

Tiny Explorers of Heat and Energy

Thermodynamics · Answer Key · 8 Questions

1. When you touch a warm mug of hot chocolate, what happens to the heat?

- A) The heat disappears.
- B) The heat moves from the mug to your hands.**
- C) Your hands make the mug hotter.
- D) The heat goes into the air very fast.

2. Which of these things is usually the hottest?

- A) A block of ice.
- B) A glass of cold water.
- C) The sun in the sky.**
- D) A frozen popsicle.

3. When water gets very cold, what does it turn into?

- A) Steam.
- B) Air.
- C) Ice.**
- D) Sand.

4. What makes a balloon get bigger when you blow into it?

- A) The air inside gets colder.
- B) The air outside pushes it.
- C) The air inside gets warmer and moves around more.**
- D) The balloon shrinks.

5. Why does a metal spoon feel colder than a wooden spoon when you touch them both after they've been in the same cold room?

- A) The metal spoon is magic.
- B) The metal spoon takes heat away from your hand faster.**
- C) The wooden spoon is hotter.
- D) The metal spoon is bigger.

6. What do we call the energy that makes things feel hot or cold?

- A) Sound energy.
- B) Light energy.
- C) Heat energy.**
- D) Water energy.

7. When you put a block of ice in a warm place, what happens to the ice?

A) It gets harder.

B) It melts and turns into water.

C) It turns into steam.

D) It stays the same.

8. Why does a stove or heater make a room warmer?

A) It takes heat from the room.

B) It makes more air.

C) It adds heat energy to the room.

D) It makes the walls colder.