Program: Energy Revealed

Grade 4 - Alberta Science Curriculum Connections

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Activity Name	Organizing Idea	Learning Outcome
Activity: Knowing Energy: Stair Climb	Energy	Students investigate how forces can act on objects without contact.
	Scientific Methods	Students investigate evidence and reflect on its role in science.
Activity: Knowing Energy: Tea at Home	Energy	Students investigate how forces can act on objects without contact.
	Scientific Methods	Students investigate evidence and reflect on its role in science.
Activity: Knowing Energy: Race to a kWh	Energy	Students investigate how forces can act on objects without contact.
	Scientific Methods	Students investigate evidence and reflect on its role in science.
Activity: Knowing Energy: How Intense is Your Electricity Usage?	Energy	Students investigate how forces can act on objects without contact.
	Scientific Methods	Students investigate evidence and reflect on its role in science.
Activity: Knowing Energy: The Electricity Grid	Energy	Students investigate how forces can act on objects without contact.
	Scientific Methods	Students investigate evidence and reflect on its role in science.
Activity: Knowing Energy: Renewables	Energy	Students investigate how forces can act on objects without contact.
	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: Knowing Energy: The Big Picture	Energy	Students investigate how forces can act on objects without contact.
	Scientific Methods	Students investigate evidence and reflect on its role in science.
Activity: All About the Baseline	**Grade 7-12**	
Activity: Can You Observe How You Conserve?	Energy	Students investigate how forces can act on objects without contact.
	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: Energy Hogs	Energy	Students investigate how forces can act on objects without contact.
	Scientific Methods	Students investigate evidence and reflect on its role in science.
Activity: Extra Energy Investigation	Energy	Students investigate how forces can act on objects without contact.
	Scientific Methods	Students investigate evidence and reflect on its role in science.
Activity: How Smart is Your Smart Board?	**Grade 7-12**	
Activity: Imagination Station	Energy	Students investigate how forces can act on objects without contact.
	Scientific Methods	Students investigate evidence and reflect on its role in science.
Activity: Small Appliance Energy Reliance	Energy	Students investigate how forces can act on objects without contact.
	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: Start Me Up!	Energy	Students investigate how forces can act on objects without contact.
	Scientific Methods	Students investigate evidence and reflect on its role in science.
Activity: Take a Look	Energy	Students investigate how forces can act on objects without contact.
	Scientific Methods	Students investigate evidence and reflect on its role in science.
Activity: Total Energy vs. Total Cost	**Grade 7-12**	
Activity: Understanding Energy Efficiency in Your School	**Grade 7-12**	
Activity: Community Walk	Energy	Students investigate how forces can act on objects without contact.
	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: School Energy Audit	**Grade 7-12**	
Activity: Energy Efficient Lighting	Energy	Students investigate how forces can act on objects without contact.
	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: Find the Phantom Load	Energy	Students investigate how forces can act on objects without contact.
	Scientific Methods	Students investigate evidence and reflect on its role in science.

Activity: Home Energy Audit	Energy	Students investigate how forces can act on objects without contact.
	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: Watchers and Seekers	Energy	Students investigate how forces can act on objects without contact.
	Computer Science	Students examine and apply design processes to meet needs.
	Scientific Methods	Students investigate evidence and reflect on its role in science.
Activity: Back to the Future	Energy	Students investigate how forces can act on objects without contact.
	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: Changing Our Ways	Energy	Students investigate how forces can act on objects without contact.
	Scientific Methods	Students investigate evidence and reflect on its role in science.
Activity: Exploring Our Energy Ethics	Energy	Students investigate how forces can act on objects without contact.
	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: Once Upon a Bike	Energy	Students investigate how forces can act on objects without contact.
	Scientific Methods	Students investigate evidence and reflect on its role in science.
Activity: Puzzling Over Energy Issues	Energy	Students investigate how forces can act on objects without contact.
	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: Ride, Roll and Stroll	Energy	Students investigate how forces can act on objects without contact.
	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: Speak for the Trees	**Grade 7-12**	
Activity: Taking the Lead	Energy	Students investigate how forces can act on objects without contact.
	Scientific Methods	Students investigate evidence and reflect on its role in science.

Activity: Walk a Mile	Energy	Students investigate how forces can act on objects without contact.
	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.

