

## Earth Science Quiz: Atmospheric Circulation and Thermal Energy Transfer

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

Date: \_\_\_\_\_

Section: \_\_\_\_\_

\_\_\_\_\_ 1. In what form does **most** solar radiation reach Earth?

- a. Infrared light                      b. Microwaves                      c. Ultraviolet light                      d. Visible light

\_\_\_\_\_ 2. Which is not an efficient greenhouse gas?

- a. helium                      b. methane                      c. carbon dioxide                      d. water vapor

\_\_\_\_\_ 3. Ultraviolet radiation from the Sun heats the atmosphere. What other energy source supplies most of the energy that keeps the atmosphere warm?

- a. X-rays from sources in space                      b. Visible light from solar radiation  
c. Radio waves from human activities                      d. Infrared radiation from Earth's surface

\_\_\_\_\_ 4. How would Earth be different if greenhouse gases were not present in the atmosphere?

- a. Earth would be much colder.                      b. Earth would be much wetter.  
c. Earth would be much warmer.                      d. Earth would be about the same.

\_\_\_\_\_ 5. Earth receives energy from the Sun. Some of this energy is transferred from Earth back into space. Which process(es) cause(s) this energy transfer?

- a. conduction only                      b. radiation only  
c. conduction and radiation                      d. conduction, convection, and radiation