Program: Re-Energy

Grade 8 - Alberta Science Curriculum Connections



Activity Name	Organizing Idea	Learning Outcome
		Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time
	Mechanical Systems	nalyze machines by describing the structures and functions of the overall system, the subsystems and the component arts evestigate and describe the transmission of force and energy between parts of a mechanical system nalyze the social and environmental contexts of science and technology, as they apply to the development of mechanical evices evestigate and interpret linkages among landforms, water and climate ustrate the development of science and technology by describing, comparing and interpreting mechanical devices that
Activity: Renewable Energy Sources		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 mechanic devices
	Freshwater and Saltwater Systems	Investigate and interpret linkages among landforms, water and climate
		Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time
	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
Activity: What is Renewable Energy?		
		Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices
	Freshwater and Saltwater Systems	Investigate and interpret linkages among landforms, water and climate
Activity: Build a Solar Car		Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time
	Mechanical Systems	Analyze machines by describing the structures and functions of the overall system, the subsystems and the component parts
	3,5555	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: Build a Solar Oven		Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time	
	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: Construire un Four Solaire		Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time	
	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: Introduction to Solar Electricity		Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time	
	Mechanical Systems	Analyze machines by describing the structures and functions of the overall system, the subsystems and the component parts Analyze machines by describing the structures and functions of the overall system, the subsystems and the component parts Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices Analyze the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time Analyze machines by describing the structures and functions of the overall system, the subsystems and the component parts 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 machines by describing the structures and functions of the overall system, the subsystems and the component parts Analyze machines by describing the structures and functions of the overall system, the subsystems and the component parts 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 mechanical devices Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices 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: Introduction to Solar Heat Energy		Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time	
	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	
		alyze machines by describing the structures and functions of the overall system, the subsystems and the component restricts restigate and describe the transmission of force and energy between parts of a mechanical system alyze the social and environmental contexts of science and technology, as they apply to the development of mechanical vices strate the development of science and technology by describing, comparing and interpreting mechanical devices that we been improved over time alyze machines by describing the structures and functions of the overall system, the subsystems and the component restricts restigate and describe the transmission of force and energy between parts of a mechanical system alyze the social and environmental contexts of science and technology, as they apply to the development of mechanical	

Activity: Solar Energy Transition with Six		Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time
	Mechanical Systems	Analyze machines by describing the structures and functions of the overall system, the subsystems and the component parts
Nations of the Grand River		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: Electrifying the Future of Transportation Guide	Grade 9-12	
Activity: Build an Electric Vehicle Model		Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time
	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
		Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time 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 Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time 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
Activity: Exploring Electric Vehicle Charging		Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time
	Mechanical Systems	Analyze machines by describing the structures and functions of the overall system, the subsystems and the component parts
<u>Stations</u>		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: History of the Electric Vehicle		Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time
	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: How is Your Community Adapting For		Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time		
	Mechanical Systems	Analyze machines by describing the structures and functions of the overall system, the subsystems and the component parts		
Electric Vehicles?		Investigate and describe the transmission of force and energy between parts of a mechanical system		
		nave been improved over time Analyze machines by describing the structures and functions of the overall system, the subsystems and the component parts arts Investigate and describe the transmission of force and energy between parts of a mechanical system		
Activity: Planning a Trip in Your Electric		Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time		
	Mechanical Systems	Analyze machines by describing the structures and functions of the overall system, the subsystems and the component parts		
<u>Vehicle</u>				
		Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices		
		Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time		
Activity: Electric Vehicles and Charging Stations with Six Nations of the Grand River	Mechanical Systems	palyze the social and environmental contexts of science and technology, as they apply to the development of mechanical vices sistrate the development of science and technology by describing, comparing and interpreting mechanical devices that ve been improved over time salyze machines by describing the structures and functions of the overall system, the subsystems and the component rts vestigate and describe the transmission of force and energy between parts of a mechanical system salyze the social and environmental contexts of science and technology, as they apply to the development of mechanical vices strate the development of science and technology by describing, comparing and interpreting mechanical devices that we been improved over time salyze machines by describing the structures and functions of the overall system, the subsystems and the component rts vestigate and describe the transmission of force and energy between parts of a mechanical system salyze the social and environmental contexts of science and technology, as they apply to the development of mechanical vices sistrate the development of science and technology by describing, comparing and interpreting mechanical devices that we been improved over time salyze and the development of science and technology by describing, comparing and interpreting mechanical devices that we been improved over time salyze machines by describing the structures and functions of the overall system, the subsystems and the component rts vestigate and describe the transmission of force and energy between parts of a mechanical system salyze machines by describing the structures and functions of the overall system, the subsystems and the component rts vestigate and describe the transmission of force and energy between parts of a mechanical system salyze and the development of mechanical contexts of science and technology, as they apply to the development of mechanical vestigate and describe the transmission of force and energy between parts of a mechanical sy		
Stations with Six Nations of the Grand River		nalyze the social and environmental contexts of science and technology, as they apply to the development of mechanical evices ustrate the development of science and technology by describing, comparing and interpreting mechanical devices that eve been improved over time nalyze machines by describing the structures and functions of the overall system, the subsystems and the component exts vestigate and describe the transmission of force and energy between parts of a mechanical system nalyze the social and environmental contexts of science and technology, as they apply to the development of mechanical evices ustrate the development of science and technology by describing, comparing and interpreting mechanical devices that eve been improved over time		
		Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices		
Activity: What EV Should You Buy?		Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time		
	Mechanical Systems	Analyze machines by describing the structures and functions of the overall system, the subsystems and the component parts		
		alyze the social and environmental contexts of science and technology, as they apply to the development of mechanical vices strate the development of science and technology by describing, comparing and interpreting mechanical devices that we been improved over time alyze machines by describing the structures and functions of the overall system, the subsystems and the component rts restigate and describe the transmission of force and energy between parts of a mechanical system alyze the social and environmental contexts of science and technology, as they apply to the development of mechanical vices strate the development of science and technology by describing, comparing and interpreting mechanical devices that we been improved over time alyze machines by describing the structures and functions of the overall system, the subsystems and the component rts restigate and describe the transmission of force and energy between parts of a mechanical system alyze the social and environmental contexts of science and technology, as they apply to the development of mechanical alyze the social and environmental contexts of science and technology, as they apply to the development of mechanical alyze the social and environmental contexts of science and technology, as they apply to the development of mechanical		
		Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices		

