

Key Concept Builder **LESSON 1*****Thermal Energy, Temperature, and Heat*****Key Concept** How do heat and thermal energy differ?**Directions:** Complete the chart by writing each phrase or statement under the correct heading. Some phrases or statements may be used more than once.**All objects do not have heat.****the movement of thermal energy from a warmer object to a cooler object****Since particles that make up matter are in constant motion, they have energy.****All objects have thermal energy.****the sum of kinetic energy and the potential energy in the particles that make up a material****When you heat something, thermal energy transfers from one object to another.**

Thermal Energy	Heat
Differences	
Similarities	

Key Concept Builder **LESSON 1*****Thermal Energy, Temperature, and Heat*****Key Concept** How are temperature and kinetic energy related?**Directions:** Complete the chart with the correct information in the space provided.

Term	Definition	Characteristics
Kinetic energy	1.	2.
Temperature	3.	4.

Directions: On each line, write the phrase that correctly completes each sentence.

5. If the average kinetic energy of the air is high, then

6. If the average kinetic energy of the air is low, then

7. A location's temperature is warm if the particles that make up the air have

8. The temperature is cold if

9. Temperature is represented by
