

Grade-4-Lesson-4- Heat Worksheet

1. A farmer needed to keep his baby chicks warm. He placed a light in their cage. Which sentence best explains the farmer's thinking of placing a light in the cage?

- The farmer thought the light would transfer thermal energy to the chicks' cage.
- The farmer thought that the chicks would be healthier if they were not in the dark.
- The farmer thought that the chicks would eat more to stay warm if they can see their food.
- The farmer thought that the light would encourage the chicks to huddle together to keep themselves warm.



2. _____transfers heat easily.

- Conductors
- Insulators

3. You are watching fireworks on the fourth of July. When the fireworks are set off, they give off three forms of energy. Which three forms of energy are given off?

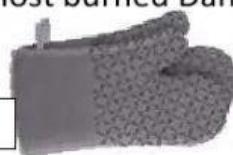
- light, sound, electrical
- light, sound, heat
- sound, electrical, mechanical
- heat, mechanical, electrical



4. Danny did an experiment where he observed that a hot pan is best held by a dry oven mitt. When the oven mitt was wet, the hot pan almost burned Danny's hand.

This is an example of _____ being transferred by heat.

- energy
- water



Oven mitt

5. In the image below, what evidence can you gather to prove that energy is being transferred?

- The smoke shows that the grill is transferring heat energy to cook the food.
- The smoke shows that the grill is transferring sound energy to cook the food.
- The smoke shows that the grill is transferring electrical energy to cook the food.
- The smoke shows that the grill is transferring mechanical energy to cook the food.



6. It is very hot outside, and you walk barefoot on hot pavement. Predict what will happen in this scenario.

- A. The transfer of heat energy from the pavement will cause your feet to feel hot.
- B. The transfer of light energy from the pavement will cause your feet to feel hot.
- C. The transfer of light energy from the pavement will cause your feet to feel cold.
- D. The transfer of heat energy from the pavement will cause your feet to feel cold.



7. Which is the slowest in conducting thermal energy.

- A. Glass
- B. Water
- C. Copper
- D. Silver

8. Which is the fastest in conducting thermal energy.

- A. Oak wood
- B. Water
- C. Stainless steel
- D. Silver

9. Thermal energy transfer happens fastest through

- A. Radiation through empty space
- B. Convection through water
- C. Conduction through matter
- D. All of the above

10. Which one is not an insulator of heat?

- A. Rubber
- B. Plastic
- C. Silver
- D. Wood