Grade 3 – Ontario Science and Technology Curriculum Connections



Activity Name	Organizing Idea	Learning Outcome
Activity: All About Plastics	D. Structures and Mechanisms: Strong and Stable Structures	D1. Relating Science and Technology to Our Changing World – Assess the importance of form, function, strength, and stability in structures to society and the environment
Activity: Circular Economy and the UN's Sustainable Development Goals	E. Earth and Space Systems: Soils in the Environment	E1. Relating Science and Technology to Our Changing World – Assess the importance of soils for society and the environment, and the impact of human activity on soils
Activity How Plactic Waste Hayms the Envisonment		A3. Applications, Connections, and Contributions – Demonstrate an understanding of the practical applications of science and technology, and of contributions to science and technology from people with diverse lived experiences
Activity: How Plastic Waste Harms the Environment	D. Structures and Mechanisms: Strong and Stable Structures	D1. Relating Science and Technology to Our Changing World – Assess the importance of form, function, strength, and stability in structures to society and the environment
	A. Stem Skills and Connection	A1. STEM Investigation and Communication Skills – Use a scientific research process, a scientific experimentation process, and an engineering design process to conduct investigations, following appropriate health and safety procedures
Activity: Imagine a Waste-Free Economy	D. Structures and Mechanisms: Strong and Stable Structures A. Stem Skills and Connection	D1. Relating Science and Technology to Our Changing World – Assess the importance of form, function, strength, and stability in structures to society and the environment
		D2. Exploring and Understanding Concepts – Demonstrate an understanding of the concepts of strength and stability as they relate to structures with various forms and functions, and of the factors that affect structures' strength and stability
Activity: Our Plastic Consumption Footprint		A1. STEM Investigation and Communication Skills – Use a scientific research process, a scientific experimentation process, and an engineering design process to conduct investigations, following appropriate health and safety procedures
Activity: Plastic Remake	A. Stem Skills and Connection	A1. STEM Investigation and Communication Skills – Use a scientific research process, a scientific experimentation process, and an engineering design process to conduct investigations, following appropriate health and safety procedures
Activity: Plastic in Our Oceans	N/A	
Activity: Sorting Your Waste	A. Stem Skills and Connection	A1. STEM Investigation and Communication Skills – Use a scientific research process, a scientific experimentation process, and an engineering design process to conduct investigations, following appropriate health and safety procedures

Activity: Taking Inspiration from Nature	B. Life Systems: Growth and Changes in Plants	B1. Relating Science and Technology to Our Changing World – Assess ways in which plants are beneficial to society and the environment, and ways in which human activity has an impact on plants and plant habitats
		B2. Exploring and Understanding Concepts – Demonstrate an understanding of characteristics and uses of plants and of plants' responses to the natural environment
Activity: Types of Plastics D. Structures and Mechanisms: Stro		A3. Applications, Connections, and Contributions – Demonstrate an understanding of the practical applications of science and technology, and of contributions to science and technology from people with diverse lived experiences
	D. Structures and Mechanisms: Strong and Stable Structures	D2. Exploring and Understanding Concepts – Demonstrate an understanding of the concepts of strength and stability as they relate to structures with various forms and functions, and of the factors that affect structures' strength and stability
Activity: Why Do We Have Plastic Waste in the Environment?	N/A	

