Program: Energy Revealed

Grade 3 – Ontario Science and Technology Curriculum Connections

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Activity Name	Organizing Idea	Learning Outcome
Activity: Knowing Energy: Stair Climb	N/A	
Activity: Knowing Energy: Tea at Home	N/A	
Activity: Knowing Energy: Race to a kWh	N/A	
Activity: Knowing Energy: How Intense is Your Electricity Usage?	N/A	
Activity: Knowing Energy: The Electricity Grid	N/A	
Activity: Knowing Energy: Renewables	N/A	
Activity: Knowing Energy: The Big Picture	N/A	
Activity: All About the Baseline	Grade 7-12	
Activity: Can You Observe How You Conserve?	Grade 4-12	
Activity: Energy Hogs	Grade 4-12	
Activity: Extra Energy Investigation	Grade 4-12	
Activity: How Smart is Your Smart Board?	Grade 7-12	
Activity: Imagination Station	Grade 4-12	
Activity: Small Appliance Energy Reliance	Grade 4-12	
Activity: Start Me Up!	Grade 4-12	
Activity: Take a Look	Grade 4-6	
Activity: Total Energy vs Total Cost	Grade 7-12	
Activity: Understanding Energy Efficiency in Your School	Grade 7-12	
Activity: Community Walk	Grade 4-12	
Activity: School Energy Audit	Grade 7-12	

Activity: Energy Efficient Lighting	**Grade 4-7**	
Activity: Find the Phantom Load	**Grade 4-12**	
Activity: Home Energy Audit	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
Activity: Watchers and Seekers	**Grade 4-12**	
Activity: Back to the Future	**Grade 4-7**	
Activity: Changing Our Ways	**Grade 4-7**	
Activity: Exploring Our Energy Ethics	**Grade 4-7**	
Activity: Once Upon a Bike	**Grade 4-7**	
Activity: Puzzling Over Energy Issues	**Grade 4-7**	
Activity: Ride, Roll and Stroll	**Grade 4-7**	
Activity: Speak for the Trees	**Grade 7-12**	
Activity: Taking the Lead	**Grade 4-7**	
Activity: Walk a Mile	**Grade 4-7**	

Program: Energy Revealed	Grade 4 – Ontario Science and Technology Curriculum Connections	

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Activity Name	Organizing Idea	Learning Outcome
Activity: Knowing Energy: Stair Climb	N/A	
Activity: Knowing Energy: Tea at Home	N/A	
Activity: Knowing Energy: Race to a kWh	N/A	
Activity: Knowing Energy: How Intense is Your Electricity Usage?	N/A	
Activity: Knowing Energy: The Electricity Grid	N/A	
Activity: Knowing Energy: Renewables	N/A	
Activity: Knowing Energy: The Big Picture	N/A	
Activity: All About the Baseline	Grade 7-12	
Activity: Can You Observe How You Conserve?	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
Activity: Energy Hogs	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
Activity: Extra Energy Investigation	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
Activity: How Smart is Your Smart Board?	Grade 7-12	
Activity: Imagination Station	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
Activity: Small Appliance Energy Reliance	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

Activity: Start Me Up!	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
Activity: Take a Look	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
Activity: Total Energy vs Total Cost	**Grade 7-12**	
Activity: Understanding Energy Efficiency in Your School	**Grade 7-12**	
Activity: Community Walk	**N/A**	
Activity: School Energy Audit	**Grade 7-12**	
Activity: Energy Efficient Lighting	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
Activity: Find the Phantom Load	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
Activity: Home Energy Audit	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
Activity: Watchers and Seekers	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
Activity: Back to the Future	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
Activity: Changing Our Ways	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
Activity: Exploring Our Energy Ethics	**N/A**	
Activity: Once Upon a Bike	**N/A**	
Activity: Puzzling Over Energy Issues	**N/A**	

Activity: Ride, Roll and Stroll	N/A	
Activity: Speak for the Trees	Grade 7-12	
Activity: Taking the Lead	N/A	
Activity: Walk a Mile	N/A	

