

Mr. P's Class Quiz!

SCIENCE QUIZ #9

_____ Name _____ Date _____

Match each term and definition.

1. _____ convection
2. _____ radiation
3. _____ conduction
4. _____ thermal energy
5. _____ heat

- A) The total energy an object has. The more stuff you have the higher this will be.
- B) Any transfer of thermal energy
- C) Transfer of energy by movement of matter
- D) Transfer of energy by contact between two things
- E) Transfer of energy by waves, often through empty space.

For each of the following write conduction, convection, or radiation to describe each.

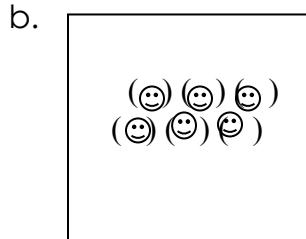
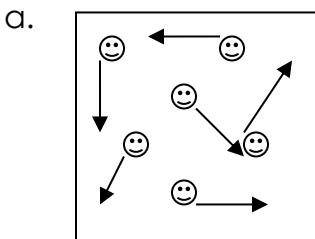
- _____ 1. Sun warming a person through a window.
- _____ 2. The heat going from the hot plate to the water on it.
- _____ 3. The heat moving around inside the water.
- _____ 4. Method of heat transfer that can go through empty space,
- _____ 5. Method of heat transfer stopped the best with a vacuum.
- _____ 6. Method of heat transfer stopped with a tight thermos lid.
- _____ 7. A fan blowing air past you, making you cold.
- _____ 8. You feel the heat sitting near a fire.
- _____ 9. You freeze your tongue to a metal pole in the winter.
- _____ 10. A down jacket helps stop this.

Choose the best answer for each question.

- ____ 1. Which of the following statements is true?
 - a. Using an insulator stops convection.
 - b. Metal is good for stopping conduction.
 - c. Metal is good for stopping radiation.
 - d. Using a lid stops conduction.
- ____ 2. Which of the following is the best insulator?
 - a. Metal
 - b. Glass
 - c. Plastic
 - d. Styrofoam

- ___ 3. Which of the following statements is true?
- A gas is a better insulator than a solid because it is tighter packed.
 - A liquid is a better insulator than a solid because it fits tighter around stuff.
 - A vacuum is the best insulator because there is nothing in a vacuum to conduct heat.
 - A gas is a better insulator than a vacuum because it cannot conduct heat.

- ___ 4. Which of the following is a picture of a cold object?



- ___ 5. What type of heat transfer occurs when a house gets warmer when the curtains covering the windows are open?

- Conduction
- Convection
- Radiation
- Fission

In complete sentences explain how a store-bought thermos is designed to stop heat loss from conduction, convection, and radiation.