
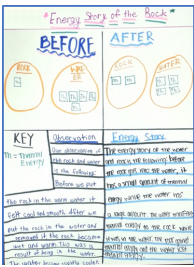


Thermal Energy Unit – Sequence of Activities


1. What can temperature tell us about energy?

Activity	Learning Targets Introduced	Representations	Image of Activity
Room temperature rock submerged in warm water.	<ul style="list-style-type: none"> Motion energy can be transformed into thermal energy through rubbing. Temperature is the indicator of an object's thermal energy. If an object's temperature increases or decreases, its thermal energy has increased or decreased. 	Energy bars, Arrows to show flow	

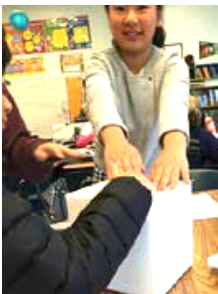
2A. What's the energy story of the rock in the water?

Create posters that tell the rock-in-water energy story.	<ul style="list-style-type: none"> Thermal energy can be transferred between objects through contact. Drawings and representations help students reason about energy flow in a scenario. 	Energy cubes, Student sketches, Student posters	
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2B. What's the energy story of the rock in the water?

Share posters made in previous session with classmates Quick Check	<ul style="list-style-type: none"> Thermal energy transfers spontaneously from hotter (higher temperature) objects to cooler (lower temperature) objects. 	Student Posters	
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3. Where did the thermal energy go?

Warm cup of water in closed box Wrap Up Probe	<ul style="list-style-type: none"> Some of the thermal energy of a warm object is transferred to the environment. When thermal energy is transferred to the environment, temperature changes in the environment may be too small to observe. Evidence and reasoning can help you infer that energy has been transferred to the environment. 	Energy bars, Energy cubes	
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