What Is Heat? Quiz

Complete the statements below:
1. Flowing thermal energy is called _____________________.

2. Heat transfer that occurs within or between solid objects is called _____________________.

3. Heat transfer into and out of fluids (like air or water) is called _____________________.

4. Heat always flows from _____________________.
   to ________________________ 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.

Cold Air
-10°C

Cold Water
0°C

Cold Air
-10°C
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