Program: Eco 360	Grade 3 - Alberta Science Curriculum Connections	

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Activity Name	Organizing Idea	Learning Outcome
Activity: All About Plastics	Matter	Students investigate and analyze how materials have the potential to be changed.
	Energy	Students investigate and explain how forces affect the movement of objects
Activity: Circular Economy and the UN's Sustainable Development Goals	Computer Science	Students investigate creativity and its relationship to computational thinking.
Activity: How Plastic Waste Harms the Environment	Living Systems	Students analyze and describe how plants and animals interact with each other and within environments.
	Scientific Methods	Students relate investigation to building knowledge.
Activity: Imagine a Waste-Free Economy	Matter	Students investigate and analyze how materials have the potential to be changed.
	Computer Science	Students investigate creativity and its relationship to computational thinking.
Activity: Our Plastic Consumption Footprint	Matter	Students investigate and analyze how materials have the potential to be changed.
	Computer Science	Students investigate creativity and its relationship to computational thinking.
Activity: Plastic Remake	Matter	Students investigate and analyze how materials have the potential to be changed.
	Computer Science	Students investigate creativity and its relationship to computational thinking.
Activity: Plastic in Our Oceans	Matter	Students investigate and analyze how materials have the potential to be changed.
Activity: Sorting Your Waste	Matter	Students investigate and analyze how materials have the potential to be changed.
	Scientific Methods	Students relate investigation to building knowledge.
Activity: Taking Inspiration from Nature	Living Systems	Students analyze and describe how plants and animals interact with each other and within environments.
Activity: Types of Plastics	Matter	Students investigate and analyze how materials have the potential to be changed.
Activity: Why Do We Have Plastic Waste in the Environment?	Scientific Methods	Students relate investigation to building knowledge.

Program: Eco 360

Grade 4 - Alberta Science Curriculum Connections

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Activity Name	Organizing Idea	Learning Outcome
Activity: All About Plastics	Matter	Students investigate the management of waste and dangerous materials and describe environmental impacts.
	Computer Science	Students examine and apply design processes to meet needs.
Activity: Circular Economy and the UN's Sustainable Development Goals	Matter	Students investigate the management of waste and dangerous materials and describe environmental impacts.
	Computer Science	Students examine and apply design processes to meet needs.
Activity: How Plastic Waste Harms the Environment	Matter	Students investigate the management of waste and dangerous materials and describe environmental impacts.
	Earth Systems	Students investigate the systems of Earth and reflect on how their interconnections sustain life.
	Scientific Methods	Students investigate evidence and reflect on its role in science.
Activity: Imagine a Waste-Free Economy	Matter	Students investigate the management of waste and dangerous materials and describe environmental impacts.
	Computer Science	Students examine and apply design processes to meet needs.
Activity: Our Plastic Consumption Footprint	Matter	Students investigate the management of waste and dangerous materials and describe environmental impacts.
	Computer Science	Students examine and apply design processes to meet needs.
Activity: Plastic Remake	Matter	Students investigate the management of waste and dangerous materials and describe environmental impacts.
	Computer Science	Students examine and apply design processes to meet needs.
Activity: Plastic in Our Oceans	Matter	Students investigate the management of waste and dangerous materials and describe environmental impacts.
	Earth Systems	Students investigate the systems of Earth and reflect on how their interconnections sustain life.
Activity: Sorting Your Waste	Matter	Students investigate the management of waste and dangerous materials and describe environmental impacts.
Activity: Taking Inspiration from Nature	Matter	Students investigate the management of waste and dangerous materials and describe environmental impacts.
	Earth Systems	Students investigate the systems of Earth and reflect on how their interconnections sustain life.
Activity: Types of Plastics	Matter	Students investigate the management of waste and dangerous materials and describe environmental impacts.

Activity: Why Do We Have Plastic Waste in the Environment?	Matter	Students investigate the management of waste and dangerous materials and describe environmental impacts.
	Scientific Methods	Students investigate evidence and reflect on its role in science.

