Grade 3 - Alberta Science Curriculum Connections



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Activity Name	Organizing Idea	Learning Outcome
Activity of the anning Engage of the Climb	Energy	Students investigate and explain how forces affect the movement of objects
Activity: Knowing Energy: Stair Climb	Scientific Methods	Students relate investigation to building knowledge.
	Matter	Students investigate and analyze how materials have the potential to be changed.
Activity: Knowing Energy: Tea at Home	Energy	Students investigate and explain how forces affect the movement of objects
	Scientific Methods	Students relate investigation to building knowledge.
Activity: Knowing Energy: Race to a kWh	Energy	Students investigate and explain how forces affect the movement of objects
Activity. Knowing Energy. Race to a KWII	Scientific Methods	Students relate investigation to building knowledge.
Activity: Knowing Energy: How Intense is Your Floatricity Usage?	Energy	Students investigate and explain how forces affect the movement of objects
Activity: Knowing Energy: How Intense is Your Electricity Usage?	Scientific Methods	Students relate investigation to building knowledge.
Activity: Knowing Energy: The Flectricity Grid	Energy	Students investigate and explain how forces affect the movement of objects
Activity: Knowing Energy: The Electricity Grid	Scientific Methods	Students relate investigation to building knowledge.
Activity: Knowing Energy: Penewables	Energy	Students investigate and explain how forces affect the movement of objects
<u>Activity: Knowing Energy: Renewables</u>	Scientific Methods	Students relate investigation to building knowledge.
Activity: Vnowing Energy: The Pig Dicture	Energy	Students investigate and explain how forces affect the movement of objects
Activity: Knowing Energy: The Big Picture	Scientific Methods	Students relate investigation to building knowledge.
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	Energy	Students investigate and explain how forces affect the movement of objects
Activity. Home Energy Addit	Scientific Methods	Students relate investigation to building knowledge.
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	

Grade 4 - Alberta Science Curriculum Connections



Activity Name	Organizing Idea	Learning Outcome
	Energy	Students investigate how forces can act on objects without contact.
Activity: Knowing Energy: Stair Climb	Scientific Methods	Students investigate evidence and reflect on its role in science.
Activity: Knowing Energy: Top at Home	Energy	Students investigate how forces can act on objects without contact.
Activity: Knowing Energy: Tea at Home	Scientific Methods	Students investigate evidence and reflect on its role in science.
Activity: Knowing Energy: Pace to a kWh	Energy	Students investigate how forces can act on objects without contact.
Activity: Knowing Energy: Race to a kWh	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.
Activity. Knowing Energy. How interise is four Electricity Osage:	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.
Activity: Knowing Energy: The Electricity Grid	Scientific Methods	Students investigate evidence and reflect on its role in science.
	Energy	Students investigate how forces can act on objects without contact.
Activity: Knowing Energy: Renewables	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 Rig Dicture	Energy	Students investigate how forces can act on objects without contact.
Activity: Knowing Energy: The Big Picture	Scientific Methods	Students investigate evidence and reflect on its role in science.
Activity: All About the Baseline	Grade 7-12	
	Energy	Students investigate how forces can act on objects without contact.
Activity: Can You Observe How You Conserve?	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.
A stinitus Fatus Forest languages in the stine of	Energy	Students investigate how forces can act on objects without contact.
Activity: Extra Energy Investigation	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.
Activity: Imagination Station	Scientific Methods	Students investigate evidence and reflect on its role in science.
	Energy	Students investigate how forces can act on objects without contact.
Activity: Small Appliance Energy Reliance	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 Mollel	Energy	Students investigate how forces can act on objects without contact.
Activity: Start Me Up!	Scientific Methods	Students investigate evidence and reflect on its role in science.
Activity: Tako a Look	Energy	Students investigate how forces can act on objects without contact.
Activity: Take a Look	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	
	Energy	Students investigate how forces can act on objects without contact.
Activity: Community Walk	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 Phantem Lead	Energy	Students investigate how forces can act on objects without contact.
Activity: Find the Phantom Load	Scientific Methods	Students investigate evidence and reflect on its role in science.
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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.
	Energy	Students investigate how forces can act on objects without contact.
Activity: Watchers and Seekers	Computer Science	Students examine and apply design processes to meet needs.
	Scientific Methods	Students investigate evidence and reflect on its role in science.
	Energy	Students investigate how forces can act on objects without contact.
Activity: Back to the Future	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.
Activity: Changing Our Ways	Scientific Methods	Students investigate evidence and reflect on its role in science.
	Energy	Students investigate how forces can act on objects without contact.
Activity: Exploring Our Energy Ethics	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: Onco Unon a Piko	Energy	Students investigate how forces can act on objects without contact.
Activity: Once Upon a Bike	Scientific Methods	Students investigate evidence and reflect on its role in science.
	Energy	Students investigate how forces can act on objects without contact.
Activity: Puzzling Over Energy Issues	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.
	Energy	Students investigate how forces can act on objects without contact.
Activity: Ride, Roll and Stroll	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.
Activity: Taking the Lead	Scientific Methods	Students investigate evidence and reflect on its role in science.