Program: Energy Revealed	Grade 5 – Ontario Science and Technology Curriculum Connections	
Activity Name	**Organizing Idea**	**Learning Outcome**
Activity: Knowing Energy: Stair Climb	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: Knowing Energy: Tea at Home	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: Knowing Energy: Race to a kWh	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: Knowing Energy: How Intense is Your Electricity Usage?	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

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Activity: Knowing Energy: The Electricity Grid	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: Knowing Energy: Renewables	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: Knowing Energy: The Big Picture	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: All About the Baseline	**Grade 7-12**	
Activity: Can You Observe How You Conserve?	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
	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: Energy Hogs	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
	E. Earth and Space Systems: Conservation of 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: Extra Energy Investigation	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
	E. Earth and Space Systems: Conservation of 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: How Smart is Your Smart Board?	**Grade 7-12**	
Activity: Imagination Station	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
	E. Earth and Space Systems: Conservation of 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: Small Appliance Energy Reliance	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
	E. Earth and Space Systems: Conservation of 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: Start Me Up!	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
	E. Earth and Space Systems: Conservation of 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: Take a Look	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
	E. Earth and Space Systems: Conservation of 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: Total Energy vs Total Cost	**Grade 7-12**	
Activity: Understanding Energy Efficiency in Your School	**Grade 7-12**	

Activity: Community Walk	E. Earth and Space Systems: Conservation of 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: School Energy Audit	**Grade 7-12**	
Activity: Energy Efficient Lighting	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
	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: Find the Phantom Load	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
	E. Earth and Space Systems: Conservation of 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: Home Energy Audit	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
	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: Watchers and Seekers	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
	E. Earth and Space Systems: Conservation of 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: Back to the Future	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
	E. Earth and Space Systems: Conservation of 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: Changing Our Ways	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
	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: Exploring Our Energy Ethics	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: Once Upon a Bike		**N/A**
Activity: Puzzling Over Energy Issues	E. Earth and Space Systems: Conservation of 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: Ride, Roll and Stroll	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: Speak for the Trees	**Grade 7-12**	

Activity: Taking the Lead	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: Walk a Mile	E. Earth and Space Systems: Conservation of 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

Program: Energy Revealed	Grade 6 – Ontario Science and Technology Curriculum Connections	

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Activity Name	Organizing Idea	Learning Outcome
Activity: Knowing Energy: Stair Climb	N/A	
Activity: Knowing Energy: Tea at Home	N/A	
Activity: Knowing Energy: Race to a kWh	N/A	
Activity: Knowing Energy: How Intense is Your Electricity Usage?	C. Matter and Energy: Electrical Phenomena, Energy, and Devices	C1. Relating Science and Technology to Our Changing World – Evaluate the impact of the use and generation of electrical energy on society and the environment, and suggest ways to use electrical energy responsibly
		C2. Exploring and Understanding Concepts – Demonstrate an understanding of the principles of electrical energy and its transformation into and from other forms of energy
Activity: Knowing Energy: The Electricity Grid	C. Matter and Energy: Electrical Phenomena, Energy, and Devices	C1. Relating Science and Technology to Our Changing World – Evaluate the impact of the use and generation of electrical energy on society and the environment, and suggest ways to use electrical energy responsibly
		C2. Exploring and Understanding Concepts – Demonstrate an understanding of the principles of electrical energy and its transformation into and from other forms of energy
Activity: Knowing Energy: Renewables	N/A	
Activity: Knowing Energy: The Big Picture	N/A	
Activity: All About the Baseline	Grade 7-12	
Activity: Can You Observe How You Conserve?	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: Electrical Phenomena, Energy, and Devices	C1. Relating Science and Technology to Our Changing World – Evaluate the impact of the use and generation of electrical energy on society and the environment, and suggest ways to use electrical energy responsibly