Program: Eco 360	Grade 5 - Alberta Science Curriculum Connections	

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Activity Name	Organizing Idea	Learning Outcome
Activity: All About Plastics	Matter	Students investigate the particle model of matter in relation to the physical properties of solids, liquids, and gases.
	Computer Science	Students apply design processes when creating artifacts that can be used by a human or machine to address a need.
Activity: Circular Economy and the UN's Sustainable Development Goals	Computer Science	Students apply design processes when creating artifacts that can be used by a human or machine to address a need.
Activity: How Plastic Waste Harms the Environment	Computer Science	Students apply design processes when creating artifacts that can be used by a human or machine to address a need.
	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
Activity: Imagine a Waste-Free Economy	Computer Science	Students apply design processes when creating artifacts that can be used by a human or machine to address a need.
Activity: Our Plastic Consumption Footprint	Computer Science	Students apply design processes when creating artifacts that can be used by a human or machine to address a need.
Activity: Plastic Remake	Computer Science	Students apply design processes when creating artifacts that can be used by a human or machine to address a need.
	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
Activity: Plastic in Our Oceans	Earth Systems	Students analyze climate and connect it to weather conditions and agricultural practices.
Activity: Sorting Your Waste	Computer Science	Students apply design processes when creating artifacts that can be used by a human or machine to address a need.
Activity: Taking Inspiration from Nature	Living Systems	Students investigate the internal systems of organisms and explain how they support vital biological processes.
Activity: Types of Plastics	Matter	Students investigate the particle model of matter in relation to the physical properties of solids, liquids, and gases.
Activity: Why Do We Have Plastic Waste in the Environment?	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.

Program: Eco 360	Grade 6 - Alberta Science Curriculum Connections	

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Activity Name	Organizing Idea	Learning Outcome
Activity: All About Plastics	Matter	Students investigate how particles of matter behave when heated or cooled and analyze effects on solids, liquids, and gases.
Activity: Circular Economy and the UN's Sustainable Development Goals	Earth Systems	Students investigate climate, changes in climate, and the impact of climate change on Earth.
	Scientific Methods	Students investigate and describe the role of explanation in science.
Activity: How Plastic Waste Harms the Environment	Earth Systems	Students investigate climate, changes in climate, and the impact of climate change on Earth.
	Scientific Methods	Students investigate and describe the role of explanation in science.
Activity: Imagine a Waste-Free Economy	Earth Systems	Students investigate climate, changes in climate, and the impact of climate change on Earth.
Activity: Our Plastic Consumption Footprint	Earth Systems	Students investigate climate, changes in climate, and the impact of climate change on Earth.
Activity: Plastic Remake	Earth Systems	Students investigate climate, changes in climate, and the impact of climate change on Earth.
Activity: Plastic in Our Oceans	Earth Systems	Students investigate climate, changes in climate, and the impact of climate change on Earth.
	Living Systems	Students investigate the characteristics and components of and interactions within ecosystems.
Activity: Sorting Your Waste	Earth Systems	Students investigate climate, changes in climate, and the impact of climate change on Earth.
	Scientific Methods	Students investigate and describe the role of explanation in science.
Activity: Taking Inspiration from Nature	Living Systems	Students investigate the characteristics and components of and interactions within ecosystems.
Activity: Types of Plastics	Earth Systems	Students investigate climate, changes in climate, and the impact of climate change on Earth.
Activity: Why Do We Have Plastic Waste in the Environment?	Earth Systems	Students investigate climate, changes in climate, and the impact of climate change on Earth.
	Scientific Methods	Students investigate and describe the role of explanation in science.

Program: Eco 360	Grade 7 - Alberta Science Curriculum Connections	
Activity Name	**Organizing Idea**	**Learning Outcome**
Activity: All About Plastics	Interactions and Ecosystems	Investigate and describe relationships between humans and their environments, and identify related issues and scientific questions
		Describe the relationships among knowledge, decisions and actions in maintaining life-supporting environments
	Heat and Temperature	Illustrate and explain how human needs have led to technologies for obtaining and controlling thermal energy and to increased use of energy resources
		Describe the nature of thermal energy and its effects on different forms of matter, using informal observations, experimental evidence and models
	Structures and Forces	Investigate and analyze the properties of materials used in structures
Activity: Circular Economy and the UN's Sustainable Development Goals	Interactions and Ecosystems	Investigate and describe relationships between humans and their environments, and identify related issues and scientific questions
Activity: How Plastic Waste Harms the Environment	Interactions and Ecosystems	Investigate and describe relationships between humans and their environments, and identify related issues and scientific questions
		Monitor a local environment, and assess the impacts of environmental factors on the growth, health and reproduction of organisms in that environment
		Describe the relationships among knowledge, decisions and actions in maintaining life-supporting environments
	Plants for Food and Fibre	Identify and interpret relationships among human needs, technologies, environments, and the culture and use of living things as sources of food and fibre
	Planet Earth	Describe and demonstrate methods used in the scientific study of Earth and in observing and interpreting its component materials

