



## SECONDARY LEVEL

### British Columbia and Yukon Territory

		1. Respect & appreciate the ocean	2. Reduce plastic in my lunches	3. Reduce use of single use plastics	4. Pick up litter & try plogging	5. Use reusable water bottles	6. Repurpose a plastic item	7. Spread my knowledge
<b>GRADE 10</b>								
<b>Big Ideas</b>								
Science	Energy change is required as atoms rearrange in chemical processes						●	
Visual Arts: Art Studio	An artist's intention transforms materials into art							●
<b>Competencies</b>								
<b>Core:</b>	Communication	●	●	●	●	●	●	●
	Creative Thinking	●	●	●	●	●	●	●
	Critical Thinking	●	●	●	●	●	●	●
	Social Responsibility	●	●	●	●	●	●	●
<b>Curricular :</b>	Science	Questioning and predicting				●	●	
		Planning and conducting				●	●	
		Processing and analyzing information				●	●	
		Evaluating				●	●	



**PLASTICS EDUCATION KIT / CURRICULAR CONNECTIONS -  
SECONDARY LEVEL**



		Applying and innovating						●	●		
		Communicating						●	●	●	
<b>Content:</b>	Science	Local and global impacts of energy transformations from technologies.							●		
		Practical applications and implications of chemical processes			●				●		
		Simple and complex global food systems and how they affect food choices, including environmental, ethical, economic, and health impacts		●							
	Visual Arts: Art Studio	Role of artist and audience									●
		Influence of visual culture on self-perception and identity									●
English Language Arts: New Media	English language strategies and processes in new media	●	●	●	●	●	●	●	●	●	
<b>GRADE 11</b>											
<b>Big Ideas</b>											
Environmental Science	Human practices affect the sustainability of ecosystems		●	●	●	●	●	●	●	●	
	Humans can play a role in the stewardship and restoration of ecosystems		●	●	●	●	●	●	●	●	
Science for Citizens	Scientific understanding enables humans to respond and adapt to changes locally and globally				●	●					
Outdoor Education	Spending time outdoors allows us to develop an understanding of the natural environment and ourselves		●			●					



**PLASTICS EDUCATION KIT / CURRICULAR CONNECTIONS -  
SECONDARY LEVEL**



Earth Sciences	The distribution of water has a major influence on weather and climate						●		
Visual Arts: Art Studio	An artist's intention transforms materials into art								●
<b>Competencies</b>									
<b>Core:</b> *same as Gr. 10									
<b>Curricular:</b> *same as Gr. 10									
<b>Content:</b>	Environmental Science	Energy flow through ecosystems		●					
		Human actions and their impact on ecosystem integrity	●	●	●	●	●	●	●
		Resource stewardship	●	●	●	●	●	●	●
	Science for Citizens	Beneficial scientific innovations							●
		Human impact on Earth's system: natural resources and effects of climate change	●	●	●	●	●	●	●
		Actions and decisions affecting the local and global environment, including those of First Peoples	●	●	●	●	●	●	●
		Evidence-based decision making through science		●					●
		Personal and public health practices		●					
	Earth Science	Influences of large bodies of water on local and global climates						●	
		The hydrologic cycle						●	
		Properties of the ocean and the ocean floor			●	●	●		
		Water as a unique resource	●						
		Evidence of climate change						●	
		Effects of climate change on water sources						●	
		English language strategies and processes in new media	●	●	●	●	●	●	●



**PLASTICS EDUCATION KIT / CURRICULAR CONNECTIONS -  
SECONDARY LEVEL**



	English Language Arts: New Media	New media functions; advocacy, propaganda	●							●
	Visual Arts: Art Studio	Role of artist and audience								●
		Influence of visual culture on self-perception and identity								●

**ALBERTA**

		1. Respect &	2. Reduce plastic in	3. Reduce use of single use plastics	4. Pick up litter & try plogging	5. Use reusable water bottles	6. Repurpose a plastic item	7. Spread my knowledge
<b>Grade 10</b>								
<b>Science 10</b>								
Attitudes - Stewardship	Develop responsibility in the application of science and technology in relation to society and the natural environment			●	●	●	●	●
Skills	Initiating and Planning; Performing and Recording; Analyzing and Interpreting; Communication and Teamwork					●	●	
Unit C: Cycling of Matter in Living Systems	Demonstrate sensitivity and responsibility in pursuing a balance between the needs of humans and a sustainable environment		●	●	●	●	●	●



