

Name _____ Period _____ Date _____



Warrior Pledge: I have neither given nor received help on this assignment.

Signature: _____

1. Three types of energy transfers are _____, _____, and _____.

2. Choose one of the energy transfers from question 1 and explain it using a real-life example.

Type of energy transfer: _____

Explanation and example:

3. Heat transfers that occur between materials that are touching is called:

- A. Conduction
- B. Collision
- C. Radiation
- D. Convection

For questions 4 and 5, circle the correct answer to complete the statement.

4. When air or water is heated, the molecules move (faster/slower) and farther apart, and their density (increases/decreases), causing them to rise.

5. When air or water is cooled, the molecules move (faster/slower) and closer together, and their density (increases/decreases), causing them to fall.

6. Which of the following make up solar radiation?

- A. X-Rays, Infrared Rays, Visible Light
- B. Infrared Rays , Microwaves, Visible Light
- C. Infrared Rays, Gamma Rays, Visible Light
- D. Infrared Rays, Ultraviolet Rays, Visible Light

7. Radiation and convection are important because:

- A. They decrease the Greenhouse Effect
- B. They increase the Greenhouse Effect
- C. They power the global circulation of the atmosphere and the oceans
- D. They cause ocean tides to rise and fall

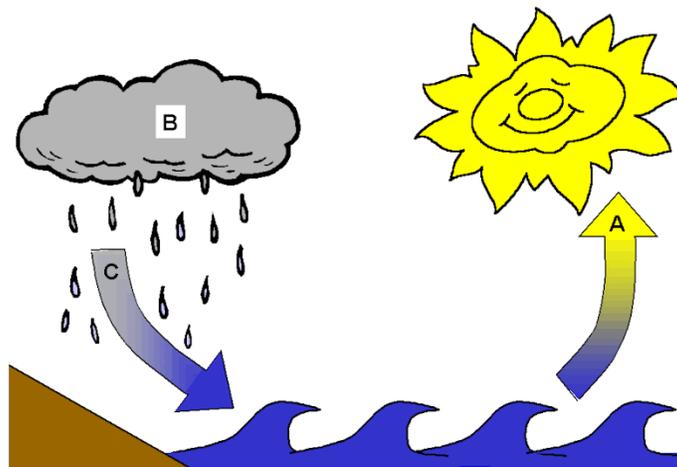
8. What is responsible for reflecting about 30% of solar energy back into space?

- A. Plant Life
- B. Oceans
- C. Earth's Surface (Land)
- D. The Atmosphere

9. What drives most natural processes within the atmosphere, hydrosphere, and on Earth's surface?

- A. The Sun
- B. Ocean Currents
- C. The Greenhouse Effect
- D. Wind Currents

Use the diagram below to answer questions 10 and 11.



10. What is the cycle being shown in the diagram? _____

11. A is showing _____.

B is showing _____.

C is showing _____.

12. Circle the correct answer to complete the following statement.

Hurricanes form over (cool/warm), tropical water and are fed by the energy of that water.

13. What type of energy transfer is responsible for the formation of clouds?

- A. Conduction
- B. Collision
- C. Radiation
- D. Convection

14. True or False. Most of the incoming solar radiation is absorbed at the Earth's surface.

- A. True
- B. False

15. What is responsible for the Greenhouse Effect?

- A. Extreme heating of the Earth's surface by the sun
- B. Sunlight reflected back into the air by lakes, oceans, and streams
- C. Burning of fossil fuels which increases carbon dioxide in the atmosphere
- D. Overgrowth of plant material that trap sunlight