



I Can Statement - Year 7

Energy

Unit/Topic Overview	Pre-taught Vocabulary	
In this topic, energy is a key idea in science that helps us understand how work is done and how physical changes occur across the universe. You will learn that energy exists in various stores—such as kinetic, potential, and thermal—and can be transferred between stores without ever being created or destroyed. Energy transfers also help us understand efficiency, power, and how electricity is generated using renewable and non-renewable resources. By studying energy, you will be able to better explain heating, motion, and fuel consumption in daily life.	Energy	Thermal Energy
	Joule	Energy Transfer
	Conservation of Energy	Efficiency
	Kinetic Energy	Power
	Potential Energy	Renewable Energy

RAG Rating:		Start	End
1.	I understand energy transfers can be represented pictorially and can interpret and construct Sankey Diagrams		
2.	I can explain that no machine is 100% efficient because energy is often "dissipated" (wasted), usually as thermal energy to the surroundings. They can recall the efficiency formula and complete calculations with the same		
3.	I can devise an experiment to compare the energy in foods and or fuels.		
4.	I can identify fossil fuels and describe how oil, natural gas and coal are formed. They are able to discuss the pros and cons for using fossil fuels.		
5.	I can describe renewable energy sources and understand the pros and cons of each type. Biomass, solar, wind, geothermal, hydroelectric, tidal and wave. They can discuss the benefits over fossil fuels		
6.	I understand how a power generator works and can label a diagram successfully.		