

Program: Flood:ED

Grade 8 – Ontario Science and Technology Curriculum Connections



Activity Name	Organizing Idea	Learning Outcome
Activity: Hot Spot Investigators	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: School Greening: Investigating Simulator Solutions	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: Fluids	C1. Relating Science and Technology to Our Changing World – Analyse uses of various technologies that rely on the properties of fluids, and assess the impact of these technologies on society and the environment
		C2. Exploring and Understanding Concepts – Demonstrate an understanding of basic fluid mechanics, including the properties and uses of fluids
	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: Flood Risk Management Awareness	C. Matter and Energy: Fluids	C2. Exploring and Understanding Concepts – Demonstrate an understanding of basic fluid mechanics, including the properties and uses of fluids
	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: Flood:ED School Greening Simulator	N/A	
Activity: Flooding Mapping Tour	C. Matter and Energy: Fluids	C2. Exploring and Understanding Concepts – Demonstrate an understanding of basic fluid mechanics, including the properties and uses of fluids
	D. Structures and Mechanisms: 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 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: Flooding and Climate Change	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

<u>Activity: Climate Change in My Watershed Inquiry</u>	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
<u>Activity: Extreme Weather Inquiry</u>	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
<u>Activity: Runoff Footprint</u>	A. Stem Skills and Connections	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
	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
	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
<u>Activity: Understand Flooding</u>	A. Stem Skills and Connections	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
	C. Matter and Energy: Fluids	C2. Exploring and Understanding Concepts – Demonstrate an understanding of basic fluid mechanics, including the properties and uses of fluids
	D. Structures and Mechanisms: 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 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
<u>Activity: What are Floodplains and Watersheds?</u>	C. Matter and Energy: Fluids	C2. Exploring and Understanding Concepts – Demonstrate an understanding of basic fluid mechanics, including the properties and uses of fluids
	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: Flood Resilience Plan for Your School	C. Matter and Energy: Fluids	C1. Relating Science and Technology to Our Changing World – Analyse uses of various technologies that rely on the properties of fluids, and assess the impact of these technologies on society and the environment
		C2. Exploring and Understanding Concepts – Demonstrate an understanding of basic fluid mechanics, including the properties and uses of fluids
	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
	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: Preparing for Flood Resilience	C. Matter and Energy: Fluids	C1. Relating Science and Technology to Our Changing World – Analyse uses of various technologies that rely on the properties of fluids, and assess the impact of these technologies on society and the environment
		C2. Exploring and Understanding Concepts – Demonstrate an understanding of basic fluid mechanics, including the properties and uses of fluids
	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
	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: Take Action: Adopt a Drain Campaign	C. Matter and Energy: Fluids	C1. Relating Science and Technology to Our Changing World – Analyse uses of various technologies that rely on the properties of fluids, and assess the impact of these technologies on society and the environment
		C2. Exploring and Understanding Concepts – Demonstrate an understanding of basic fluid mechanics, including the properties and uses of fluids
	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
	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: Take Action: Build a Rain Garden	A. Stem Skills and Connections	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
	C. Matter and Energy: Fluids	C1. Relating Science and Technology to Our Changing World – Analyse uses of various technologies that rely on the properties of fluids, and assess the impact of these technologies on society and the environment
		C2. Exploring and Understanding Concepts – Demonstrate an understanding of basic fluid mechanics, including the properties and uses of fluids
	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
	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
		E2. Exploring and Understanding Concepts – Demonstrate an understanding of the characteristics of Earth's water systems and of factors that affect these systems
Activity: Take Action: Flood Protect Your Home	A. Stem Skills and Connections	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
	C. Matter and Energy: Fluids	C1. Relating Science and Technology to Our Changing World – Analyse uses of various technologies that rely on the properties of fluids, and assess the impact of these technologies on society and the environment
		C2. Exploring and Understanding Concepts – Demonstrate an understanding of basic fluid mechanics, including the properties and uses of fluids
	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
	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: Chasse Au Trésor	C. Matter and Energy: Fluids	C1. Relating Science and Technology to Our Changing World – Analyse uses of various technologies that rely on the properties of fluids, and assess the impact of these technologies on society and the environment
		C2. Exploring and Understanding Concepts – Demonstrate an understanding of basic fluid mechanics, including the properties and uses of fluids
	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
	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
		E2. Exploring and Understanding Concepts – Demonstrate an understanding of the characteristics of Earth's water systems and of factors that affect these systems
Activity: Take Action: Home Flood Protector Scavenger Hunt	C. Matter and Energy: Fluids	C1. Relating Science and Technology to Our Changing World – Analyse uses of various technologies that rely on the properties of fluids, and assess the impact of these technologies on society and the environment
		C2. Exploring and Understanding Concepts – Demonstrate an understanding of basic fluid mechanics, including the properties and uses of fluids
	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
	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
		E2. Exploring and Understanding Concepts – Demonstrate an understanding of the characteristics of Earth's water systems and of factors that affect these systems

Activity: Take Action: Install Rain Barrels	A. Stem Skills and Connections	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
	C. Matter and Energy: Fluids	C1. Relating Science and Technology to Our Changing World – Analyse uses of various technologies that rely on the properties of fluids, and assess the impact of these technologies on society and the environment
		C2. Exploring and Understanding Concepts – Demonstrate an understanding of basic fluid mechanics, including the properties and uses of fluids
	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
	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
		E2. Exploring and Understanding Concepts – Demonstrate an understanding of the characteristics of Earth’s water systems and of factors that affect these systems
Activity: Take Action: Plant a Tree	C. Matter and Energy: Fluids	C2. Exploring and Understanding Concepts – Demonstrate an understanding of basic fluid mechanics, including the properties and uses of fluids
	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
		E2. Exploring and Understanding Concepts – Demonstrate an understanding of the characteristics of Earth’s water systems and of factors that affect these systems