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

Grade 5 - Alberta Science Curriculum Connections



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.
Activity: Knowing Energy: Stair Climb	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
	Matter	Students investigate the particle model of matter in relation to the physical properties of solids, liquids, and gases.
Activity: Knowing Energy: Tea at Home	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: Pace to a kWh	Energy	Students investigate and compare how forces affect living things and objects in water and air.
Activity: Knowing Energy: Race to a kWh	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
Activity: Knowing Energy: How Intense is Your Floatricity Usage?	Energy	Students investigate and compare how forces affect living things and objects in water and air.
<u>Activity: Knowing Energy: How Intense is Your Electricity Usage?</u>	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.
Activity. Knowing Energy. The Electricity Grid	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.
Activity. Knowing Energy. Renewables	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
Activity: Knowing Energy: The Pig Dicture	Energy	Students investigate and analyze various energy resources.
<u>Activity: Knowing Energy: The Big Picture</u>	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 Consorve?	Energy	Students investigate and analyze various energy resources.
Activity: Can You Observe How You Can Conserve?	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.
Activity: Energy Hogs	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.
ACTIVITY. EXTIA ETIET BY TITVESTIGATION	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.
Activity: Imagination Station	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
Activity: Small Appliance Energy Poliance	Energy	Students investigate and analyze various energy resources.
<u>Activity: Small Appliance Energy Reliance</u>	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
Activity: Start Mo Uni	Energy	Students investigate and analyze various energy resources.
Activity: Start Me Up!	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.
Activity: Take a Look	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.
Activity: Community Walk	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.
Activity: Energy Efficient Lighting	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.
Activity: Find the Phantom Load	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.
Activity: Home Energy Audit	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
	Energy	Students investigate and analyze various energy resources.
Activity: Watchers and Seekers	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.
Activity: Changing Our Ways	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
Activity Evaloring Our Engrav Ethics	Energy	Students investigate and analyze various energy resources.
Activity: Exploring Our Energy Ethics	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
Activity Open Upon a Bile	Energy	Students investigate and analyze various energy resources.
Activity: Once Upon a Bike	Scientific Methods	Students investigate how evidence is gathered and explain the importance of ethics in science.
	Energy	Students investigate and analyze various energy resources.
Activity: Puzzling Over Energy Issues	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 a Dide Dell and Strell	Energy	Students investigate and analyze various energy resources.
Activity: Ride, Roll and Stroll	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.

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.
Activity: Knowing Energy: Stair Climb	Scientific Methods	Students investigate and describe the role of explanation in science.
	Matter	Students investigate how particles of matter behave when heated or cooled and analyze effects on solids, liquids, and gases.
Activity: Knowing Energy: Tea at Home	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 Engrav Paco to a kWh	Energy	Students analyze forces and relate them to interactions between objects.
Activity: Knowing Energy: Race to a kWh	Scientific Methods	Students investigate and describe the role of explanation in science.
Activity / Knowing Engrave How Intongo is Vous Floatvicity Hango?	Energy	Students analyze forces and relate them to interactions between objects.
Activity: Knowing Energy: How Intense is Your Electricity Usage?	Scientific Methods	Students investigate and describe the role of explanation in science.
Activity: Knowing Engrave The Floctricity Crid	Energy	Students investigate energy resources and explain factors that influence their use.
Activity: Knowing Energy: The Electricity Grid	Scientific Methods	Students investigate and describe the role of explanation in science.
	Energy	Students investigate energy resources and explain factors that influence their use.
Activity: Knowing Energy: Renewables	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 / Vnewing Energy The Dig Digture	Energy	Students investigate energy resources and explain factors that influence their use.
<u>ctivity: Knowing Energy: The Big Picture</u>	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 Hegs	Energy	Students investigate energy resources and explain factors that influence their use.
Activity: Energy Hogs	Scientific Methods	Students investigate and describe the role of explanation in science.
	Energy	Students investigate energy resources and explain factors that influence their use.
Activity: Extra Energy Investigation	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.
Activity: Imagination Station	Scientific Methods	Students investigate and describe the role of explanation in science.
Activity: Small Appliance Energy Poliance	Energy	Students investigate energy resources and explain factors that influence their use.
Activity: Small Appliance Energy Reliance	Scientific Methods	Students investigate and describe the role of explanation in science.
Activity: Start Mo Hal	Energy	Students investigate energy resources and explain factors that influence their use.
Activity: Start Me Up!	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.
Activity: Take a Look	Scientific Methods	Students investigate and describe the role of explanation in science.
Activity: Total Energy vs. Total Cost	Grade 7-12	
Activity: Total Energy vs. Total Cost Activity: Understanding Energy Efficiency in Your School	Grade 7-12 Grade 7-12	
Activity: Understanding Energy Efficiency in Your School		Students investigate energy resources and explain factors that influence their use.
	Grade 7-12	Students investigate energy resources and explain factors that influence their use. Students investigate and describe the role of explanation in science.
Activity: Understanding Energy Efficiency in Your School	Grade 7-12 Energy	
Activity: Understanding Energy Efficiency in Your School Activity: Community Walk Activity: School Energy Audit	Grade 7-12 Energy Scientific Methods	
Activity: Understanding Energy Efficiency in Your School Activity: Community Walk	Grade 7-12 Energy Scientific Methods Grade 7-12	Students investigate and describe the role of explanation in science.
Activity: Understanding Energy Efficiency in Your School Activity: Community Walk Activity: School Energy Audit Activity: Energy Efficient Lighting	Grade 7-12 Energy Scientific Methods Grade 7-12 Energy	Students investigate and describe the role of explanation in science. Students investigate energy resources and explain factors that influence their use.
Activity: Understanding Energy Efficiency in Your School Activity: Community Walk Activity: School Energy Audit	Grade 7-12 Energy Scientific Methods Grade 7-12 Energy Scientific Methods	Students investigate and describe the role of explanation in science. Students investigate energy resources and explain factors that influence their use. Students investigate and describe the role of explanation in science.
Activity: Understanding Energy Efficiency in Your School Activity: Community Walk Activity: School Energy Audit Activity: Energy Efficient Lighting	Grade 7-12 Energy Scientific Methods Grade 7-12 Energy Scientific Methods Energy	Students investigate and describe the role of explanation in science. Students investigate energy resources and explain factors that influence their use. Students investigate and describe the role of explanation in science. Students investigate energy resources and explain factors that influence their use.
Activity: Understanding Energy Efficiency in Your School Activity: Community Walk Activity: School Energy Audit Activity: Energy Efficient Lighting	Grade 7-12 Energy Scientific Methods Grade 7-12 Energy Scientific Methods Energy Scientific Methods	Students investigate and describe the role of explanation in science. Students investigate energy resources and explain factors that influence their use. Students investigate and describe the role of explanation in science. Students investigate energy resources and explain factors that influence their use. Students investigate and describe the role of explanation in science.
Activity: Understanding Energy Efficiency in Your School Activity: Community Walk Activity: School Energy Audit Activity: Energy Efficient Lighting Activity: Find the Phantom Load	Grade 7-12 Energy Scientific Methods Grade 7-12 Energy Scientific Methods Energy Scientific Methods Energy Scientific Methods Energy	Students investigate and describe the role of explanation in science. Students investigate energy resources and explain factors that influence their use. Students investigate and describe the role of explanation in science. Students investigate energy resources and explain factors that influence their use. Students investigate and describe the role of explanation in science. Students investigate and describe the role of explanation in science. Students investigate energy resources and explain factors that influence their use.