Grade 4 – Ontario Science and Technology Curriculum Connections



Activity Name	Organizing Idea	Learning Outcome
Activity: All About Plastics	A. Stem Skills and Connections	A3. Applications, Connections, and Contributions – Demonstrate an understanding of the practical applications of science and technology, and of contributions to science and technology from people with diverse lived experiences
Activity: Circular Economy and the UN's Sustainable Development Goals	A. Stem Skills and Connections	A3. Applications, Connections, and Contributions – Demonstrate an understanding of the practical applications of science and technology, and of contributions to science and technology from people with diverse lived experiences
Activity: How Plastic Waste Harms the Environment	B. Habitats and Communities	B1. Relating Science and Technology to Our Changing World – Assess impacts of human activities on habitats and communities, and analyse actions for minimizing negative impacts and enhancing positive ones
Activity: Imagine a Waste-Free Economy	N/A	
Activity: Our Plastic Consumption Footprint	N/A	
Activity: Plastic Remake	N/A	
Activity: Plastic in Our Oceans	B. Habitats and Communities	B1. Relating Science and Technology to Our Changing World – Assess impacts of human activities on habitats and communities, and analyse actions for minimizing negative impacts and enhancing positive ones
Activity: Sorting Your Waste	N/A	
Activity: Taking Inspiration from Nature	A. Stem Skills and Connections	A3. Applications, Connections, and Contributions – Demonstrate an understanding of the practical applications of science and technology, and of contributions to science and technology from people with diverse lived experiences
Activity: Types of Plastics	N/A	
Activity: Why Do We Have Plastic Waste in the Environment?	N/A	

Grade 5 – Ontario Science and Technology Curriculum Connections



Activity Name	Organizing Idea	Learning Outcome
Activity: All About Plastics	A. Stem Skills and Connections	A3. Applications, Connections, and Contributions – Demonstrate an understanding of the practical applications of science and technology, and of contributions to science and technology from people with diverse lived experiences
Activity: Circular Economy and the UN's Sustainable	A. Stem Skills and Connections	A3. Applications, Connections, and Contributions – Demonstrate an understanding of the practical applications of science and technology, and of contributions to science and technology from people with diverse lived experiences
Development Goals	C. Matter and Energy: Properties of and Changes in Matter	C1. Relating Science and Technology to Our Changing World – Assess the impacts on society and the environment of various processes and materials used in the manufacture of common products, and ways to mitigate negative impacts
Activity: How Plastic Waste Harms the Environment	C. Matter and Energy: Properties of and Changes in Matter	C1. Relating Science and Technology to Our Changing World – Assess the impacts on society and the environment of various processes and materials used in the manufacture of common products, and ways to mitigate negative impacts
	A. Stem Skills and Connections	A3. Applications, Connections, and Contributions – Demonstrate an understanding of the practical applications of science and technology, and of contributions to science and technology from people with diverse lived experiences
Activity Imagina a Masta Evas Economy	C. Matter and Energy: Properties of and Changes in Matter	C1. Relating Science and Technology to Our Changing World – Assess the impacts on society and the environment of various processes and materials used in the manufacture of common products, and ways to mitigate negative impacts
Activity: Imagine a Waste-Free Economy	E. Earth and Space Systems: Conservation of Energy and Resources	E1. Relating Science and Technology to Our Changing World – Assess effects of energy and resource use on society and the environment, and suggest options for conserving energy and resources
		E2. Exploring and Understanding Concepts – Demonstrate an understanding of the conservation of energy, and the forms, sources, and uses of energy and resources
Activity: Our Plastic Consumption Footprint	N/A	

Activity: Plastic Remake	E. Earth and Space Systems: Conservation of Energy and Resources	E1. Relating Science and Technology to Our Changing World – Assess effects of energy and resource use on society and the environment, and suggest options for conserving energy and resources
		E2. Exploring and Understanding Concepts – Demonstrate an understanding of the conservation of energy, and the forms, sources, and uses of energy and resources
Activity: Plastic in Our Oceans	N/A	
Activity: Sorting Your Waste	C. Matter and Energy: Properties of and Changes in Matter A. Stem Skills and Connections	C1. Relating Science and Technology to Our Changing World – Assess the impacts on society and the environment of various processes and materials used in the manufacture of common products, and ways to mitigate negative impacts
		C2. Exploring and Understanding Concepts – Demonstrate an understanding of the properties of matter, changes of state, and physical and chemical change
Activity: Taking Inspiration from Nature		A3. Applications, Connections, and Contributions – Demonstrate an understanding of the practical applications of science and technology, and of contributions to science and technology from people with diverse lived experiences
Activity: Types of Plastics	C. Matter and Energy: Properties of and Changes in Matter	C2. Exploring and Understanding Concepts – Demonstrate an understanding of the properties of matter, changes of state, and physical and chemical change
Activity: Why Do We Have Plastic Waste in the Environment?	C. Matter and Energy: Properties of and Changes in Matter	C1. Relating Science and Technology to Our Changing World – Assess the impacts on society and the environment of various processes and materials used in the manufacture of common products, and ways to mitigate negative impacts