Program: Energy Revealed	Grade 5 - Alberta Science Curriculum Connections	

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Activity Name	Organizing Idea	Learning Outcome
Activity: Knowing Energy: Stair Climb	Energy	Students investigate and compare how forces affect living things and objects in water and air.
	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
Activity: Knowing Energy: Tea at Home	Matter	Students investigate the particle model of matter in relation to the physical properties of solids, liquids, and gases.
	Energy	Students investigate and compare how forces affect living things and objects in water and air.
	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
Activity: Knowing Energy: Race to a kWh	Energy	Students investigate and compare how forces affect living things and objects in water and air.
	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
Activity: Knowing Energy: How Intense is Your Electricity Usage?	Energy	Students investigate and compare how forces affect living things and objects in water and air.
	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
Activity: Knowing Energy: The Electricity Grid	Energy	Students investigate and analyze various energy resources.
	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
Activity: Knowing Energy: Renewables	Energy	Students investigate and analyze various energy resources.
	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
Activity: Knowing Energy: The Big Picture	Energy	Students investigate and analyze various energy resources.
	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
Activity: All About the Baseline	**Grade 7-12**	
Activity: Can You Observe How You Can Conserve?	Energy	Students investigate and analyze various energy resources.
	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
Activity: Energy Hogs	Energy	Students investigate and analyze various energy resources.
	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.

Activity: Extra Energy Investigation	Energy	Students investigate and analyze various energy resources.
	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
Activity: How Smart is Your Smart Board?	**Grade 7-12**	
Activity: Imagination Station	Energy	Students investigate and analyze various energy resources.
	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
Activity: Small Appliance Energy Reliance	Energy	Students investigate and analyze various energy resources.
	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
Activity: Start Me Up!	Energy	Students investigate and analyze various energy resources.
	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
Activity: Take a Look	Energy	Students investigate and analyze various energy resources.
	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
Activity: Total Energy vs. Total Cost	**Grade 7-12**	
Activity: Understanding Energy Efficiency in Your School	**Grade 7-12**	
Activity: Community Walk	Energy	Students investigate and analyze various energy resources.
	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
Activity: School Energy Audit	**Grade 7-12**	
Activity: Energy Efficient Lighting	Energy	Students investigate and analyze various energy resources.
	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
Activity: Find the Phantom Load	Energy	Students investigate and analyze various energy resources.
	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
Activity: Home Energy Audit	Energy	Students investigate and analyze various energy resources.
	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
Activity: Watchers and Seekers	Energy	Students investigate and analyze various energy resources.
	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: Back to the Future	Energy	Students investigate and analyze various energy resources.
	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
Activity: Changing Our Ways	Energy	Students investigate and analyze various energy resources.
	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
Activity: Exploring Our Energy Ethics	Energy	Students investigate and analyze various energy resources.
	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
Activity: Once Upon a Bike	Energy	Students investigate and analyze various energy resources.
	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
Activity: Puzzling Over Energy Issues	Energy	Students investigate and analyze various energy resources.
	Earth Systems	Students analyze climate and connect it to weather conditions and agricultural practices.
	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
Activity: Ride, Roll and Stroll	Energy	Students investigate and analyze various energy resources.
	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
Activity: Speak for the Trees	**Grade 7-12**	
Activity: Taking the Lead	Energy	Students investigate and analyze various energy resources.
	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
Activity: Walk a Mile	Energy	Students investigate and analyze various energy resources.
	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.

Program: Energy Revealed	Grade 6 - Alberta Science Curriculum Connections	

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Activity Name	Organizing Idea	Learning Outcome
Activity: Knowing Energy: Stair Climb	Energy	Students analyze forces and relate them to interactions between objects.
	Scientific Methods	Students investigate and describe the role of explanation in science.
Activity: Knowing Energy: Tea at Home	Matter	Students investigate how particles of matter behave when heated or cooled and analyze effects on solids, liquids, and gases.
	Energy	Students analyze forces and relate them to interactions between objects.
	Scientific Methods	Students investigate and describe the role of explanation in science.
Activity: Knowing Energy: Race to a kWh	Energy	Students analyze forces and relate them to interactions between objects.
	Scientific Methods	Students investigate and describe the role of explanation in science.
Activity: Knowing Energy: How Intense is Your Electricity Usage?	Energy	Students analyze forces and relate them to interactions between objects.
	Scientific Methods	Students investigate and describe the role of explanation in science.
Activity: Knowing Energy: The Electricity Grid	Energy	Students investigate energy resources and explain factors that influence their use.
	Scientific Methods	Students investigate and describe the role of explanation in science.
Activity: Knowing Energy: Renewables	Energy	Students investigate energy resources and explain factors that influence their use.
	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: Knowing Energy: The Big Picture	Energy	Students investigate energy resources and explain factors that influence their use.
	Scientific Methods	Students investigate and describe the role of explanation in science.
Activity: All About the Baseline	**Grade 7-12**	
Activity: Can You Observe How You Can Conserve?	Energy	Students investigate energy resources and explain factors that influence their use.
	Scientific Methods	Students investigate and describe the role of explanation in science.