	Energy	Students investigate energy resources and explain factors that influence their use.
Activity: Watchers and Seekers	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.
	Energy	Students investigate energy resources and explain factors that influence their use.
Activity: Back to the Future	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 Mays	Energy	Students investigate energy resources and explain factors that influence their use.
Activity: Changing Our Ways	Scientific Methods	Students investigate and describe the role of explanation in science.
	Energy	Students investigate energy resources and explain factors that influence their use.
Activity: Exploring Our Energy Ethics	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: Onco Unon a Piko	Energy	Students investigate energy resources and explain factors that influence their use.
Activity: Once Upon a Bike	Scientific Methods	Students investigate and describe the role of explanation in science.
	Energy	Students investigate energy resources and explain factors that influence their use.
Activity: Puzzling Over Energy Issues	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.
	Energy	Students investigate energy resources and explain factors that influence their use.
Activity: Ride, Roll and Stroll	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.
Activity: Taking the Lead	Scientific Methods	Students investigate and describe the role of explanation in science.
	Energy	Students investigate energy resources and explain factors that influence their use.
Activity: Walk a Mile	Earth Systems	Students investigate climate, changes in climate, and the impact of climate change on Earth.

Grade 7 - Alberta Science Curriculum Connections



Activity Name	Organizing Idea	Learning Outcome
	Heat and Temperature	Describe the nature of thermal energy and its effects on different forms of matter, using informal observations, experimental evidence and models
Activity: Knowing Energy: Stair Climb		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
	Structures and Forces	Investigate and analyze the properties of materials used in structures
	Heat and Temperature	Describe the nature of thermal energy and its effects on different forms of matter, using informal observations, experimental evidence and models
Activity: Knowing Energy: Tea at Home		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: Pace to a kWh	Structures and Forces	Investigate and analyze forces within structures, and forces applied to them
Activity: Knowing Energy: Race to a kWh		Investigate and analyze the properties of materials used in structures
	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
Activity: Knowing Energy: How Intense is Your Electricity Usage?		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
	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
Activity: Knowing Energy: Renewables	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

	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
Activity: All About the Baseline		Analyze issues related to the selection and use of thermal technologies, and explain decisions in terms of advantages and disadvantages for sustainability
		Describe and interpret different types of structures encountered in everyday objects, buildings, plants and animals; and identify materials from which they are made
	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: 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
The state of the s		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
	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
Activity: Energy Hogs		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
St		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
<u>Necrytey. Extra Error Sy mivestigation</u>		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
	Structures and Forces	Investigate and analyze the properties of materials used in structures
	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
Activity: How Smart is Your Smart Board?		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

	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
Activity: Small Appliance Energy Reliance		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
	Structures and Forces	Investigate and analyze the properties of materials used in structures
		Illustrate and explain how human needs have led to technologies for obtaining and controlling thermal energy and to increased use of energy resources
	Heat and Temperature	Apply an understanding of heat and temperature in interpreting natural phenomena and technological devices
Activity: Start Me Up!		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	
	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
Activity: Total Energy vs. Total Cost	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
	Christian and Fares	Investigate and analyze forces within structures, and forces applied to them
	Structures and Forces	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
<u> </u>		Apply an understanding of heat and temperature in interpreting natural phenomena and technological devices
	Character was a seed Fources	Investigate and analyze forces within structures, and forces applied to them
	Structures and Forces	Investigate and analyze the properties of materials used in structures
	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
Activity: Community Walk	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
	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
Activity: School Energy Audit		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

	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
Activity: Energy Efficient Lighting		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
	Structures and Forces	Investigate and analyze the properties of materials used in structures
	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
Activity: Find the Phantom Load		Describe the nature of thermal energy and its effects on different forms of matter, using informal observations, experimental evidence and models
Activity: Title the Filantoni Load		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
	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
Activity: Home Energy Audit		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
recivity. Wateriers and seekers		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
	Structures and Forces	Investigate and analyze the properties of materials used in structures
	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
Activity: Back to the Future	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

	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
Activity: Exploring Our Energy Ethics	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
	Structures and Forces	Investigate and analyze the properties of materials used in structures
	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
Activity: Once Upon a Bike	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

	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
Activity: Puzzling Over Energy Issues		Illustrate and explain how human needs have led to technologies for obtaining and controlling thermal energy and to increased use of energy resources
	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
	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

	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
Activity: Speak for the Trees		Analyze plant environments, and identify impacts of specific factors and controls
	Plants for Food and Fibre	Identify and interpret relationships among human needs, technologies, environments, and the culture and use of living things as sources of food and fibre
	Planet Earth	Describe and demonstrate methods used in the scientific study of Earth and in observing and interpreting its component materials
	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
Activity: Taking the Lead	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

	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

Grade 8 - Alberta Science Curriculum Connections



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Activity Name	Organizing Idea	Learning Outcome
	Mechanical Systems	Analyze machines by describing the structures and functions of the overall system, the subsystems and the component parts
Activity: Knowing Energy: Stair Climb		Investigate and describe the transmission of force and energy between parts of a mechanical system
		Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices
	Mix and Flow of Matter	Investigate and describe fluids used in technological devices and everyday materials
	IVIIX and Flow of Matter	Identify, interpret and apply technologies based on properties of fluids
Activity: Knowing Energy: Tea at Home	Mechanical Systems	Analyze machines by describing the structures and functions of the overall system, the subsystems and the component parts
		Investigate and describe the transmission of force and energy between parts of a mechanical system
		Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices
	Mechanical Systems	Analyze machines by describing the structures and functions of the overall system, the subsystems and the component parts
Activity: Knowing Energy: Race to a kWh		Investigate and describe the transmission of force and energy between parts of a mechanical system
		Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices
Activity: Knowing Energy: How Intense is Your Electricity Usage?	Mechanical Systems	Analyze machines by describing the structures and functions of the overall system, the subsystems and the component parts
		Investigate and describe the transmission of force and energy between parts of a mechanical system
		Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices

Activity: Knowing Energy: The Electricity Grid	Mechanical Systems	Analyze machines by describing the structures and functions of the overall system, the subsystems and the component parts
		Investigate and describe the transmission of force and energy between parts of a mechanical system
		Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices
	Mechanical Systems	Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time
Activity: Knowing Energy: Renewables		Analyze machines by describing the structures and functions of the overall system, the subsystems and the component parts
		Investigate and describe the transmission of force and energy between parts of a mechanical system
		Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices
	Mechanical Systems	Analyze machines by describing the structures and functions of the overall system, the subsystems and the component parts
Activity: Knowing Energy: The Big Picture		Investigate and describe the transmission of force and energy between parts of a mechanical system
		Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices
	Mechanical Systems	Analyze machines by describing the structures and functions of the overall system, the subsystems and the component parts
Activity: All About the Baseline		Investigate and describe the transmission of force and energy between parts of a mechanical system
		Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices
Activity: Can You Observe How You Conserve?	Mechanical Systems	Analyze machines by describing the structures and functions of the overall system, the subsystems and the component parts
		Investigate and describe the transmission of force and energy between parts of a mechanical system
		Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices

Mechanical Systems	Analyze machines by describing the structures and functions of the overall system, the subsystems and the component parts
	Investigate and describe the transmission of force and energy between parts of a mechanical system
	Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices
	Investigate and describe the transmission of force and energy between parts of a mechanical system
Mechanical Systems	Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices
	Investigate and describe the transmission of force and energy between parts of a mechanical system
Mechanical Systems	Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices
	Investigate and describe the transmission of force and energy between parts of a mechanical system
Mechanical Systems	Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices
Mechanical Systems	Investigate and describe the transmission of force and energy between parts of a mechanical system
	Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices
Mechanical Systems	Investigate and describe the transmission of force and energy between parts of a mechanical system
	Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices
Grade 4-6	
Mechanical Systems	Investigate and describe the transmission of force and energy between parts of a mechanical system
	Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices
	Investigate and describe the transmission of force and energy between parts of a mechanical system
Mechanical Systems	Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices
	Mechanical Systems Mechanical Systems Mechanical Systems Mechanical Systems Grade 4-6 Mechanical Systems