Grade 6 – Ontario Science and Technology Curriculum Connections



Activity Name	Organizing Idea	Learning Outcome
Activity: All About Plastics	A. Stem Skills and Connections	A3. Applications, Connections, and Contributions – Demonstrate an understanding of the practical applications of science and technology, and of contributions to science and technology from people with diverse lived experiences
Activity: Circular Economy and the UN's Sustainable Development Goals	A. Stem Skills and Connections	A3. Applications, Connections, and Contributions – Demonstrate an understanding of the practical applications of science and technology, and of contributions to science and technology from people with diverse lived experiences
Activity: How Plastic Waste Harms the Environment	N/A	
Activity: Imagine a Waste-Free Economy	A. Stem Skills and Connections	A3. Applications, Connections, and Contributions – Demonstrate an understanding of the practical applications of science and technology, and of contributions to science and technology from people with diverse lived experiences
Activity: Our Plastic Consumption Footprint	N/A	
Activity: Plastic Remake	N/A	
Activity: Plastic in Our Oceans	N/A	
Activity: Sorting Your Waste	N/A	
Activity: Taking Inspiration from Nature	A. Stem Skills and Connections	A3. Applications, Connections, and Contributions – Demonstrate an understanding of the practical applications of science and technology, and of contributions to science and technology from people with diverse lived experiences
Activity: Types of Plastics	N/A	
Activity: Why Do We Have Plastic Waste in the Environment?	N/A	

Grade 7 – Ontario Science and Technology Curriculum Connections



Activity Name	Organizing Idea	Learning Outcome
	A. Stem Skills and Connections	A3. Applications, Connections, and Contributions – Demonstrate an understanding of the practical applications of science and technology, and of contributions to science and technology from people with diverse lived experiences
Activity: All About Plastics	B. Life Systems: Interactions in the Environment	B1. Relating Science and Technology to Our Changing World – Assess the impact of human activities and technologies on the environment, and analyse ways to mitigate negative impacts and contribute to environmental sustainability
	C. Matter and Energy: Pure Substances and Mixtures	C1. Relating Science and Technology to Our Changing World – Evaluate the environmental and social impacts of the use and disposal of various pure substances and mixtures
	A. Stem Skills and Connections	A3. Applications, Connections, and Contributions – Demonstrate an understanding of the practical applications of science and technology, and of contributions to science and technology from people with diverse lived experiences
Activity: Circular Economy and the UN's Sustainable Development Goals	B. Life Systems: Interactions in the Environment	B1. Relating Science and Technology to Our Changing World – Assess the impact of human activities and technologies on the environment, and analyse ways to mitigate negative impacts and contribute to environmental sustainability
	C. Matter and Energy: Pure Substances and Mixtures	C1. Relating Science and Technology to Our Changing World – Evaluate the environmental and social impacts of the use and disposal of various pure substances and mixtures
	B. Life Systems: Interactions in the Environment	B1. Relating Science and Technology to Our Changing World – Assess the impact of human activities and technologies on the environment, and analyse ways to mitigate negative impacts and contribute to environmental sustainability
Activity: How Plastic Waste Harms the Environment	C. Matter and Energy: Pure Substances and Mixtures	C1. Relating Science and Technology to Our Changing World – Evaluate the environmental and social impacts of the use and disposal of various pure substances and mixtures
		C2. Exploring and Understanding Concepts – Demonstrate an understanding of the nature of matter, including the properties of pure substances and mixtures, and describe these properties using particle theory

