

In each of the following situations, identify the method of heat transfer taking place (conduction, convection, radiation). More than one process may be occurring.

1. Hot coffee is stirred with a spoon, the spoon gets hot due to _____.
2. A chair is placed several feet from a fire in a fireplace. The fireplace has a glass screen. The side of the chair facing the fireplace gets warm because of _____.
3. A certain type of decorative lamp contains colored liquids. These liquids form globes that break off and rise to the top of the liquid. The globes rise due to _____.
4. Near the ceiling of a room the air is warmer. The warm air rises because of _____.
5. A college student holds the back of his hand near an iron to see if it is hot. Heat is transferred to his hand by _____.
6. A heater is placed under one corner of a water bed mattress. Warm water moves throughout the mattress because of _____.
7. A certain type of stainless steel cookware has a layer of copper applied to the bottom to help it heat evenly. The copper transfers heat to the pan by _____.
8. In a swimming pool, the water near the surface is slightly warmer. The warm water rises because of _____.
9. One end of a copper rod is placed in a flame of a Bunsen burner. Small pieces of wax placed along the rod melt at progressively larger distance from the flame. Heat is transferred through the rod by _____.
10. A house burns down. On the house across the street, all of the vinyl siding is twisted and warped by the heat. The heat was transferred across the street by _____.
11. Warm air over the beach rises while cooler dense air from the ocean rushes in due to _____.
12. The metal skewer gets so hot that you drop your marshmallow in the campfire because of _____.
13. A huge rock at the state park gets so hot during the day that you can't sit on it from _____.
14. You lay on that same rock at night so that you can keep warm by _____.
15. A fireman feels a door and it is hot from the fire on the other side due to _____.
16. The cause of weather systems on earth is _____.
17. You are in the top bunk of a bunk bed and you want to turn the air conditioner on while your friend on the bottom bunk is fine is caused by _____.