**PLASTICS EDUCATION KIT / CURRICULAR CONNECTIONS -  
SECONDARY LEVEL**



Unit D: Energy Flow in Global Systems	Investigate and interpret the role of environmental factors on global energy transfer and climate change						●		
<b>GRADE 11</b>									
<b>Biology 20</b>									
Attitude and Skills	* as for Science 10			●	●	●	●	●	
<b>Science 20</b>									
Attitude and Skills	* as for Science 10			●	●	●	●	●	
Unit D: Changes in Living Systems	Analyze and investigate the cycling of matter and the flow of energy through the biosphere and ecosystems as well as the interrelationship of society and the environment.						●		
<b>Knowledge and Employability Science 10-4, 20-4</b>									
Attitude: Stewardship	*as for Science 10			●	●	●	●	●	
<b>Art 20</b>									
Impact of Images	Acquire a repertoire of visual skills useful for the comprehension of different art forms.								●



## SASKATCHEWAN

		1. Respect & appreciate the ocean	2. Reduce plastic in my lunches	3. Reduce use of single use plastics	4. Pick up litter & try plogging	5. Use reusable water bottles	6. Repurpose a plastic item	7. Spread my knowledge
<b>Grade 10</b>								
<b>Science 10</b>								
Cross-Curricular Competencies	Developing Thinking	●	●	●	●	●	●	●
	Developing Identity and Interdependence	●	●	●	●	●	●	●
	Developing Literacies	●	●	●	●	●	●	●
	Developing Social Responsibility	●	●	●	●	●	●	●
Climate and Ecosystem Dynamics	Assess the implications of human actions on the local and global climate and the sustainability of ecosystems			●		●		
	Investigate factors that influence Earth's climate system, including the role of the natural greenhouse effect.					●		
	Examine biodiversity through the analysis of interactions among populations within communities.	●	●	●	●	●		
<b>GRADE 11</b>								
<b>Environmental Science 20</b>								
Cross Curricular Competences	*as for Science 10	●	●	●	●	●	●	●
Human Population and Pollution	Investigate technologies and processes used for mitigating and managing resource use, waste generation and pollution associated with a growing human population.			●	●		●	●



**PLASTICS EDUCATION KIT / CURRICULAR CONNECTIONS -  
SECONDARY LEVEL**



Student-Directed Study	Create and carry out a plan to explore one or more topics of personal interest relevant to Environmental Science 20 in depth	●	●	●	●	●	●	●	
<b>Biology 30</b>									
Cross Curricular Competences	*as for Science 10	●	●	●	●	●	●	●	
<b>Visual Art 10, 20, 30</b>									
Foundational Objective	Analyze forms of art from a variety of cultures and societies, historical and contemporary; interpret meanings within appropriate contexts; and relate their understanding to their own expressions and life experiences							●	







**ONTARIO**

		Lessons	1. Respect & appreciate the ocean	2. Reduce plastic in my lunches	3. Reduce use of single use plastics	4. Pick up litter & try plogging	5. Use reusable water bottles	6. Repurpose a plastic item	7. Spread my knowledge
<b>Grade 10</b>									
<b>Science Skills</b>									
	Initiating and planning						●	●	
	Performing and recording						●	●	
	Analysing and interpreting						●	●	
	Communicating						●	●	
<b>Science 10</b>									
Earth and Space Science	Investigate various natural and human factors that influence Earth's climate and climate change						●		
<b>GRADE 11</b>									
<b>Science Skills</b> **same as for Gr. 10									
<b>Biology 11 University Preparation</b>									
Diversity of Living Things	Analyse the effects of various human activities on the diversity of living things.		●			●			
<b>Environmental Science 11 University Preparation</b>									
Scientific Solutions to Contemporary Environmental Challenges	Demonstrate an understanding of major contemporary environmental challenges and how we acquire knowledge about them	●	●	●	●	●	●	●	●
Human Health and the Environment	Demonstrate an understanding of various environmental factors that can affect human	●	●	●	●	●		●	●