Activity: Energy Hogs	Energy	Students investigate energy resources and explain factors that influence their use.
	Scientific Methods	Students investigate and describe the role of explanation in science.
Activity: Extra Energy Investigation	Energy	Students investigate energy resources and explain factors that influence their use.
	Scientific Methods	Students investigate and describe the role of explanation in science.
Activity: How Smart is Your Smart Board?	**Grade 7-12**	
Activity: Imagination Station	Energy	Students investigate energy resources and explain factors that influence their use.
	Scientific Methods	Students investigate and describe the role of explanation in science.
Activity: Small Appliance Energy Reliance	Energy	Students investigate energy resources and explain factors that influence their use.
	Scientific Methods	Students investigate and describe the role of explanation in science.
Activity: Start Me Up!	Energy	Students investigate energy resources and explain factors that influence their use.
	Scientific Methods	Students investigate and describe the role of explanation in science.
Activity: Take a Look	Energy	Students investigate energy resources and explain factors that influence their use.
	Scientific Methods	Students investigate and describe the role of explanation in science.
Activity: Total Energy vs. Total Cost	**Grade 7-12**	
Activity: Understanding Energy Efficiency in Your School	**Grade 7-12**	
Activity: Community Walk	Energy	Students investigate energy resources and explain factors that influence their use.
	Scientific Methods	Students investigate and describe the role of explanation in science.
Activity: School Energy Audit	**Grade 7-12**	
Activity: Energy Efficient Lighting	Energy	Students investigate energy resources and explain factors that influence their use.
	Scientific Methods	Students investigate and describe the role of explanation in science.
Activity: Find the Phantom Load	Energy	Students investigate energy resources and explain factors that influence their use.
	Scientific Methods	Students investigate and describe the role of explanation in science.
Activity: Home Energy Audit	Energy	Students investigate energy resources and explain factors that influence their use.
	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: Watchers and Seekers	Energy	Students investigate energy resources and explain factors that influence their use.
	Computer Science	Students examine abstraction in relation to design and coding and describe impacts of technologies.
	Scientific Methods	Students investigate and describe the role of explanation in science.
Activity: Back to the Future	Energy	Students investigate energy resources and explain factors that influence their use.
	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: Changing Our Ways	Energy	Students investigate energy resources and explain factors that influence their use.
	Scientific Methods	Students investigate and describe the role of explanation in science.
Activity: Exploring Our Energy Ethics	Energy	Students investigate energy resources and explain factors that influence their use.
	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: Once Upon a Bike	Energy	Students investigate energy resources and explain factors that influence their use.
	Scientific Methods	Students investigate and describe the role of explanation in science.
Activity: Puzzling Over Energy Issues	Energy	Students investigate energy resources and explain factors that influence their use.
	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: Ride, Roll and Stroll	Energy	Students investigate energy resources and explain factors that influence their use.
	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: Speak for the Trees	**Grade 7-12**	
Activity: Taking the Lead	Energy	Students investigate energy resources and explain factors that influence their use.
	Scientific Methods	Students investigate and describe the role of explanation in science.
Activity: Walk a Mile	Energy	Students investigate energy resources and explain factors that influence their use.
	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: Energy Revealed