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Activity: Imagine a Waste-Free Economy	Plants for Food and Fibre	Identify and interpret relationships among human needs, technologies, environments, and the culture and use of living things as sources of food and fibre
	Structures and Forces	Describe and interpret different types of structures encountered in everyday objects, buildings, plants and animals; and identify materials from which they are made
		Investigate and analyze the properties of materials used in structures
		Demonstrate and describe processes used in developing, evaluating and improving structures that will meet human needs with a margin of safety
Activity: Our Plastic Consumption Footprint	Interactions and Ecosystems	Investigate and describe relationships between humans and their environments, and identify related issues and scientific questions
		Describe the relationships among knowledge, decisions and actions in maintaining life-supporting environments
	Plants for Food and Fibre	Investigate plant uses; and identify links among needs, technologies, products and impacts
		Identify and interpret relationships among human needs, technologies, environments, and the culture and use of living things as sources of food and fibre
	Structures and Forces	Describe and interpret different types of structures encountered in everyday objects, buildings, plants and animals; and identify materials from which they are made
Activity: Plastic Remake	Structures and Forces	Describe and interpret different types of structures encountered in everyday objects, buildings, plants and animals; and identify materials from which they are made
		Investigate and analyze the properties of materials used in structures
		Demonstrate and describe processes used in developing, evaluating and improving structures that will meet human needs with a margin of safety
Activity: Plastic in Our Oceans	Interactions and Ecosystems	Investigate and describe relationships between humans and their environments, and identify related issues and scientific questions
		Trace and interpret the flow of energy and materials within an ecosystem
		Monitor a local environment, and assess the impacts of environmental factors on the growth, health and reproduction of organisms in that environment
		Describe the relationships among knowledge, decisions and actions in maintaining life-supporting environments
	Structures and Forces	Investigate and analyze the properties of materials used in structures
		Demonstrate and describe processes used in developing, evaluating and improving structures that will meet human needs with a margin of safety

Activity: Sorting Your Waste	Interactions and Ecosystems	Investigate and describe relationships between humans and their environments, and identify related issues and scientific questions
		Describe the relationships among knowledge, decisions and actions in maintaining life-supporting environments
		Identify and interpret relationships among human needs, technologies, environments, and the culture and use of living things as sources of food and fibre
	Structures and Forces	Describe and interpret different types of structures encountered in everyday objects, buildings, plants and animals; and identify materials from which they are made
		Investigate and analyze the properties of materials used in structures
Activity: Taking Inspiration from Nature	Interactions and Ecosystems	Investigate and describe relationships between humans and their environments, and identify related issues and scientific questions
		Trace and interpret the flow of energy and materials within an ecosystem
		Monitor a local environment, and assess the impacts of environmental factors on the growth, health and reproduction of organisms in that environment
		Describe the relationships among knowledge, decisions and actions in maintaining life-supporting environments
Activity: Types of Plastics	Structures and Forces	Describe and interpret different types of structures encountered in everyday objects, buildings, plants and animals; and identify materials from which they are made
		Investigate and analyze the properties of materials used in structures
		Demonstrate and describe processes used in developing, evaluating and improving structures that will meet human needs with a margin of safety
Activity: Why Do We Have Plastic Waste in the Environment?	Interactions and Ecosystems	Investigate and describe relationships between humans and their environments, and identify related issues and scientific questions
		Trace and interpret the flow of energy and materials within an ecosystem
		Monitor a local environment, and assess the impacts of environmental factors on the growth, health and reproduction of organisms in that environment
		Describe the relationships among knowledge, decisions and actions in maintaining life-supporting environments

Program: Eco 360	Grade 8 - Alberta Science Curriculum Connections	

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Activity Name	Organizing Idea	Learning Outcome
Activity: All About Plastics	Mix and Flow of Matter	Investigate and describe fluids used in technological devices and everyday materials
	Freshwater and Saltwater Systems	Describe the distribution and characteristics of water in local and global environments, and identify the significance of water supply and quality to the needs of humans and other living things
		Analyze human impacts on aquatic systems; and identify the roles of science and technology in addressing related questions, problems and issues
Activity: Circular Economy and the UN's Sustainable Development Goals	Freshwater and Saltwater Systems	Describe the distribution and characteristics of water in local and global environments, and identify the significance of water supply and quality to the needs of humans and other living things
		Analyze human impacts on aquatic systems; and identify the roles of science and technology in addressing related questions, problems and issues
Activity: How Plastic Waste Harms the Environment	Freshwater and Saltwater Systems	Describe the distribution and characteristics of water in local and global environments, and identify the significance of water supply and quality to the needs of humans and other living things
		Investigate and interpret linkages among landforms, water and climate
		Analyze factors affecting productivity and species distribution in marine and freshwater environments
		Analyze human impacts on aquatic systems; and identify the roles of science and technology in addressing related questions, problems and issues
Activity: Imagine a Waste-Free Economy	Freshwater and Saltwater Systems	Investigate and interpret linkages among landforms, water and climate
Activity: Our Plastic Consumption Footprint	Freshwater and Saltwater Systems	Investigate and interpret linkages among landforms, water and climate
Activity: Plastic Remake	Freshwater and Saltwater Systems	Investigate and interpret linkages among landforms, water and climate