Activity: Build a Wind Turbine		Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time
	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
		Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time
Activity: Introduction to Wind Energy	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: Wind Turbine Simulator		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
		Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time
Activity: Build a Hydroelectric Generator	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 interpret linkages among landforms, water and climate
	Freshwater and Saltwater Systems	Analyze human impacts on aquatic systems; and identify the roles of science and technology in addressing related questions, problems and issues

		Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time
	Mechanical Systems	Analyze machines by describing the structures and functions of the overall system, the subsystems and the component parts
A stinitus Internalization to Healer Engage		Investigate and describe the transmission of force and energy between parts of a mechanical system
Activity: Introduction to Hydro Energy		Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices
		Investigate and interpret linkages among landforms, water and climate
	Freshwater and Saltwater Systems	Analyze human impacts on aquatic systems; and identify the roles of science and technology in addressing related questions, problems and issues
		Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time
	Mechanical Systems	Analyze machines by describing the structures and functions of the overall system, the subsystems and the component parts
Activity Dummed Hydro Storage		Investigate and describe the transmission of force and energy between parts of a mechanical system
Activity: Pumped Hydro Storage		Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices
		Investigate and interpret linkages among landforms, water and climate
	Freshwater and Saltwater Systems	Analyze human impacts on aquatic systems; and identify the roles of science and technology in addressing related questions, problems and issues
		Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time
Activity: Build a Biogas Generator	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 interpret linkages among landforms, water and climate
	Freshwater and Saltwater Systems	Analyze human impacts on aquatic systems; and identify the roles of science and technology in addressing related questions, problems and issues

		Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time
	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
Activity: Introduction to Biomass Energy		Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices
		Investigate and interpret linkages among landforms, water and climate
	Freshwater and Saltwater Systems	Analyze human impacts on aquatic systems; and identify the roles of science and technology in addressing related questions, problems and issues
		Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time 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: Build a Flywheel Model	Mechanical Systems	
		Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time
Activity: Build a Penny Battery	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: Endothermic and Exothermic Reactions		Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time
	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: Energy Storage Match		Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time
		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: Exploring Energy Storage in Your		Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time
	Mechanical Systems	Analyze machines by describing the structures and functions of the overall system, the subsystems and the component parts
<u>Community</u>		vestigate and describe the transmission of force and energy between parts of a mechanical system alyze the social and environmental contexts of science and technology, as they apply to the development of mechanical
		Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices
Activity: Exploring How To make a Battery		Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time
	Mechanical Systems	analyze machines by describing the structures and functions of the overall system, the subsystems and the component contexts of science 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 levices are the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time analyze the social and environmental contexts of science and technology, as they apply to the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time analyze machines by describing the structures and functions of the overall system, the subsystems and the component contexts and devices that the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time analyze machines by describing the structures and functions of the overall system, the subsystems and the component contexts are the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical evices and the social and environmental contexts of science and technology, as they apply to the development of mechanical evices and the social and environmental contexts of science and technology, as they apply to the development of mechanical evices that have been improved over time analyze machines by describing the structures and functions of the overall system, the subsystems and the component contexts are the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time and the subsystems and the component contexts of science and technology, as they apply to the development of mechanical evices that have been improv
		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: Heat Transfer Lab		Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time
	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: The Electrostatic Effect		Illustrate the development of science and technology by describing, comparing and interpreting mechanical devices that have been improved over time
	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