmental stewardship in Canada</p> <p><b>B3.1</b> identify various physical regions in Canada (e.g., landform, vegetation, and climatic regions), and describe their location and some of the major ways in which they are distinct from and similar to each other</p> <p><b>B3.2</b> identify some of the main human activities, including industrial development and recreational activities, in various physical regions of Canada</p> <p><u>Grade 4 Sci and Tech STEM Investigation and Communication Skills</u></p> <p><b>A3.1</b> describe practical applications of science and technology concepts in various occupations, including skilled trades, and how these applications address real-world problems</p> <p><b>A3.2</b> investigate how science and technology can be used with other subject areas to address real-world problems</p> <p><u>Grade 4 Sci and Tech Life Systems - Habitats and Communities</u></p> <p><b>B1.1</b> assess positive and negative impacts of human activities on habitats and communities, while taking different perspectives into account</p> <p><b>B2.1</b> describe habitats as areas that provide organisms, including plants and animals, with the necessities of life, and identify ways in which a local habitat provides these necessities</p> <p><u>Grade 4 Sci and Tech Machines and Their Mechanisms</u></p> <p><b>D1.1</b> assess the impacts of machines and their mechanisms on the daily lives of people in various communities</p> <p><b>D1.2</b> assess and compare the environmental impacts of using different machines designed for similar purposes</p> <p><b>D2.1</b> identify machines that are used in daily life, and describe their purposes</p> <p><u>Grade 4 Sci and Tech Rocks, Minerals, And Geological Processes</u></p> <p><b>E1.1</b> analyze ways in which geological processes impact society and the environment</p>





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Activity Name	Theme	Description	Learning Expectations
<p><b>WHAT'S UP DOC? CONT'D</b></p>			<p>suburban land development) and measures taken to reduce the negative impact of that use</p> <p><b>B2.5</b> evaluate evidence and draw conclusions about some of the short- and long-term effects on the environment of different types of land use in municipal regions of Ontario and about key measures to reduce the negative impact of that use</p> <p><b>B3.5</b> describe major types of land use (e.g., for agriculture, industry, commerce, housing, recreation, transportation, conservation) and how they address human needs and wants</p> <p><u>Grade 3 Sci and Tech STEM Skills and Connections</u></p> <p><b>A3.1</b> describe practical applications of science and technology concepts in their home and community, and how these applications address real-world problems</p> <p><b>A3.2</b> investigate how science and technology can be used with other subject areas to address real-world problems</p> <p><u>Grade 3 Sci and Tech Forces and Motion</u></p> <p><b>C1.1</b> assess the effects of the action of forces from natural phenomena on natural and built environments, and identify ways in which human activities can reduce or enhance these effects</p> <p><b>C1.2</b> assess harmful effects of forces that may result from various human activities, and describe how health and safety devices can minimize these effects</p> <p><b>C2.4</b> identify ways in which forces are used in their daily lives</p> <p><u>Grade 3 Sci and Tech Soils in The Environment</u></p> <p><b>E1.1</b> assess the importance of soils for society and the environment</p> <p><b>E1.2</b> assess the impact of human activity on soils, and describe ways in which humans can improve the quality of soils and/or lessen or prevent harmful effects on soils</p> <p><u>Grade 3 Mathematics Data</u></p> <p><b>D1. Data Literacy</b> manage, analyze, and use data to make convincing arguments and informed decisions, in various contexts drawn from real life</p> <p><b>D2. Probability</b> describe the likelihood that events will happen, and use that information to make predictions</p> <p><u>Grade 4 Social Studies Heritage and Identity: Early Societies To 1500 CE</u></p> <p><b>A1.4</b> compare a few early societies, including at least one First Nation and one Inuit society, in terms of their relationship with the environment (e.g., with reference to</p>