Activity: Energy Hogs	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: Electrical Phenomena, Energy, and Devices	C1. Relating Science and Technology to Our Changing World – Evaluate the impact of the use and generation of electrical energy on society and the environment, and suggest ways to use electrical energy responsibly
Activity: Extra Energy Investigation	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: Electrical Phenomena, Energy, and Devices	C1. Relating Science and Technology to Our Changing World – Evaluate the impact of the use and generation of electrical energy on society and the environment, and suggest ways to use electrical energy responsibly
Activity: How Smart is Your Smart Board?	**Grade 7-12**	
Activity: Imagination Station	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: Electrical Phenomena, Energy, and Devices	C1. Relating Science and Technology to Our Changing World – Evaluate the impact of the use and generation of electrical energy on society and the environment, and suggest ways to use electrical energy responsibly
Activity: Small Appliance Energy Reliance	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: Electrical Phenomena, Energy, and Devices	C1. Relating Science and Technology to Our Changing World – Evaluate the impact of the use and generation of electrical energy on society and the environment, and suggest ways to use electrical energy responsibly
Activity: Start Me Up!	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: Electrical Phenomena, Energy, and Devices	C1. Relating Science and Technology to Our Changing World – Evaluate the impact of the use and generation of electrical energy on society and the environment, and suggest ways to use electrical energy responsibly

Activity: Take a Look	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: Electrical Phenomena, Energy, and Devices	C1. Relating Science and Technology to Our Changing World – Evaluate the impact of the use and generation of electrical energy on society and the environment, and suggest ways to use electrical energy responsibly
Activity: Total Energy vs Total Cost	**Grade 7-12**	
Activity: Understanding Energy Efficiency in Your School	**Grade 7-12**	
Activity: Community Walk	C. Matter and Energy: Electrical Phenomena, Energy, and Devices	C1. Relating Science and Technology to Our Changing World – Evaluate the impact of the use and generation of electrical energy on society and the environment, and suggest ways to use electrical energy responsibly
Activity: School Energy Audit	**Grade 7-12**	
Activity: Energy Efficient Lighting	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: Electrical Phenomena, Energy, and Devices	C1. Relating Science and Technology to Our Changing World – Evaluate the impact of the use and generation of electrical energy on society and the environment, and suggest ways to use electrical energy responsibly
Activity: Find the Phantom Load	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: Electrical Phenomena, Energy, and Devices	C1. Relating Science and Technology to Our Changing World – Evaluate the impact of the use and generation of electrical energy on society and the environment, and suggest ways to use electrical energy responsibly
Activity: Home Energy Audit	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: Electrical Phenomena, Energy, and Devices	C1. Relating Science and Technology to Our Changing World – Evaluate the impact of the use and generation of electrical energy on society and the environment, and suggest ways to use electrical energy responsibly

Activity: Watchers and Seekers	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: Electrical Phenomena, Energy, and Devices	C1. Relating Science and Technology to Our Changing World – Evaluate the impact of the use and generation of electrical energy on society and the environment, and suggest ways to use electrical energy responsibly
Activity: Back to the Future	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: Electrical Phenomena, Energy, and Devices	C1. Relating Science and Technology to Our Changing World – Evaluate the impact of the use and generation of electrical energy on society and the environment, and suggest ways to use electrical energy responsibly
Activity: Changing Our Ways	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
Activity 27: Exploring Our Energy Ethics	**N/A**	
Activity: Once Upon a Bike	**N/A**	
Activity: Puzzling Over Energy Issues	**N/A**	
Activity: Ride, Roll and Stroll	**N/A**	
Activity: Speak for the Trees	**Grade 7-12**	
Activity: Taking the Lead	**N/A**	
Activity: Walk a Mile	**N/A**	

Program: Energy Revealed	Grade 7 – Ontario Science and Technology Curriculum Connections	

