Atmosphere Notes 2

1. **Heating of the Atmosphere:**

As energy enters the atmosphere some of the energy is:

1. 70% is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ by the ozone, clouds , atmospheric gases and Earth’s surfaces
2. 30% is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ by Earth’s surfaces and the clouds.
3. The remaining energy is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ by clouds.

**Heat Transfer:**

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_is the transfer of energy as electromagnetic waves or rays through space.
2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the transfer of thermal energy through a liquid or a gas. As cold air is heated by the earth’s surface it becomes warm and less dense causing it to rise in the atmosphere where it cools and becomes denser, causing the cold dense air to sink back down to earth to be reheated again.
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the transfer of thermal energy from one material to another by direct contact.

3. The heating process, in which gases in the atmosphere trap thermal energy, is called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

4. The rise in average global temperatures is referred to as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. The curving of wind caused by the Earth’s rotation is referred to as the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ effect.

6. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a measure of the average kinetic energy of the molecules in a substance.

7. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a form of energy, a form of energy that moves from one area or substance to another as a result of a difference between temperatures. Usually moves from an area of warm temperatures to an area of cold temperatures.

**3. Water Cycle:**

. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is defined as the conditions of the atmosphere at particular time and place.

The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the continuous movement of water from rivers, lakes and the ocean into the atmosphere, and back onto and over land and into the ground.

Steps of the water cycle:

A. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the process by which liquid water is heated by the sun and converted from its liquid state into water vapor or a gas.

B. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the process by which plants release water vapor into the air through their leaves.

C. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the process by which water vapor changes back into liquid droplets as water vapor cools.

D. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the process by which water in liquid or solid form retunes to earth as rain, snow , sleet or hail.

E. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the process by which water seeps down through the ground resulting in ground water.

F. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the process by which water flows across land and collects in streams, rivers, and eventually collecting in the ocean.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ refers to the amount of water vapor or moisture is in the air.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ refers to the amount of moisture the air contains compared to the maximum water it can hold at a particular temperature.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the temperature to which air must cool to be completely saturated.