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Activity Name	Theme	Description	Learning Expectations
<p><b>WHAT'S UP DOC? CONT'D</b></p>			<p>seasonal rhythms, use of land and resources, differences between urban and rural communities, religious and spiritual practices/ beliefs with respect to the environment), and describe some key similarities and differences in environmental practices between these societies and present-day Canada</p> <p><b>A2.1</b> formulate questions to guide investigations into ways of life and relationships with the environment in a few early societies, including at least one First Nation and one Inuit society, with an emphasis on aspects of the interrelationship between the environment and life in those societies (e.g., connections between the local environment and settlement, art, medicine, religion, spirituality, types of work; the impact on the environment of agriculture or the development of towns, cities, settlements, communities, and/or villages)</p> <p><b>A2.5</b> evaluate evidence and draw conclusions about ways of life and relationships with the environment in a few early societies, including at least one First Nation and one Inuit society, with an emphasis on aspects of the interrelationship between the environment and life in those societies</p> <p><b>A3.3</b> describe significant aspects of daily life in a few early societies, including at least one First Nation and one Inuit society</p> <p><b>A3.4</b> describe significant physical features and natural processes and events in a few early societies, including at least one First Nation and one Inuit society</p> <p><b>A3.5</b> describe the importance of the environment for a few early societies, including at least one First Nation and one Inuit society, with a particular focus on how the local environment affected the ways in which people met their physical needs (e.g., food, housing, clothing)</p> <p><u>Grade 4 Social Studies People and Environments: Political and Physical Regions of Canada</u></p> <p><b>B2.2</b> gather and organize information and data from various sources to investigate issues and challenges associated with balancing human needs/wants and activities with environmental stewardship in one or more of the political and/or physical regions of Canada</p> <p><b>B2.5</b> evaluate evidence and draw conclusions about issues and challenges associated with balancing human needs/wants and activities with environmental stewardship in Canada</p> <p><u>Grade 4 Sci and Tech STEM Investigation and Communication Skills</u></p> <p><b>A3.2</b> investigate how science and technology can be used with other subject areas to address real-world problems</p>



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<p><b>WHAT'S UP DOC? CONT'D</b></p>			<p><u>Grade 4 Sci and Tech Life Systems - Habitats and Communities</u>  <b>B1.1</b> assess positive and negative impacts of human activities on habitats and communities, while taking different perspectives into account  <b>B1.2</b> analyze the impact of the depletion or extinction of a species on its habitat and community, and describe possible actions to prevent such depletions or extinctions</p> <p><u>Grade 4 Language - Oral Communication</u>  <b>1.1</b> identify purposes for listening in a variety of situations, formal and informal, and set goals related to specific listening tasks  <b>1.2</b> demonstrate an understanding of appropriate listening behavior by adapting active listening strategies to suit a variety of situations, including work in groups  <b>1.3</b> identify a variety of listening comprehension strategies and use them appropriately before, during, and after listening in order to understand and clarify the meaning of oral texts  <b>1.4</b> demonstrate an understanding of the information and ideas in a variety of oral texts by summarizing important ideas and citing important details  <b>1.5</b> make inferences using stated and implied ideas in oral texts  <b>1.6</b> extend understanding of oral texts by connecting the ideas in them to their own knowledge, experience, and insights; to other texts, including print and visual texts; and to the world around them  <b>1.7</b> analyze oral texts and explain how specific elements in them contribute to meaning  <b>2.3</b> communicate in a clear, coherent manner, presenting ideas, opinions, and information in a readily understandable form  <b>2.4</b> use appropriate words and phrases from the full range of their vocabulary, including inclusive and non-discriminatory terms, and appropriate elements of style, to communicate their meaning accurately and engage the interest of their audience  <b>2.5</b> identify some vocal effects, including tone, pace, pitch, volume, and a range of sound effects, and use them appropriately and with sensitivity towards cultural differences to help communicate their meaning  <b>2.6</b> identify some non-verbal cues, including facial expression, gestures, and eye contact, and use them in oral communications, appropriately and with sensitivity towards cultural differences, to help convey their meaning</p> <p><u>Grade 5 Sci and Tech Human Health and Body Systems</u></p>





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Activity Name	Theme	Description	Learning Expectations
		are included for relating to the working model.	
<b>YOU'RE MOSTLY WATER</b>	Water Science and Technology	Students will discover how much of their body mass is made up of water. Using a teeter-totter, and water bottles, they will be able to calculate the amount of water in their bodies.	<p><u>Grade 4 Mathematics - Numbers</u>  <b>B1.1</b> read, represent, compose, and decompose whole numbers up to and including 10 000, using appropriate tools and strategies, and describe various ways they are used in everyday life  <b>B1.2</b> compare and order whole numbers up to and including 10 000, in various contexts  <b>B1.3</b> round whole numbers to the nearest ten, hundred, or thousand, in various contexts  <b>B1.7</b> read, represent, compare, and order decimal tenths, in various contexts  <b>B1.9</b> describe relationships and show equivalences among fractions and decimal tenths, in various contexts  <b>B2.1</b> use the properties of operations, and the relationships between addition, subtraction, multiplication, and division, to solve problems involving whole numbers, including those requiring more than one operation, and check calculations</p> <p><u>Grade 4 Mathematics - Measurement</u>  <b>E2.1</b> explain the relationships between grams and kilograms as metric units of mass, and between litres and millilitres as metric units of capacity, and use benchmarks for these units to estimate mass and capacity  <b>E2.2</b> use metric prefixes to describe the relative size of different metric units, and choose appropriate units and tools to measure length, mass, and capacity</p>