

# Science ISAT: General Science – Physical Science

## Skills: Understand That the Total Energy in the Universe is Constant

**Students:**

**RIT Above 240:**

- *None*

**Students:**

**RIT 231-240:**

- Gives examples of potential energy

**Students:**

**RIT 221-230:**

- Recognizes the major forms of energy
- Defines kinetic energy
- Gives examples of kinetic energy
- Gives examples of potential energy

**Students:**

**RIT 211-220:**

- Defines kinetic energy
- Relates kinetic energy to the speed of an object
- Describes ways that energy may be changed as a result of a chemical reaction
- Explains that when energy is converted from one form to another, heat is often produced as a by-product
- Recognizes that mechanical machines produce heat

**Students:**

**RIT 201-210:**

- Relates kinetic energy to the speed of an object
- Interprets diagrams showing conversions between potential and kinetic energy
- Makes predictions about the transformation between kinetic and potential energy
- Describes the transformations of energy that may occur in electrical systems
- Explains that a turbine is a machine that is used in the transformation of mechanical to electrical energy

**Students:**

**RIT 191-200:**

- Gives examples of objects that use electrical energy

**Students:**

**RIT 181-190:**

- Gives examples of forms of energy