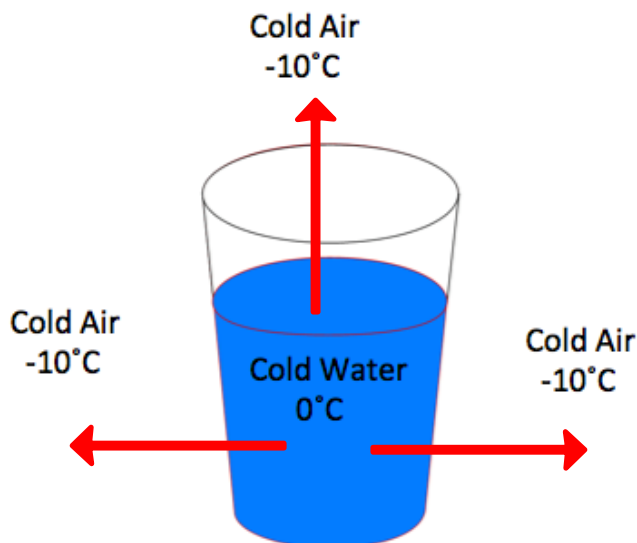


What Is Heat? Quiz Answer Key

Complete the statements below:

1. Flowing thermal energy is called heat.
2. Heat transfer that occurs within or between *solid* objects is called conduction.
3. Heat transfer into and out of *fluids* (like air or water) is called convection.
4. Heat always flows from hot (or higher temperature) materials to cold (or lower temperature) materials.
5. Ice water in cold air: *Which way will heat flow?*

Draw an arrow between the air and the ice water below, showing the direction of heat transfer.



Multiple choice: (circle the correct letter)

1. You accidentally touch a hot iron and burn your hand.

What type of heat transfer caused this to happen?

- a. electricity
- b. convection
- c. conduction**
- d. locomotion

2. You are holding a glass of ice-cold water (32 °F) in a room that is 72 °F.

Your body is 98 °F. What is the direction of heat transfer?

- a. From you to the glass and from you to the room**
- b. From you to the glass and from the room to you
- c. From the glass to you and from the room to the glass
- d. None of the above

3. It is a cool windy day and you start to feel cold.

What is the main type of heat transfer that is making you feel cold?

- a. conduction
- b. convection**
- c. solar
- d. induction

4. A material that slows down heat transfer is known as a/an:

- a. conductor
- b. thermometer
- c. insulator**
- d. metal

5. When you heat up a material (such as water),

- a. Its molecules move more quickly**
- b. Its molecules slow down
- c. Its temperature will drop
- d. All of the above