

- 1. Chemical energy in a battery: *Potential* A moving baseball: *Kinetic* A raised weight: *Potential*
- 2. Students' descriptions of the difference between kinetic energy and potential energy will vary but should include at least this basic distinction: *Kinetic energy is the energy of motion, while potential energy is stored energy that has the potential to do work or cause motion.*

Students may also list the forms of kinetic energy (electrical, radiant, thermal, motion, and sound energy) and the forms of potential energy (chemical, stored mechanical, nuclear, and gravitational energy).

- 3. Light bulbs produce radiant energy. Bulbs that give off heat, such as compact fluorescent and incandescent bulbs, also produce thermal energy. The sun produces both radiant energy and thermal energy.
- 4. False. Energy cannot be created from nothing.
- 5. Students' explanations of the Law of Conservation of Energy will vary but should include at least this concept: *Energy is never created or destroyed. It only changes from one place to another and from one form to another.*