Grade 7 - Alberta Science Curriculum Connections

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Activity Name	Organizing Idea	Learning Outcome
Activity: Knowing Energy: Stair Climb	Heat and Temperature	Describe the nature of thermal energy and its effects on different forms of matter, using informal observations, experimental evidence and models
		Apply an understanding of heat and temperature in interpreting natural phenomena and technological devices
	Structures and Forces	Investigate and analyze forces within structures, and forces applied to them
		Investigate and analyze the properties of materials used in structures
Activity: Knowing Energy: Tea at Home	Heat and Temperature	Describe the nature of thermal energy and its effects on different forms of matter, using informal observations, experimental evidence and models
		Apply an understanding of heat and temperature in interpreting natural phenomena and technological devices
	Structures and Forces	Investigate and analyze forces within structures, and forces applied to them
		Investigate and analyze the properties of materials used in structures
Activity: Knowing Energy: Race to a kWh	Structures and Forces	Investigate and analyze forces within structures, and forces applied to them
		Investigate and analyze the properties of materials used in structures
Activity: Knowing Energy: How Intense is Your Electricity Usage?	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
		Apply an understanding of heat and temperature in interpreting natural phenomena and technological devices
		Analyze issues related to the selection and use of thermal technologies, and explain decisions in terms of advantages and disadvantages for sustainability
	Structures and Forces	Investigate and analyze forces within structures, and forces applied to them
		Investigate and analyze the properties of materials used in structures

Activity: Knowing Energy: The Electricity Grid	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
		Apply an understanding of heat and temperature in interpreting natural phenomena and technological devices
		Analyze issues related to the selection and use of thermal technologies, and explain decisions in terms of advantages and disadvantages for sustainability
	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 forces within structures, and forces applied to them
		Investigate and analyze the properties of materials used in structures
Activity: Knowing Energy: Renewables	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
		Apply an understanding of heat and temperature in interpreting natural phenomena and technological devices
		Analyze issues related to the selection and use of thermal technologies, and explain decisions in terms of advantages and disadvantages for sustainability
	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
		Describe the relationships among knowledge, decisions and actions in maintaining life-supporting environments
	Structures and Forces	Demonstrate and describe processes used in developing, evaluating and improving structures that will meet human needs with a margin of safety
Activity: Knowing Energy: The Big Picture	Structures and Forces	Investigate and analyze forces within structures, and forces applied to them
		Investigate and analyze the properties of materials used in structures

Activity: All About the Baseline	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
		Apply an understanding of heat and temperature in interpreting natural phenomena and technological devices
		Analyze issues related to the selection and use of thermal technologies, and explain decisions in terms of advantages and disadvantages for sustainability
	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 forces within structures, and forces applied to them
		Investigate and analyze the properties of materials used in structures
Activity: Can You Observe How You Conserve?	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
		Apply an understanding of heat and temperature in interpreting natural phenomena and technological devices
	Structures and Forces	Investigate and analyze forces within structures, and forces applied to them
		Investigate and analyze the properties of materials used in structures
Activity: Energy Hogs	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
		Apply an understanding of heat and temperature in interpreting natural phenomena and technological devices
		Analyze issues related to the selection and use of thermal technologies, and explain decisions in terms of advantages and disadvantages for sustainability
	Structures and Forces	Investigate and analyze forces within structures, and forces applied to them
		Investigate and analyze the properties of materials used in structures

Activity: Extra Energy Investigation	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
		Apply an understanding of heat and temperature in interpreting natural phenomena and technological devices
	Structures and Forces	Investigate and analyze forces within structures, and forces applied to them
		Investigate and analyze the properties of materials used in structures
Activity: How Smart is Your Smart Board?	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
		Apply an understanding of heat and temperature in interpreting natural phenomena and technological devices
	Structures and Forces	Investigate and analyze forces within structures, and forces applied to them
		Investigate and analyze the properties of materials used in structures
Activity: Imagination Station	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
		Apply an understanding of heat and temperature in interpreting natural phenomena and technological devices
		Analyze issues related to the selection and use of thermal technologies, and explain decisions in terms of advantages and disadvantages for sustainability
	Structures and Forces	Investigate and analyze forces within structures, and forces applied to them
		Investigate and analyze the properties of materials used in structures

[Activity: Small Appliance Energy Reliance]	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
	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
		Apply an understanding of heat and temperature in interpreting natural phenomena and technological devices
	Structures and Forces	Investigate and analyze forces within structures, and forces applied to them
		Investigate and analyze the properties of materials used in structures
[Activity: Start Me Up!]	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
		Apply an understanding of heat and temperature in interpreting natural phenomena and technological devices
		Analyze issues related to the selection and use of thermal technologies, and explain decisions in terms of advantages and disadvantages for sustainability
	Structures and Forces	Investigate and analyze forces within structures, and forces applied to them
		Investigate and analyze the properties of materials used in structures
[Activity: Take a Look]	**Grade 4-6**	
[Activity: Total Energy vs. Total Cost]	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
	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
		Apply an understanding of heat and temperature in interpreting natural phenomena and technological devices
	Structures and Forces	Investigate and analyze forces within structures, and forces applied to them
		Investigate and analyze the properties of materials used in structures