Activity: School Energy Audit Activity: Back to the Phantom Load Activity: Watchers and Seekers Activity: Watchers and Seekers Activity: Watchers and Seekers Activity: Back to the Future Activity: Back to the Future Activity: Back to the Future Activity: Changing Our Ways Activity: Changing Our Energy Ethics Grade 4-7 Activity: Changing Our Energy Ethics Grade 4-7 Activity: Puzzling Over Energy Issues Activity: Speak for the Trees Cells and Systems Activity: Speak for the Trees Activity: Aback to the Trees Activity: Speak for the Trees Activity: Aback to the Trees Activity: Speak for the Trees Activity: Aback to the Trees Activity: Aback to the Trees Activity: Aback to the Future Activity: Speak for the Trees Activity: Speak for the Trees Activity: Aback to the Future Activity: Speak for the Trees Activity: Speak for the Trees Activity: Aback to the Trees Activity: Aback to the Future A			Investigate and describe the transmission of force and energy between parts of a mechanical system
Activity. Energy Efficient Lighting Activity. Energy Efficient Lighting Activity. Find the Phantom Load Mechanical Systems	Activity: Community Walk	Mechanical Systems	
Activity: Find the Phantom Load Mechanical Systems Investigate and describe the transmission of force and energy between parts of a mechanical system Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices Activity: Back to the Fitture Grade 4-7 Activity: Exploring Our Energy Ethics Activity: Exploring Our Energy Ethics Grade 4-7 Activity: Puzziling Over Energy Issues Grade 4-7 Activity: Puzziling Over Energy Issues Grade 4-7 Calls and Systems Investigate Inving things; and identify and apply scientific ideas used to interpret their general structure, function and organization Mechanical Systems Investigate and describe the transmission of force and energy between parts of a mechanical system Mechanical Systems Mechanical Systems Mechanical Systems Mechanical Systems Mechanical Systems Mechanical Systems Investigate and describe t			Investigate and describe the transmission of force and energy between parts of a mechanical system
Investigate and describe the transmission of force and energy between parts of a mechanical system Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices Investigate and describe the transmission of force and energy between parts of a mechanical system Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices Investigate and describe the transmission of force and energy between parts of a mechanical system Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices Investigate and describe the transmission of force and energy between parts of a mechanical system Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices Investigate and describe the transmission of force and energy between parts of a mechanical system Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices Analyze the social and environmental contexts of science and technology, as they apply to the development of organization	Activity: School Energy Audit	Mechanical Systems	
Activity: Find the Phantom Load Mechanical Systems Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices Investigate and describe the transmission of force and energy between parts of a mechanical system Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices Investigate and describe the transmission of force and energy between parts of a mechanical system Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices Investigate and describe the transmission of force and energy between parts of a mechanical system Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices 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 Cells and Systems Investigate living things: and identify and apply scientific ideas used to interpret their general structure, function and organization Investigate and describe the transmission of force and energy between parts of a mechanical system Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices	Activity: Energy Efficient Lighting	Grade 4-7	
Activity: Home Energy Audit Mechanical Systems Investigate and describe the transmission of force and energy between parts of a mechanical system Investigate and describe the transmission of force and energy between parts of a mechanical system Investigate and describe the transmission of force and energy between parts of a mechanical system Investigate and describe the transmission of force and energy between parts of a mechanical system Investigate and describe the transmission of force and energy between parts of a mechanical system Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices			Investigate and describe the transmission of force and energy between parts of a mechanical system
Activity: Home Energy Audit Mechanical Systems Investigate and describe the transmission of force and energy between parts of a mechanical system Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices Activity: Back to the Future Activity: Changing Our Ways Grade 4-7 Activity: Exploring Our Energy Ethics Grade 4-7 Activity: Once Upon a Bike Activity: Puzzling Over Energy Issues Activity: Ride, Roll and Stroll Grade 4-7 Activity: Ride, Roll and Stroll Grade 4-7 Activity: Speak for the Trees Mechanical Systems Mechanical Systems Investigate living things; and identify and apply scientific ideas used to interpret their general structure, function and organization Investigate and describe the transmission of force and energy between parts of a mechanical system Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices	Activity: Find the Phantom Load	Mechanical Systems	
Activity: Watchers and Seekers Mechanical Systems Investigate and describe the transmission of force and energy between parts of a mechanical system Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices Activity: Changing Our Ways Grade 4-7 Activity: Duzzling Our Energy Issues Grade 4-7 Activity: Puzzling Over Energy Issues Grade 4-7 Activity: Ride, Roll and Stroll Grade 4-7 Cells and Systems Cells and Systems Investigate living things; and identify and apply scientific ideas used to interpret their general structure, function and organization Investigate and describe the transmission of force and energy between parts of a mechanical system Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices			Investigate and describe the transmission of force and energy between parts of a mechanical system
Activity: Watchers and Seekers Mechanical Systems Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices Activity: Back to the Future Activity: Changing Our Ways Grade 4-7 Activity: Exploring Our Energy Ethics Activity: Once Upon a Bike Activity: Puzzling Over Energy Issues Activity: Ride, Roll and Stroll Cells and Systems Cells and Systems Mechanical Systems Mechanical Systems Mechanical Systems Investigate living things; and identify and apply scientific ideas used to interpret their general structure, function and organization Investigate and describe the transmission of force and energy between parts of a mechanical system Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices	Activity: Home Energy Audit		
Activity: Back to the Future Activity: Changing Our Ways Grade 4-7 Activity: Exploring Our Energy Ethics Activity: Once Upon a Bike Activity: Puzzling Over Energy Issues Activity: Puzzling Over Energy Issues Activity: Ride, Roll and Stroll Activity: Speak for the Trees Mechanical Systems Mechanical Systems Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices			Investigate and describe the transmission of force and energy between parts of a mechanical system
Activity: Changing Our Ways Grade 4-7 Activity: Exploring Our Energy Ethics Activity: Once Upon a Bike Grade 4-7 Activity: Puzzling Over Energy Issues Grade 4-7 Activity: Ride, Roll and Stroll Grade 4-7 Cells and Systems Cells and Systems Investigate living things; and identify and apply scientific ideas used to interpret their general structure, function and organization Activity: Speak for the Trees Mechanical Systems Investigate and describe the transmission of force and energy between parts of a mechanical system Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices	Activity: Watchers and Seekers		
Activity: Exploring Our Energy Ethics Activity: Once Upon a Bike Grade 4-7 Activity: Puzzling Over Energy Issues Activity: Ride, Roll and Stroll Cells and Systems Cells and Systems Investigate living things; and identify and apply scientific ideas used to interpret their general structure, function and organization Investigate and describe the transmission of force and energy between parts of a mechanical system Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices	Activity: Back to the Future	Grade 4-7	
Activity: Once Upon a Bike Activity: Puzzling Over Energy Issues Grade 4-7 Activity: Ride, Roll and Stroll Cells and Systems Cells and Systems Mechanical Systems Mechanical Systems Grade 4-7 Investigate living things; and identify and apply scientific ideas used to interpret their general structure, function and organization Investigate and describe the transmission of force and energy between parts of a mechanical system Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices	Activity: Changing Our Ways	Grade 4-7	
Activity: Puzzling Over Energy Issues Activity: Ride, Roll and Stroll Cells and Systems Cells and Systems Investigate living things; and identify and apply scientific ideas used to interpret their general structure, function and organization Investigate and describe the transmission of force and energy between parts of a mechanical system Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices	Activity: Exploring Our Energy Ethics	Grade 4-7	
Activity: Ride, Roll and Stroll Cells and Systems Cells and Systems Investigate living things; and identify and apply scientific ideas used to interpret their general structure, function and organization Investigate and describe the transmission of force and energy between parts of a mechanical system Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices	Activity: Once Upon a Bike	Grade 4-7	
Activity: Speak for the Trees Cells and Systems Investigate living things; and identify and apply scientific ideas used to interpret their general structure, function and organization	Activity: Puzzling Over Energy Issues	Grade 4-7	
Activity: Speak for the Trees Mechanical Systems Mechanical Systems Investigate and describe the transmission of force and energy between parts of a mechanical system Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices	Activity: Ride, Roll and Stroll	Grade 4-7	
Mechanical Systems Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices		Cells and Systems	
mechanical devices	Activity: Speak for the Trees	Mechanical Systems	Investigate and describe the transmission of force and energy between parts of a mechanical system
Activity: Taking the Lead Grade 4-7	M		
	Activity: Taking the Lead	Grade 4-7	

Activity: Walk a Mile	Grade 4-7	

Grade 9 - Alberta Science Curriculum Connections



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Activity Name	Organizing Idea	Learning Outcome
	Electrical Principles and Technologies	Investigate and interpret the use of devices to convert various forms of energy to electrical energy and electrical energy to other forms of energy
Activity: Knowing Energy: Stair Climb		Describe technologies for transfer and control of electrical energy
		Identify and estimate energy inputs and outputs for example devices and systems, and evaluate the efficiency of energy conversions
	Matter and Chansinal Chans	Investigate materials, and describe them in terms of their physical and chemical properties
	Matter and Chemical Change	Describe and interpret patterns in chemical reactions
Activity: Knowing Energy: Tea at Home	Electrical Principles and Technologies	Investigate and interpret the use of devices to convert various forms of energy to electrical energy and electrical energy to other forms of energy
		Describe technologies for transfer and control of electrical energy
		Identify and estimate energy inputs and outputs for example devices and systems, and evaluate the efficiency of energy conversions
	Electrical Principles and Technologies	Investigate and interpret the use of devices to convert various forms of energy to electrical energy and electrical energy to other forms of energy
Activity: Knowing Energy: Race to a kWh		Describe technologies for transfer and control of electrical energy
		Identify and estimate energy inputs and outputs for example devices and systems, and evaluate the efficiency of energy conversions
Activity: Knowing Energy: How Intense is Your Electricity Usage?	Electrical Principles and Technologies	Investigate and interpret the use of devices to convert various forms of energy to electrical energy and electrical energy to other forms of energy
		Describe technologies for transfer and control of electrical energy
		Identify and estimate energy inputs and outputs for example devices and systems, and evaluate the efficiency of energy conversions