Activity: Imagine a Waste-Free Economy	A. Stem Skills and Connections	A3. Applications, Connections, and Contributions – Demonstrate an understanding of the practical applications of science and technology, and of contributions to science and technology from people with diverse lived experiences
	C. Matter and Energy: Pure Substances and Mixtures	C1. Relating Science and Technology to Our Changing World – Evaluate the environmental and social impacts of the use and disposal of various pure substances and mixtures
Activity: Our Plastic Consumption Footprint	B. Life Systems: Interactions in the Environment	B1. Relating Science and Technology to Our Changing World – Assess the impact of human activities and technologies on the environment, and analyse ways to mitigate negative impacts and contribute to environmental sustainability
	C. Matter and Energy: Pure Substances and Mixtures	C1. Relating Science and Technology to Our Changing World – Evaluate the environmental and social impacts of the use and disposal of various pure substances and mixtures
	B. Life Systems: Interactions in the Environment	B1. Relating Science and Technology to Our Changing World – Assess the impact of human activities and technologies on the environment, and analyse ways to mitigate negative impacts and contribute to environmental sustainability
Activity: Plastic Remake	D. Structures and Mechanisms: Form, Function, and Design of Structures	D1. Relating Science and Technology to Our Changing World – Analyse personal, social, economic, and environmental factors that should be considered when designing and building structures
	B. Life Systems: Interactions in the Environment	B1. Relating Science and Technology to Our Changing World – Assess the impact of human activities and technologies on the environment, and analyse ways to mitigate negative impacts and contribute to environmental sustainability
Activity: Plastic in Our Oceans	C. Matter and Energy: Pure Substances and Mixtures	C1. Relating Science and Technology to Our Changing World – Evaluate the environmental and social impacts of the use and disposal of various pure substances and mixtures
		C2. Exploring and Understanding Concepts – Demonstrate an understanding of the nature of matter, including the properties of pure substances and mixtures, and describe these properties using particle theory
Activity: Sorting Your Waste	B. Life Systems: Interactions in the Environment	B1. Relating Science and Technology to Our Changing World – Assess the impact of human activities and technologies on the environment, and analyse ways to mitigate negative impacts and contribute to environmental sustainability
	C. Matter and Energy: Pure Substances and Mixtures	C1. Relating Science and Technology to Our Changing World – Evaluate the environmental and social impacts of the use and disposal of various pure substances and mixtures

Activity: Ta	Activity Taking Inchiration from Nature	A. Stem Skills and Connections	A3. Applications, Connections, and Contributions – Demonstrate an understanding of the practical applications of science and technology, and of contributions to science and technology from people with diverse lived experiences
	Activity: Taking Inspiration from Nature	D. Structures and Mechanisms: Form, Function, and Design of Structures	D1. Relating Science and Technology to Our Changing World – Analyse personal, social, economic, and environmental factors that should be considered when designing and building structures
	Activity Types of Plactics	B. Life Systems: Interactions in the Environment	B1. Relating Science and Technology to Our Changing World – Assess the impact of human activities and technologies on the environment, and analyse ways to mitigate negative impacts and contribute to environmental sustainability
A	<u>ctivity: Types of Plastics</u>	C. Matter and Energy: Pure Substances and Mixtures	C2. Exploring and Understanding Concepts – Demonstrate an understanding of the nature of matter, including the properties of pure substances and mixtures, and describe these properties using particle theory
Activity: Why Do We Have Plastic Waste in the Environment?		B. Life Systems: Interactions in the Environment	B1. Relating Science and Technology to Our Changing World – Assess the impact of human activities and technologies on the environment, and analyse ways to mitigate negative impacts and contribute to environmental sustainability
	C. Matter and Energy: Pure Substances and Mixtures	C1. Relating Science and Technology to Our Changing World – Evaluate the environmental and social impacts of the use and disposal of various pure substances and mixtures	