**PLASTICS EDUCATION KIT / CURRICULAR CONNECTIONS -  
SECONDARY LEVEL**



	health, and explain how the impact of these factors can be reduced.							
Reducing and Managing Waste	Analyse economic, political, and environmental considerations affecting waste management strategies	●	●	●	●		●	
<b>Environmental Science 11 Workplace Preparation</b>								
Human Impact on the Environment	Analyse selected current environmental problems in terms of the role human activities have played in creating or perpetuating them, and propose possible solutions to one such problem	●	●	●	●	●	●	●
	Demonstrate an understanding of some of the ways in which human activities affect the environment and how the impact of those activities is measured and monitored	●	●	●	●	●	●	●
<b>Visual Arts 11 University Preparation</b>								
Reflecting, Responding, and Analysing	Art, Society, and Values: demonstrate an understanding of how art works reflect the society in which they were created, and of how they can affect both social and personal values.							●





**NEW BRUNSWICK**

		Lessons	1. Respect & appreciate the ocean	2. Reduce plastic in my lunches	3. Reduce use of single use plastics	4. Pick up litter & try plogging	5. Use reusable water bottles	6. Repurpose a plastic item	7. Spread my knowledge
<b>Grade 10</b>									
<b>Science 10</b>									
Attitude Outcomes	-Have a sense of personal and shared responsibility for maintaining a sustainable environment	●	●	●	●	●	●	●	●
	Project the personal, social, and environmental consequences of proposed action	●	●	●	●	●	●	●	●
	Want to take action for maintaining a sustainable environment	●	●	●	●	●	●	●	●
Skills Outcomes	-Initiating and Planning -Performing and Recording -Analysing and Interpretation -Communication and Teamwork					●	●		
Life Science: Sustainability of Ecosystems	Explain how a paradigm shift can change scientific world views in understanding sustainability explore and develop a concept of sustainability	●							●
<b>GRADE 11</b>									
<b>Biology 11</b>									
Attitude & Skills Outcomes	**same as for Gr. 10	●	●	●	●	●	●	●	●
Biodiversity	Explain how biodiversity of an ecosystem contributes to its sustainability		●		●				
<b>Introduction to Environmental Science 120</b>									



**PLASTICS EDUCATION KIT / CURRICULAR CONNECTIONS -  
SECONDARY LEVEL**



Ocean  
School

ocean wise



Sea Smart



STUDENTS ON ICE  
FOUNDATION - FONDATION



Ecology - Sustainable Development	Recognize that humans are just one part of a complex system of living things, with an inordinate impact on the biosphere, often accelerated by the use of technology	●	●	●	●	●	●	●
Ecology - Sustainable Ecosystems and Communities	Understand stewardship in relation to sustainability	●	●	●	●		●	●
Air and Water Pollution	Describe examples of the effect of air and water pollution on human health and society, and on the natural environment	●		●	●		●	●
<b>Visual Arts 110</b>								
Perceiving, Reflecting and Responding	Apply critical thinking and problem-solving strategies to reflect and respond to their own and others' expressive works							●



NOVA SCOTIA

		Lessons	1. Respect & appreciate the ocean	2. Reduce plastic in my lunches	3. Reduce use of single use plastics	4. Pick up litter & try plogging	5. Use reusable water bottles	6. Repurpose a plastic item	7. Spread my knowledge
<b>Grade 10</b>									
<b>Science 10</b>									
Attitude Outcomes	-Have a sense of personal and shared responsibility for maintaining a sustainable environment	●	●	●	●	●	●	●	●
	Project the personal, social, and environmental consequences of proposed action	●	●	●	●	●	●	●	●
	Want to take action for maintaining a sustainable environment	●	●	●	●	●	●	●	●
Skills Outcomes	-Initiating and Planning -Performing and Recording -Analysing and Interpretation -Communication and Teamwork					●	●		
Life Science: Sustainability of Ecosystems	Question and analyze how a paradigm shift in sustainability can change society's views	●							●
<b>Visual Arts 10</b>									
Perceiving, Reflecting and Responding	Apply critical thinking and problem-solving strategies to reflect and respond to their own and others' expressive works								●
<b>GRADE 11</b>									
<b>Visual Arts 11</b> **same as for Gr. 10									

