Program: Energy Revealed	Grade 8 - Alberta Science Curriculum Connections	
Activity Name	**Organizing Idea**	**Learning Outcome**
Activity: Knowing Energy: Stair Climb	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: Tea at Home	Mix and Flow of Matter	Investigate and describe fluids used in technological devices and everyday materials
		Identify, interpret and apply technologies based on properties of fluids
	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: Race to a kWh	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: 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

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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
Activity: Knowing Energy: Renewables	Mechanical Systems	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: Knowing Energy: The Big Picture	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: All About the Baseline	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: 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

Activity: Energy Hogs	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: Extra Energy Investigation	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: How Smart is Your Smart Board?	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: Imagination Station	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: Small Appliance Energy Reliance	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: Start Me Up!	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: Take a Look	**Grade 4-6**	
Activity: Total Energy vs. Total Cost	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: Understanding Energy Efficiency in Your School	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: Community Walk	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: School 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: Energy Efficient Lighting	**Grade 4-7**	
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
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: 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: 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	Cells and Systems	Investigate living 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
		Analyze the social and environmental contexts of science and technology, as they apply to the development of mechanical devices
Activity: Taking the Lead	**Grade 4-7**	

Activity: Walk a Mile	Grade 4-7	