

**Goal** • Use this activity to build your understanding of conduction, convection, and radiation.

### What to Do

Your teacher has labelled three corners of the room: Conduction, Convection, and Radiation. For each situation, circle the method of heat transfer that is used. When your teacher says “corners,” go to the corner that represents the answer you think is correct.

Situation	Corner
1. Ceramic tiles feel cold to your feet, so many homeowners install a heating system of wires that run under and heat the tiles. What process transfers the heat from the wires to the tiles?	Conduction  Convection  Radiation
2. A) Black hosing surrounds an above-ground swimming pool. Water circulates through the hosing, absorbing energy from the sun. What process warms the water in the hose?	Conduction  Convection  Radiation
2. B) What process of heat transmission occurs between the water in the hose and the water in the pool?	Conduction  Convection  Radiation

DATE:

NAME:

CLASS:

Activity 5  
continued

<p>3. On an air mattress, heat from your body warms the air inside the mattress and is then distributed to the surrounding air. What process warms the air of the mattress?</p>	<p>Conduction</p> <p>Convection</p> <p>Radiation</p>
<p>4. The glowing red wires in your toaster brown your bread for toast. What is the main method of heat transfer?</p>	<p>Conduction</p> <p>Convection</p> <p>Radiation</p>
<p>5. Holding your hands in front of a campfire warms them quickly. What type of heat transfer warms your hands without touching them?</p>	<p>Conduction</p> <p>Convection</p> <p>Radiation</p>