Activity: Plastic in Our Oceans	Freshwater and Saltwater Systems	Describe the distribution and characteristics of water in local and global environments, and identify the significance of water supply and quality to the needs of humans and other living things
		Investigate and interpret linkages among landforms, water and climate
		Analyze factors affecting productivity and species distribution in marine and freshwater environments
		Analyze human impacts on aquatic systems; and identify the roles of science and technology in addressing related questions, problems and issues
Activity: Sorting Your Waste	Freshwater and Saltwater Systems	Investigate and interpret linkages among landforms, water and climate
Activity: Taking Inspiration From Nature	Freshwater and Saltwater Systems	Describe the distribution and characteristics of water in local and global environments, and identify the significance of water supply and quality to the needs of humans and other living things
		Investigate and interpret linkages among landforms, water and climate
		Analyze factors affecting productivity and species distribution in marine and freshwater environments
		Analyze human impacts on aquatic systems; and identify the roles of science and technology in addressing related questions, problems and issues
Activity: Types of Plastics	Freshwater and Saltwater Systems	Investigate and interpret linkages among landforms, water and climate
Activity: Why Do We Have Plastic Waste In Our Environment?	Cells and Systems	Investigate living things; and identify and apply scientific ideas used to interpret their general structure, function and organization
		Investigate and describe the role of cells within living things
	Freshwater and Saltwater Systems	Investigate and interpret linkages among landforms, water and climate

Program: Eco 360	Grade 9 - Alberta Science Curriculum Connections	

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Activity Name	Organizing Idea	Learning Outcome
Activity: What is a Circular Economy?	Environmental Chemistry	Analyze and evaluate mechanisms affecting the distribution of potentially harmful substances within an environment
Activity: What are Plastics?	N/A	
Activity: Different Types of Plastics	Environmental Chemistry	Analyze and evaluate mechanisms affecting the distribution of potentially harmful substances within an environment
Activity: Properties of Plastics	Environmental Chemistry	Analyze and evaluate mechanisms affecting the distribution of potentially harmful substances within an environment
Activity: Sources of Plastic Waste in the Environment	Environmental Chemistry	Investigate and describe, in general terms, the role of different substances in the environment in supporting or harming humans and other living things
Activity: Plastics in the Environment	Environmental Chemistry	Investigate and describe, in general terms, the role of different substances in the environment in supporting or harming humans and other living things
Activity: Plastics in Our Oceans	N/A	
Activity: Microplastics in the Environment Experiment	Environmental Chemistry	Investigate and describe, in general terms, the role of different substances in the environment in supporting or harming humans and other living things
Activity: What is Your Plastic Consumption Footprint?	N/A	
Activity: Policy Action: Circular Economy for Plastics	N/A	
Activity: Plastic Waste to Energy	N/A	
Activity: Plastic Waste to Consumer Goods	N/A	
Activity: Plastic Waste Management in Canada	N/A	
Activity: Circular Economy, Sustainability and Climate Action	N/A	
Activity: Reimagining Economy Using Biomimicry	N/A	

Program: Eco 360	Grade 10 - Alberta Science Curriculum Connections	

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Activity Name	Organizing Idea	Learning Outcome
Activity: What is a Circular Economy?	N/A	*At this point, there are no grade 10 science curriculum connections for this program.*
Activity: What are Plastics?	N/A	
Activity: Different Types of Plastics	N/A	
Activity: Properties of Plastics	N/A	
Activity: Sources of Plastic Waste in the Environment	N/A	
Activity: Plastics in the Environment	N/A	
Activity: Plastics in Our Oceans	N/A	
Activity: Microplastics in the Environment Experiment	N/A	
Activity: What is Your Plastic Consumption Footprint?	N/A	
Activity: Policy Action: Circular Economy for Plastics	N/A	
Activity: Plastic Waste to Energy	N/A	
Activity: Plastic Waste to Consumer Goods	N/A	
Activity: Plastic Waste Management in Canada	N/A	
Activity: Circular Economy, Sustainability and Climate Action	N/A	
Activity: Reimagining Economy Using Biomimicry	N/A	