	Electrical Principles and Technologies	Investigate and interpret the use of devices to convert various forms of energy to electrical energy and electrical energy to other forms of energy
Activity: Knowing Energy: The Electricity Grid		Describe technologies for transfer and control of electrical energy
		Identify and estimate energy inputs and outputs for example devices and systems, and evaluate the efficiency of energy conversions
		Investigate and interpret the use of devices to convert various forms of energy to electrical energy and electrical energy to other forms of energy
Activity: Knowing Energy: Renewables	Electrical Principles and	Describe technologies for transfer and control of electrical energy
Activity. Knowing Energy. Renewables	Technologies	Identify and estimate energy inputs and outputs for example devices and systems, and evaluate the efficiency of energy conversions
		Describe and discuss the societal and environmental implications of the use of electrical energy
	Electrical Principles and Technologies	Investigate and interpret the use of devices to convert various forms of energy to electrical energy and electrical energy to other forms of energy
Activity: Knowing Energy: The Big Picture		Describe technologies for transfer and control of electrical energy
		Identify and estimate energy inputs and outputs for example devices and systems, and evaluate the efficiency of energy conversions
Activity: All About the Baseline	Electrical Principles and	Identify and estimate energy inputs and outputs for example devices and systems, and evaluate the efficiency of energy conversions
	Technologies	Describe and discuss the societal and environmental implications of the use of electrical energy
		Investigate and interpret the use of devices to convert various forms of energy to electrical energy and electrical energy to other forms of energy
Activity: Can You Observe How You Conserve?	Electrical Principles and Technologies	Describe technologies for transfer and control of electrical energy
		Identify and estimate energy inputs and outputs for example devices and systems, and evaluate the efficiency of energy conversions
		Investigate and interpret the use of devices to convert various forms of energy to electrical energy and electrical energy to other forms of energy
Activity: Energy Hogs	Electrical Principles and Technologies	Describe technologies for transfer and control of electrical energy
	Identify and estimate energy inputs and outputs for example devices and systems, and evaluate the efficiency of energy conversions	

Activity: Electronic Overload	Electrical Principles and Technologies	Investigate and interpret the use of devices to convert various forms of energy to electrical energy and electrical energy to other forms of energy
		Describe technologies for transfer and control of electrical energy
		Identify and estimate energy inputs and outputs for example devices and systems, and evaluate the efficiency of energy conversions
		Investigate and interpret the use of devices to convert various forms of energy to electrical energy and electrical energy to other forms of energy
Activity: Extra Energy Investigation	Electrical Principles and Technologies	Describe technologies for transfer and control of electrical energy
		Identify and estimate energy inputs and outputs for example devices and systems, and evaluate the efficiency of energy conversions
		Investigate and interpret the use of devices to convert various forms of energy to electrical energy and electrical energy to other forms of energy
Activity: How Smart is Your Smart Board?	Electrical Principles and Technologies	Describe technologies for transfer and control of electrical energy
		Identify and estimate energy inputs and outputs for example devices and systems, and evaluate the efficiency of energy conversions
	Electrical Principles and Technologies	Investigate and interpret the use of devices to convert various forms of energy to electrical energy and electrical energy to other forms of energy
Activity: Imagination Station		Describe technologies for transfer and control of electrical energy
		Identify and estimate energy inputs and outputs for example devices and systems, and evaluate the efficiency of energy conversions
Activity: Small Appliance Energy Poliance	Electrical Principles and	energy conversions Investigate and interpret the use of devices to convert various forms of energy to electrical energy and electrical
Activity: Small Appliance Energy Reliance	Electrical Principles and Technologies	energy conversions Investigate and interpret the use of devices to convert various forms of energy to electrical energy and electrical energy to other forms of energy
Activity: Small Appliance Energy Reliance	·	Investigate and interpret the use of devices to convert various forms of energy to electrical energy and electrical energy to other forms of energy Describe technologies for transfer and control of electrical energy Identify and estimate energy inputs and outputs for example devices and systems, and evaluate the efficiency of
Activity: Small Appliance Energy Reliance Activity: Start Me Up!	Technologies Electrical Principles and	Investigate and interpret the use of devices to convert various forms of energy to electrical energy and electrical energy to other forms of energy Describe technologies for transfer and control of electrical energy Identify and estimate energy inputs and outputs for example devices and systems, and evaluate the efficiency of energy conversions
	Technologies	Investigate and interpret the use of devices to convert various forms of energy to electrical energy and electrical energy to other forms of energy Describe technologies for transfer and control of electrical energy Identify and estimate energy inputs and outputs for example devices and systems, and evaluate the efficiency of energy conversions Describe and discuss the societal and environmental implications of the use of electrical energy Identify and estimate energy inputs and outputs for example devices and systems, and evaluate the efficiency of

Activity of Tabal Francisco Tabal Cont	Electrical Principles and Technologies	Investigate and interpret the use of devices to convert various forms of energy to electrical energy and electrical energy to other forms of energy
		Describe technologies for transfer and control of electrical energy
Activity: Total Energy vs. Total Cost		Identify and estimate energy inputs and outputs for example devices and systems, and evaluate the efficiency of energy conversions
		Describe and discuss the societal and environmental implications of the use of electrical energy
		Investigate and interpret the use of devices to convert various forms of energy to electrical energy and electrical energy to other forms of energy
Activity: Understanding Energy Efficiency in Your School	Electrical Principles and Technologies	Describe technologies for transfer and control of electrical energy
		Identify and estimate energy inputs and outputs for example devices and systems, and evaluate the efficiency of energy conversions
		Describe technologies for transfer and control of electrical energy
Activity: Community Walk	Electrical Principles and Technologies	Identify and estimate energy inputs and outputs for example devices and systems, and evaluate the efficiency of energy conversions
		Describe and discuss the societal and environmental implications of the use of electrical energy
	Electrical Principles and Technologies	Describe technologies for transfer and control of electrical energy
Activity: School Energy Audit		Identify and estimate energy inputs and outputs for example devices and systems, and evaluate the efficiency of energy conversions
		Describe and discuss the societal and environmental implications of the use of electrical energy
	Electrical Principles and Technologies	Investigate and interpret the use of devices to convert various forms of energy to electrical energy and electrical energy to other forms of energy
Activity: Find the Phantom Load		Describe technologies for transfer and control of electrical energy
		Identify and estimate energy inputs and outputs for example devices and systems, and evaluate the efficiency of energy conversions
	Electrical Principles and Technologies	Investigate and interpret the use of devices to convert various forms of energy to electrical energy and electrical energy to other forms of energy
Activity: Homo Energy Audit		Describe technologies for transfer and control of electrical energy
Activity: Home Energy Audit		Identify and estimate energy inputs and outputs for example devices and systems, and evaluate the efficiency of energy conversions
		Describe and discuss the societal and environmental implications of the use of electrical energy