Grade 8 – Ontario Science and Technology Curriculum Connections



Activity Name	Organizing Idea	Learning Outcome
Activity: All About Plastics	A. Stem Skills and Connections	A3. Applications, Connections, and Contributions – Demonstrate an understanding of the practical applications of science and technology, and of contributions to science and technology from people with diverse lived experiences
	A. Stem Skills and Connections	A3. Applications, Connections, and Contributions – Demonstrate an understanding of the practical applications of science and technology, and of contributions to science and technology from people with diverse lived experiences
Activity: Circular Economy and the UN's Sustainable Development Goals	D. Structures and Mechanisms: Systems in Action	D1. Relating Science and Technology to Our Changing World – Assess the social and environmental impacts of various systems, and evaluate improvements to the systems or alternative ways of meeting the same needs
		D2. Exploring and Understanding Concepts – Demonstrate an understanding of different types of systems and the factors that contribute to their safe and efficient operation
	D. Structures and Mechanisms:	D1. Relating Science and Technology to Our Changing World – Assess the social and environmental impacts of various systems, and evaluate improvements to the systems or alternative ways of meeting the same needs
Activity: How Plastic Waste Harms the Environment	Systems in Action	D2. Exploring and Understanding Concepts – Demonstrate an understanding of different types of systems and the factors that contribute to their safe and efficient operation
E. Earth and Space Syst Water Systems		E1. Relating Science and Technology to Our Changing World – Assess the impact of human activities and technologies on the sustainability of water resources

	A. Stem Skills and Connections	A3. Applications, Connections, and Contributions – Demonstrate an understanding of the practical applications of science and technology, and of contributions to science and technology from people with diverse lived experiences
Activity: Imagine a Waste-Free Economy	D. Structures and Mechanisms:	D1. Relating Science and Technology to Our Changing World – Assess the social and environmental impacts of various systems, and evaluate improvements to the systems or alternative ways of meeting the same needs
	Systems in Action	D2. Exploring and Understanding Concepts – Demonstrate an understanding of different types of systems and the factors that contribute to their safe and efficient operation
Activity: Our Plastic Consumption Footprint	N/A	
Activity: Plastic Remake	N/A	
	E Farth and Space Systems:	E1. Relating Science and Technology to Our Changing World – Assess the impact of human activities and technologies on the sustainability of water resources
Activity: Plastic in Our Oceans	E. Earth and Space Systems: Water Systems	E2. Exploring and Understanding Concepts – Demonstrate an understanding of the characteristics of Earth's water systems and of factors that affect these systems
Activity: Sorting Your Waste	D. Structures and Mechanisms: Systems in Action	D1. Relating Science and Technology to Our Changing World – Assess the social and environmental impacts of various systems, and evaluate improvements to the systems or alternative ways of meeting the same needs
Activity: Taking Inspiration from Nature	A. Stem Skills and Connections	A3. Applications, Connections, and Contributions – Demonstrate an understanding of the practical applications of science and technology, and of contributions to science and technology from people with diverse lived experiences
Activity: Types of Plastics	N/A	
	D. Structures and Mechanisms: Systems in Action	D1. Relating Science and Technology to Our Changing World – Assess the social and environmental impacts of various systems, and evaluate improvements to the systems or alternative ways of meeting the same needs
Activity: Why Do We Have Plastic Waste in the Environment?		D2. Exploring and Understanding Concepts – Demonstrate an understanding of different types of systems and the factors that contribute to their safe and efficient operation
	E. Earth and Space Systems: Water Systems	E1. Relating Science and Technology to Our Changing World – Assess the impact of human activities and technologies on the sustainability of water resources