Activity: Understanding Energy Efficiency in Your School	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
		Apply an understanding of heat and temperature in interpreting natural phenomena and technological devices
	Structures and Forces	Investigate and analyze forces within structures, and forces applied to them
		Investigate and analyze the properties of materials used in structures
Activity: Community Walk	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
	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
		Apply an understanding of heat and temperature in interpreting natural phenomena and technological devices
	Structures and Forces	Investigate and analyze forces within structures, and forces applied to them
		Investigate and analyze the properties of materials used in structures
Activity: School Energy Audit	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
		Apply an understanding of heat and temperature in interpreting natural phenomena and technological devices
	Structures and Forces	Investigate and analyze forces within structures, and forces applied to them
		Investigate and analyze the properties of materials used in structures

Activity: Energy Efficient Lighting	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
	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
		Apply an understanding of heat and temperature in interpreting natural phenomena and technological devices
	Structures and Forces	Investigate and analyze forces within structures, and forces applied to them
		Investigate and analyze the properties of materials used in structures
Activity: Find the Phantom Load	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
		Apply an understanding of heat and temperature in interpreting natural phenomena and technological devices
	Structures and Forces	Investigate and analyze forces within structures, and forces applied to them
		Investigate and analyze the properties of materials used in structures
Activity: Home Energy Audit	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
		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
		Apply an understanding of heat and temperature in interpreting natural phenomena and technological devices
	Structures and Forces	Investigate and analyze forces within structures, and forces applied to them
		Investigate and analyze the properties of materials used in structures

Activity: Watchers and Seekers	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
		Apply an understanding of heat and temperature in interpreting natural phenomena and technological devices
	Structures and Forces	Investigate and analyze forces within structures, and forces applied to them
		Investigate and analyze the properties of materials used in structures
Activity: Back to the Future	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
	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
		Apply an understanding of heat and temperature in interpreting natural phenomena and technological devices
	Structures and Forces	Investigate and analyze forces within structures, and forces applied to them
		Investigate and analyze the properties of materials used in structures
Activity: Changing Our Ways	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
		Apply an understanding of heat and temperature in interpreting natural phenomena and technological devices
	Structures and Forces	Investigate and analyze forces within structures, and forces applied to them
		Investigate and analyze the properties of materials used in structures

Activity: Exploring Our Energy Ethics	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
		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
		Apply an understanding of heat and temperature in interpreting natural phenomena and technological devices
	Structures and Forces	Investigate and analyze forces within structures, and forces applied to them
		Investigate and analyze the properties of materials used in structures
Activity: Once Upon a Bike	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
	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
		Apply an understanding of heat and temperature in interpreting natural phenomena and technological devices
	Structures and Forces	Investigate and analyze forces within structures, and forces applied to them
		Investigate and analyze the properties of materials used in structures

Activity: Puzzling Over Energy Issues	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
		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
		Apply an understanding of heat and temperature in interpreting natural phenomena and technological devices
	Structures and Forces	Investigate and analyze forces within structures, and forces applied to them
		Investigate and analyze the properties of materials used in structures
Activity: Ride, Roll and Stroll	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
	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
		Apply an understanding of heat and temperature in interpreting natural phenomena and technological devices
	Structures and Forces	Investigate and analyze forces within structures, and forces applied to them
		Investigate and analyze the properties of materials used in structures

Activity: Speak for the Trees	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
		Describe the relationships among knowledge, decisions and actions in maintaining life-supporting environments
	Plants for Food and Fibre	Analyze plant environments, and identify impacts of specific factors and controls
		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
Activity: Taking the Lead	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
	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
		Apply an understanding of heat and temperature in interpreting natural phenomena and technological devices
	Structures and Forces	Investigate and analyze forces within structures, and forces applied to them
		Investigate and analyze the properties of materials used in structures

Activity: Walk a Mile	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
	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
		Apply an understanding of heat and temperature in interpreting natural phenomena and technological devices
	Structures and Forces	Investigate and analyze forces within structures, and forces applied to them
		Investigate and analyze the properties of materials used in structures