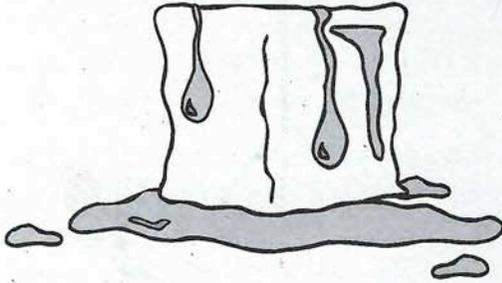




**Light energy** is created by the vibrations of electrically charged particles. Like sound energy, light energy is produced by vibrations and is a form of kinetic energy. Although we cannot see without light, we also cannot see all forms of light. A microwave oven, for example, uses a form of light energy that is invisible.



**Thermal energy** comes from the energy made by moving particles. Because particles are always in motion, they have kinetic energy. This means all objects, because they are made of moving particles, have thermal energy. The faster the particles move, the greater their kinetic energy and, therefore, the greater the thermal energy of the object. Particles move faster at higher temperatures than at lower temperatures, and the more particles an object has, the more thermal energy it creates.

### Exercise

1. Name at least three types of energy that are not mechanical (potential + kinetic) energy.

---

---

---

2. How are sound and light energy alike? \_\_\_\_\_

---

---

3. What type of energy does the sun have? \_\_\_\_\_

4. What type of energy does a nuclear power plant produce? (Careful!) \_\_\_\_\_

5. Why does an object with more particles have more thermal energy than an object with fewer particles?

---

---

---

6. After reading about thermal energy, it is clear that movement, or energy, produces:

---