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Activity Name	Organizing Idea	Learning Outcome
Activity: Knowing Energy: Stair Climb	N/A	
Activity: Knowing Energy: Tea at Home	E. Earth and Space Systems: Heat in the Environment	E2. Exploring and Understanding Concepts – Demonstrate an understanding of heat as a form of energy that is associated with the movement of particles and is essential for many natural processes within Earth's systems
Activity: Knowing Energy: Race to a kWh	N/A	
Activity: Knowing Energy: How Intense is Your Electricity Usage?	N/A	
Activity: Knowing Energy: The Electricity Grid	N/A	
Activity: Knowing Energy: Renewables	E. Earth and Space Systems: Heat in the Environment	E1. Relating Science and Technology to Our Changing World – Assess the benefits of technologies that reduce heat loss, and analyse various social and environmental impacts of the use of energy from renewable and non-renewable sources
Activity: Knowing Energy: The Big Picture	N/A	
Activity: All About the Baseline	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
Activity: Can You Observe How You Conserve?	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
Activity: Energy Hogs	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
Activity: Extra Energy Investigation	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
Activity: How Smart is Your Smart Board?	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

Activity: Imagination Station	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
Activity: Small Appliance Energy Reliance	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
Activity: Start Me Up!	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
Activity: Take a Look	**Grade 4-6**	
Activity: Total Energy vs Total Cost	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
Activity: Understanding Energy Efficiency in Your School	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
Activity: Community Walk	**N/A**	
Activity: School Energy Audit	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
Activity: Energy Efficient Lighting	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
	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: Find the Phantom Load	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

Activity: Home Energy Audit	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
	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
	E. Earth and Space Systems: Heat in the Environment	E1. Relating Science and Technology to Our Changing World – Assess the benefits of technologies that reduce heat loss, and analyse various social and environmental impacts of the use of energy from renewable and non-renewable sources
Activity: Watchers and Seekers	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
Activity: Back to the Future	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
Activity: Changing Our Ways	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
	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: Exploring Our Energy Ethics	**N/A**	
Activity: Once Upon a Bike	**N/A**	
Activity: Puzzling Over Energy Issues	**N/A**	
Activity: Ride, Roll and Stroll	**N/A**	
Activity: Speak for the Trees	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
	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: Taking the Lead	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: Walk a Mile	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

Program: Energy Revealed	Grade 8 – Ontario Science and Technology Curriculum Connections	

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Activity Name	Organizing Idea	Learning Outcome
Activity: Knowing Energy: Stair Climb	N/A	
Activity: Knowing Energy: Tea at Home	N/A	
Activity: Knowing Energy: Race to a kWh	N/A	
Activity: Knowing Energy: How Intense is Your Electricity Usage?	N/A	
Activity: Knowing Energy: The Electricity Grid	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
Activity: Knowing Energy: Renewables	N/A	
Activity: Knowing Energy: The Big Picture	N/A	
Activity: All About the Baseline	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
Activity: Can You Observe How You Conserve?	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
Activity: Energy Hogs	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
Activity: Extra Energy Investigation	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

Activity: How Smart is Your Smart Board?	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
Activity: Imagination Station	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
Activity: Small Appliance Energy Reliance	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
Activity: Start Me Up!	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
Activity: Take a Look	**Grade 4-6**	
Activity: Total Energy vs Total Cost	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
Activity: Understanding Energy Efficiency in Your School	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
Activity: Community Walk	**N/A**	
Activity: School Energy Audit	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
Activity: Energy Efficient Lighting	**Grade 4-7**	
Activity: Find the Phantom Load	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
Activity: Home Energy Audit	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
Activity: Watchers and Seekers	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

Activity: Back to the Future	**Grade 4-7**	
Activity: Changing Our Ways	**Grade 4-7**	
Activity: Exploring Our Energy Ethics	**Grade 4-7**	
Activity: Once Upon a Bike	**Grade 4-7**	
Activity: Puzzling Over Energy Issues	**Grade 4-7**	
Activity: Ride, Roll and Stroll	**Grade 4-7**	
Activity: Speak for the Trees	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
Activity: Taking the Lead	**Grade 4-7**	
Activity: Walk a Mile	**Grade 4-7**	