

Unit Issue Provides context for relevant and connected anchoring and investigative phenomena within the unit.

Why are some devices more efficient than others? What can people do to reduce energy use? How can people manipulate energy transfer and transformation to use energy more efficiently?

Unit Phenomena What can we observe in science that makes us wonder?

When a device uses energy, some is changed into a less useful form. This reduces the device's efficiency.

Some devices are less efficient than others. For example, some light bulbs are hotter than others.

There are many different types of energy that we encounter every day.

Height affects the amount of energy an object has.

There is energy in food, fuel, weather systems, and many other situations.

Activities Students use SEPs and understanding of DCIs and CCCs to explain, justify, and argue a point of view about the issue.

home energy efficiency

exploring energy to drive a nail

energy transfer & thermal energy

storing thermal energy

energy design challenge

conduction, convection & radiation

redesigning a solar oven

comparing light bulbs

improving home efficiency

