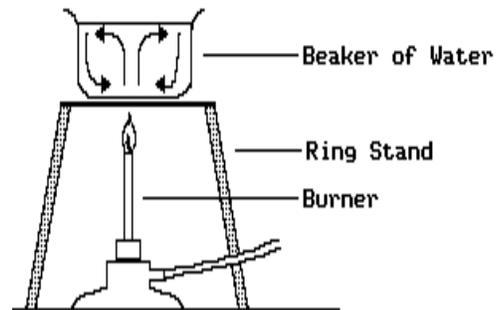


# Energy MC Review

Name: \_\_\_\_\_

- 1) Which process requires the addition of energy to water?
  - A) vaporization of water
  - B) condensation of water
  - C) freezing of water
  - D) cooling of water
- 2) According to the *Earth Science Reference Tables*, which material would require the most heat energy to increase the temperature of 1 gram of the material one Celsius degree?
  - A) ice
  - B) water
  - C) basalt
  - D) granite
- 3) Which type of surface would most likely be the best reflector of electromagnetic energy?
  - A) light-colored and rough
  - B) dark-colored and rough
  - C) dark-colored and smooth
  - D) light-colored and smooth
- 4) Which statement is the best example of heat energy transfer by conduction?
  - A) Heat energy is transferred from the bottom to the top of the lake.
  - B) Heat energy is transferred from the surface soil to the rocks below.
  - C) Heat energy is transferred from the Sun to the Earth.
  - D) Heat energy is transferred from the Earth's surface to the upper atmosphere.
- 5) An object that is a good radiator of electromagnetic waves is also a good
  - A) insulator from heat
  - B) reflector of heat
  - C) retractor of electromagnetic energy
  - D) absorber of electromagnetic energy
- 6) Which process results in a release of heat energy?
  - A) evaporation of water
  - B) condensation of water vapor
  - C) heating of liquid water
  - D) melting of ice

- 7) The diagram shows a container of water that is being heated. The movement of water shown by the arrows is most likely an example of



- A) conduction
  - B) insolation
  - C) convection
  - D) radiation
- 8) Which characteristics of a material have the *greatest* effect on the amount of insolation that the material will absorb?
  - A) density and hardness
  - B) roughness and color
  - C) age and roughness
  - D) hardness and age
- 9) Infrared, ultraviolet, and visible light are all part of the solar spectrum. The basic difference between them is their
  - A) wavelength
  - B) source
  - C) temperature
  - D) speed
- 10) Which example of heat transfer is due mainly to convection?
  - A) heat energy transferred by air moving from the Earth's surface to the upper atmosphere
  - B) heat energy transferred through a solid metal door
  - C) heat energy transferred from the Sun to the Earth
  - D) heat energy transferred by being reflected from a lake surface to the air above
- 11) If equal masses of water in various phases (states) are compared, which phase will contain the *greatest* amount of stored energy?
  - A) solid ice
  - B) water vapor
  - C) liquid water

## ANSWER KEY

1) A 2) B 3) D 4) B 5) D 6) B 7) C 8) B 9) A 10) A 11) B