Science Fables

The Heat That Traveled Three Ways

Story Quiz

This quiz follows Nina and Omar as they discover the three ways heat moves: conduction, convection, and radiation.

1. What is conduction?

A. Heat moving through direct contact
B. Heat moving only through space
C. Heat moving because warm air rises
D. Heat disappearing from an object

2. Why did the spoon handle become warm in the hot tea?

A. Radiation from the Sun warmed it
B. Conduction moved heat through the spoon
C. Cooler air sank around it
D. The spoon made its own heat

3. What happens during convection?

A. Warm liquids or gases rise while cooler parts sink
B. Heat moves only through solid objects
C. Heat travels through empty space as waves
D. Heat stops moving completely

4. How did the Sun warm the metal bench?

A. By conduction
B. By convection
C. By radiation
D. By evaporation

5. Which statement correctly matches all three types of heat transfer?

A. Conduction uses direct contact, convection happens in liquids and gases, and radiation travels as waves
B. Conduction happens only in air, convection needs no matter, and radiation uses direct contact
C. Conduction and convection happen only in space
D. Radiation happens only in water

Answer Key

1. A — Heat moving through direct contact

Conduction is heat moving through direct contact.

2. B — Conduction moved heat through the spoon

Conduction moved heat through the spoon, warming the handle in the hot tea.

3. A — Warm liquids or gases rise while cooler parts sink

During convection, warm liquids or gases rise while cooler parts sink.

4. C — By radiation

The Sun warmed the metal bench by radiation.

5. A — Conduction uses direct contact, convection happens in liquids and gases, and radiation travels as waves

Conduction uses direct contact, convection happens in liquids and gases, and radiation travels as waves.