

# ENERGY TYPES AND TRANSFERS

## Key Concepts

- Energy cannot be created or destroyed; it can only be transferred or transformed.
- Different types of energy include kinetic, potential, thermal, chemical, and electrical.



## Key Facts to Remember

- Energy is measured in joules (J).
- Kinetic energy is energy of movement; potential energy is stored energy.
- Heat energy moves from hot to cold objects.
- Energy transfer examples include conduction, convection, and radiation.
- Renewable energy sources include solar, wind, and hydroelectric.
- Non-renewable energy sources include coal, oil, and gas.
- The efficiency of energy transfers can be calculated.

## Quick Questions

1. What is the unit of energy?
2. Name two types of potential energy.
3. What is kinetic energy?
4. How does heat energy transfer between objects?
5. Give two examples of renewable energy sources.
6. What is meant by energy efficiency?
7. Which energy resource is non-renewable?
8. State the law of conservation of energy.

## Fun Fact

**One hour of sunlight hitting Earth could power the whole world for a year!**