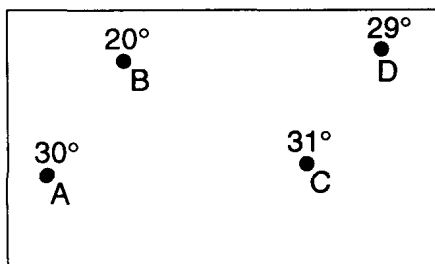


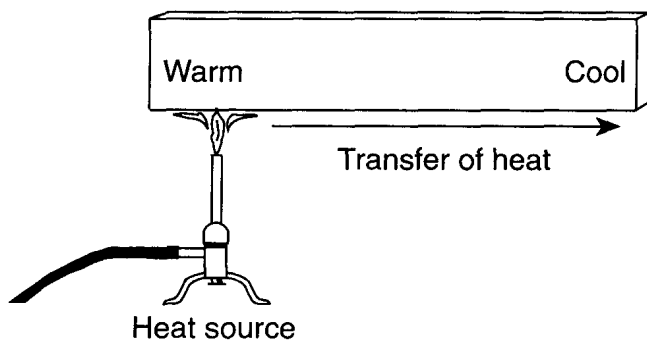
Energy Transfer

1. The map below shows four locations in a temperature field. The temperature of each location is given in degrees Celsius.



Heat energy will normally flow from

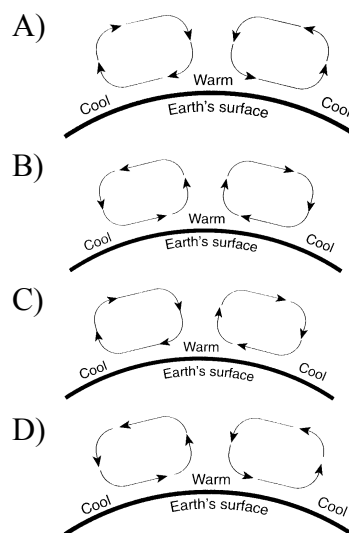
- A) A to B B) A to C
 C) B to D D) D to C
2. Heat energy transfer will normally occur between two objects that are close to each other if the objects have different
- A) specific heats B) temperatures
 C) masses D) densities
3. An ice cube is placed in a glass of water at room temperature. Which heat exchange occurs between the ice and the water within the first minute?
- A) The ice cube gains heat and the water loses heat.
 B) The ice cube loses heat and the water gains heat.
 C) Both the ice cube and the water gain heat.
 D) Both the ice cube and the water lose heat.
4. Base your answer to the following question on The diagram below shows a solid iron bar that is being heated in a flame.



The primary method of heat transfer in the solid iron bar is

- A) convection B) conduction
 C) absorption D) advection

5. Conduction is the transfer of heat energy by
- A) density differences
 B) molecular contact
 C) electromagnetic waves
 D) movement through a vacuum
6. The cross sections below show different patterns of air movement in Earth's atmosphere. Air temperatures at Earth's surface are indicated in each cross section. Which cross section shows the most likely pattern of air movement in Earth's atmosphere that would result from the surface air temperatures shown?



7. During which process does heat transfer occur because of density differences?
- A) conduction B) convection
 C) radiation D) reflection
8. Which process is primarily responsible for the transfer of energy by air currents within the Earth's atmosphere?
- A) convection B) radiation
 C) absorption D) conduction
9. Which process transfers energy primarily by electromagnetic waves?
- A) radiation B) evaporation
 C) conduction D) convection
10. By which process does starlight travel through space?
- A) absorption B) conduction
 C) convection D) radiation

Answer Key
energytransfer

1. A
 2. B
 3. A
 4. B
 5. B
 6. B
 7. B
 8. A
 9. A
 10. D
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