

What Is Heat?

Science Words

Say each word quietly to yourself. Then read the meaning.

Read the tip to help you remember.

heat [HEET] energy that moves between objects of different temperatures

Heat and *hot* begin and end with the same sounds. *Heat* energy moves from something hot to something that is cooler.

conduction [kuhn•DUK•shuhn] movement of heat between two objects that are touching

Conduction and *contact* begin with the same sounds. Heat *conduction* takes place when objects are in contact.

convection [kuhn•VEK•shuhn] movement of heat within a liquid or a gas

Convection and *carries* begin with the same sound. In *convection*, matter carries heat as it moves.

radiation [ray•dee•AY•shuhn] movement of heat without matter to carry it

Radiation, *radiate*, and *rays* begin the same way. In *radiation*, energy radiates out like rays and travels until it meets something.

What Is Heat?

Science Concepts

Read the Ideas more than once. Do your best to remember them.

1. Heat moves from a warmer object to a cooler object.
2. Ice cubes melt because heat from the warmer surrounding air transfers, or moves into them.
3. As matter gains heat energy, it becomes warmer.
4. Conduction occurs when heat moves between things that are touching.
5. A spoon in hot soup may soon become warm as heat from the soup moves to the spoon.
6. When your feet touch a cold floor, heat travels from your feet to the floor.
7. Convection occurs when heat moves within a gas or a liquid, for example when water heats on a stove.
8. Radiation occurs when heat travels without moving through matter.
9. Heat from the sun travels to Earth by radiation.
10. Heat from a fire travels by convection and radiation.