Activity: Watchers and Seekers	Electrical Principles and Technologies	Investigate and interpret the use of devices to convert various forms of energy to electrical energy and electrical energy to other forms of energy
		Describe technologies for transfer and control of electrical energy
		Identify and estimate energy inputs and outputs for example devices and systems, and evaluate the efficiency of energy conversions
Activity: Science Slam	Electrical Principles and Technologies	Identify and estimate energy inputs and outputs for example devices and systems, and evaluate the efficiency of energy conversions
		Describe and discuss the societal and environmental implications of the use of electrical energy
Activity: Speak for the Trees	Biological Diversity	Identify impacts of human action on species survival and variation within species, and analyze related issues for personal and public decision making
	Electrical Principles and Technologies	Investigate and interpret the use of devices to convert various forms of energy to electrical energy and electrical energy to other forms of energy
		Describe technologies for transfer and control of electrical energy
		Identify and estimate energy inputs and outputs for example devices and systems, and evaluate the efficiency of energy conversions
		Describe and discuss the societal and environmental implications of the use of electrical energy

Grade 10 - Alberta Science Curriculum Connections



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Activity Name	Organizing Idea	Learning Outcome
	10 - Unit B: Energy Flow in Technological Systems	Analyze and illustrate how technologies based on thermodynamic principles were developed before the laws of thermodynamics were formulated
Activity: Knowing Energy: Stair Climb		Explain and apply concepts used in theoretical and practical measures of energy in mechanical systems
		Apply the principles of energy conservation and thermodynamics to investigate, describe and predict efficiency of energy transformation in technological systems
	10 - Unit B: Energy Flow in Technological Systems	Analyze and illustrate how technologies based on thermodynamic principles were developed before the laws of thermodynamics were formulated
		Explain and apply concepts used in theoretical and practical measures of energy in mechanical systems
Activity: Knowing Energy: Tea at Home		Apply the principles of energy conservation and thermodynamics to investigate, describe and predict efficiency of energy transformation in technological systems
	14 - Unit B: Understanding Energy Transfer Technologies	Describe how natural and technological cooling and heating systems are based upon the transfer of thermal energy (heat) from hot to cold objects
		Explain the functioning of common methods and devices designed to control the transfer of thermal energy
	10 - Unit B: Energy Flow in Technological Systems	Analyze and illustrate how technologies based on thermodynamic principles were developed before the laws of thermodynamics were formulated
Activity: Knowing Energy: Race to a kWh		Explain and apply concepts used in theoretical and practical measures of energy in mechanical systems
		Apply the principles of energy conservation and thermodynamics to investigate, describe and predict efficiency of energy transformation in technological systems
Activity: Knowing Energy: How Intense is Your Electricity Usage?	10 - Unit B: Energy Flow in Technological Systems	Analyze and illustrate how technologies based on thermodynamic principles were developed before the laws of thermodynamics were formulated
		Explain and apply concepts used in theoretical and practical measures of energy in mechanical systems
		Apply the principles of energy conservation and thermodynamics to investigate, describe and predict efficiency of energy transformation in technological systems

Activity: Knowing Energy: The Electricity Grid	10 - Unit B: Energy Flow in Technological Systems	Analyze and illustrate how technologies based on thermodynamic principles were developed before the laws of thermodynamics were formulated
		Explain and apply concepts used in theoretical and practical measures of energy in mechanical systems
		Apply the principles of energy conservation and thermodynamics to investigate, describe and predict efficiency of energy transformation in technological systems
		Analyze and illustrate how technologies based on thermodynamic principles were developed before the laws of thermodynamics were formulated
	10 - Unit B: Energy Flow in Technological Systems	Explain and apply concepts used in theoretical and practical measures of energy in mechanical systems
Activity: Knowing Energy: Renewables		Apply the principles of energy conservation and thermodynamics to investigate, describe and predict efficiency of energy transformation in technological systems
	10 - Unit D: Energy Flow in Global	Describe how the relationships among input solar energy, output terrestrial energy and energy flow within the biosphere affect the lives of humans and other species
	Systems	Investigate and interpret the role of environmental factors on global energy transfer and climate change
	10 - Unit B: Energy Flow in Technological Systems	Analyze and illustrate how technologies based on thermodynamic principles were developed before the laws of thermodynamics were formulated
Activity: Knowing Energy: The Big Picture		Explain and apply concepts used in theoretical and practical measures of energy in mechanical systems
		Apply the principles of energy conservation and thermodynamics to investigate, describe and predict efficiency of energy transformation in technological systems
	10 - Unit B: Energy Flow in Technological Systems	Analyze and illustrate how technologies based on thermodynamic principles were developed before the laws of thermodynamics were formulated
Activity: All About the Baseline		Explain and apply concepts used in theoretical and practical measures of energy in mechanical systems
		Apply the principles of energy conservation and thermodynamics to investigate, describe and predict efficiency of energy transformation in technological systems
Activity: Can You Observe How You Conserve?	10 - Unit B: Energy Flow in Technological Systems	Analyze and illustrate how technologies based on thermodynamic principles were developed before the laws of thermodynamics were formulated
		Explain and apply concepts used in theoretical and practical measures of energy in mechanical systems
		Apply the principles of energy conservation and thermodynamics to investigate, describe and predict efficiency of energy transformation in technological systems