**PLASTICS EDUCATION KIT / CURRICULAR CONNECTIONS -  
SECONDARY LEVEL**



Environment and  
Climate Change Canada

Environnement et  
Changement climatique Canada



Ocean  
School



ocean wise



Sea Smart



STUDENTS ON ICE  
FOUNDATION - FONDATION





PRINCE EDWARD ISLAND

		Lessons	1. Respect & appreciate the ocean	2. Reduce plastic in my lunches	3. Reduce use of single use plastics	4. Pick up litter & try plogging	5. Use reusable water bottles	6. Repurpose a plastic item	7. Spread my knowledge
<b>Science 431A</b>									
Ecosystems	Attitudes	Have a sense of personal and shared responsibility for maintaining a sustainable environment	●	●	●	●	●	●	●
		Want to take action for maintaining a sustainable environment	●	●	●	●	●	●	●
		Be aware of the direct and indirect consequences of their actions	●	●	●	●	●	●	●
	Knowledge	Analyze the impact of external factors on an ecosystem	●	●	●	●			●
<b>Biology 521A</b>									
Attitudes		**same as for Gr. 10	●	●	●	●	●	●	●
<b>Environmental Science 621A</b>									
Attitudes		**same as for Gr. 10	●	●	●	●	●	●	●
Ecological Principles		Demonstrate an understanding that humans can have a great impact on systems of living and nonliving things	●	●	●	●		●	
<b>Visual Arts 401A &amp; 501A</b>									





**PLASTICS EDUCATION KIT / CURRICULAR CONNECTIONS -  
SECONDARY LEVEL**



Perceiving, Reflecting and Responding	Apply critical thinking and problem-solving strategies to reflect and respond to their own and others' expressive works											●
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**NEWFOUNDLAND AND LABRADOR**

			1. Respect & appreciate the ocean	2. Reduce plastic in my lunches	3. Reduce use of single use plastics	4. Pick up litter & try plogging	5. Use reusable water bottles	6. Repurpose a plastic item	7. Spread my knowledge
<b>Biology 2201</b>									
Attitudes	Have a sense of personal and shared responsibility for maintaining a sustainable environment		●	●	●	●	●	●	●
	Want to take action for maintaining a sustainable environment		●	●	●	●	●	●	●
	Be aware of the direct and indirect consequences of their actions		●	●	●	●	●	●	●
<b>Science 1206</b>									
Sustainability of Ecosystems	Knowledge	analyze the impact of external factors on an ecosystem	●	●	●	●			●
	Attitudes	Have a sense of personal and shared responsibility for maintaining a sustainable environment	●	●	●	●	●	●	●
		Want to take action for maintaining a sustainable environment	●	●	●	●	●	●	●



**PLASTICS EDUCATION KIT / CURRICULAR CONNECTIONS -  
SECONDARY LEVEL**



	Be aware of the direct and indirect consequences of their actions	●	●	●	●	●	●	●
<b>Science 2200</b>								
Attitudes: Stewardship	**same as for Sc. 1206	●	●	●	●	●	●	●
Ecosystems	explain how a paradigm shift, with respect to environmental attitudes, can change scientific world views in understanding sustainability	●						●
	explain how biodiversity of an ecosystem contributes to its sustainability		●		●			
<b>Environmental Science 3205</b>								
Water Use and the Environment	Identify the importance of marine ecosystems to Newfoundland and Labrador	●	●	●	●	●	●	●
<b>Art 2200/3200</b>								
Perceiving, Reflecting and Responding	Apply critical thinking and problem-solving strategies to reflect and respond to their own and others' expressive works							●





**NUNAVUT**

	Lessons	1. Respect & appreciate the ocean	2. Reduce plastic in my lunches	3. Reduce use of single use plastics	4. Pick up litter & try plogging	5. Use reusable water bottles	6. Repurpose a plastic item	7. Spread my knowledge
<b>Grade 10</b>								
Science 10 **same as Alberta Curriculum								
<b>GRADE 11</b>								
Biology 20-30 **same as Alberta Curriculum								
Science 20 **same as Alberta Curriculum								
Experiential Science 20 **same as Northwest Territories Curriculum								
Knowledge and Employability Science 10-4, 20-4 **same as Alberta Curriculum								
Art 20 **same as Alberta Arts curriculum								