Activity: Energy Hogs	10 - Unit B: Energy Flow in Technological Systems	Analyze and illustrate how technologies based on thermodynamic principles were developed before the laws of thermodynamics were formulated
		Explain and apply concepts used in theoretical and practical measures of energy in mechanical systems
		Apply the principles of energy conservation and thermodynamics to investigate, describe and predict efficiency of energy transformation in technological systems
Activity: Electronic Overload	10 - Unit B: Energy Flow in Technological Systems	Analyze and illustrate how technologies based on thermodynamic principles were developed before the laws of thermodynamics were formulated
		Explain and apply concepts used in theoretical and practical measures of energy in mechanical systems
		Apply the principles of energy conservation and thermodynamics to investigate, describe and predict efficiency of energy transformation in technological systems
Activity: Extra Energy Investigation	10 - Unit B: Energy Flow in Technological Systems	Analyze and illustrate how technologies based on thermodynamic principles were developed before the laws of thermodynamics were formulated
		Explain and apply concepts used in theoretical and practical measures of energy in mechanical systems
		Apply the principles of energy conservation and thermodynamics to investigate, describe and predict efficiency of energy transformation in technological systems
Activity: How Smart is Your Smart Board?	10 - Unit B: Energy Flow in Technological Systems	Analyze and illustrate how technologies based on thermodynamic principles were developed before the laws of thermodynamics were formulated
		Explain and apply concepts used in theoretical and practical measures of energy in mechanical systems
		Apply the principles of energy conservation and thermodynamics to investigate, describe and predict efficiency of energy transformation in technological systems
Activity: Imagination Station	10 - Unit B: Energy Flow in Technological Systems	Analyze and illustrate how technologies based on thermodynamic principles were developed before the laws of thermodynamics were formulated
		Explain and apply concepts used in theoretical and practical measures of energy in mechanical systems
		Apply the principles of energy conservation and thermodynamics to investigate, describe and predict efficiency of energy transformation in technological systems

Activity: Small Appliance Energy Reliance	10 - Unit B: Energy Flow in Technological Systems	Analyze and illustrate how technologies based on thermodynamic principles were developed before the laws of thermodynamics were formulated
		Explain and apply concepts used in theoretical and practical measures of energy in mechanical systems
		Apply the principles of energy conservation and thermodynamics to investigate, describe and predict efficiency of energy transformation in technological systems
	14 - Unit B: Understanding Energy Transfer Technologies	Describe how natural and technological cooling and heating systems are based upon the transfer of thermal energy (heat) from hot to cold objects
		Explain the functioning of common methods and devices designed to control the transfer of thermal energy
Activity: Start Me Up!	10 - Unit B: Energy Flow in Technological Systems	Analyze and illustrate how technologies based on thermodynamic principles were developed before the laws of thermodynamics were formulated
		Explain and apply concepts used in theoretical and practical measures of energy in mechanical systems
		Apply the principles of energy conservation and thermodynamics to investigate, describe and predict efficiency of energy transformation in technological systems
Activity: Total Energy vs. Total Cost	10 - Unit B: Energy Flow in Technological Systems	Analyze and illustrate how technologies based on thermodynamic principles were developed before the laws of thermodynamics were formulated
		Explain and apply concepts used in theoretical and practical measures of energy in mechanical systems
		Apply the principles of energy conservation and thermodynamics to investigate, describe and predict efficiency of energy transformation in technological systems
Activity: Understanding Energy Efficiency in Your School	10 - Unit B: Energy Flow in Technological Systems	Analyze and illustrate how technologies based on thermodynamic principles were developed before the laws of thermodynamics were formulated
		Explain and apply concepts used in theoretical and practical measures of energy in mechanical systems
		Apply the principles of energy conservation and thermodynamics to investigate, describe and predict efficiency of energy transformation in technological systems
Activity: Community Walk	10 - Unit B: Energy Flow in Technological Systems	Analyze and illustrate how technologies based on thermodynamic principles were developed before the laws of thermodynamics were formulated
		Explain and apply concepts used in theoretical and practical measures of energy in mechanical systems
		Apply the principles of energy conservation and thermodynamics to investigate, describe and predict efficiency of energy transformation in technological systems

Activity: School Energy Audit	10 - Unit B: Energy Flow in Technological Systems	Analyze and illustrate how technologies based on thermodynamic principles were developed before the laws of thermodynamics were formulated
		Explain and apply concepts used in theoretical and practical measures of energy in mechanical systems
		Apply the principles of energy conservation and thermodynamics to investigate, describe and predict efficiency of energy transformation in technological systems
Activity: Find the Phantom Load	10 - Unit B: Energy Flow in Technological Systems	Analyze and illustrate how technologies based on thermodynamic principles were developed before the laws of thermodynamics were formulated
		Explain and apply concepts used in theoretical and practical measures of energy in mechanical systems
		Apply the principles of energy conservation and thermodynamics to investigate, describe and predict efficiency of energy transformation in technological systems
Activity: Home Energy Audit	10 - Unit B: Energy Flow in Technological Systems	Analyze and illustrate how technologies based on thermodynamic principles were developed before the laws of thermodynamics were formulated
		Explain and apply concepts used in theoretical and practical measures of energy in mechanical systems
		Apply the principles of energy conservation and thermodynamics to investigate, describe and predict efficiency of energy transformation in technological systems
Activity: Watchers and Seekers	10 - Unit B: Energy Flow in Technological Systems	Analyze and illustrate how technologies based on thermodynamic principles were developed before the laws of thermodynamics were formulated
		Explain and apply concepts used in theoretical and practical measures of energy in mechanical systems
		Apply the principles of energy conservation and thermodynamics to investigate, describe and predict efficiency of energy transformation in technological systems
Activity: Science Slam	10 - Unit B: Energy Flow in Technological Systems	Analyze and illustrate how technologies based on thermodynamic principles were developed before the laws of thermodynamics were formulated
		Explain and apply concepts used in theoretical and practical measures of energy in mechanical systems
		Apply the principles of energy conservation and thermodynamics to investigate, describe and predict efficiency of energy transformation in technological systems

Activity: Speak for the Trees	10 - Unit B: Energy Flow in Technological Systems	Analyze and illustrate how technologies based on thermodynamic principles were developed before the laws of thermodynamics were formulated	
		Explain and apply concepts used in theoretical and practical measures of energy in mechanical systems	
		Apply the principles of energy conservation and thermodynamics to investigate, describe and predict efficiency of energy transformation in technological systems	
	10 - Unit D: Energy Flow in Global Systems	Describe how the relationships among input solar energy, output terrestrial energy and energy flow within the biosphere affect the lives of humans and other species	
		Investigate and interpret the role of environmental factors on global energy transfer and climate change	