

## Fill in the Blank

1. Energy of motion is also known as \_\_\_\_\_.
2. Sunlight that bounces off a surface is said to be \_\_\_\_\_.
3. A perfect absorber and a perfect emitter of radiation is called a \_\_\_\_\_.
4. How much radiation would an object be emitting if its temperature were at absolute zero?  
\_\_\_\_\_
5. The \_\_\_\_\_ represents the reflectivity of a surface.
6. The two most significant atmospheric greenhouse gases in the earth's atmosphere are \_\_\_\_\_ and \_\_\_\_\_.
7. At night objects on the ground cool by the process of emitting \_\_\_\_\_.
8. The combined albedo of the earth and its atmosphere averages about \_\_\_\_\_ percent.
9. The earth emits maximum radiation in the \_\_\_\_\_ portion of the spectrum, while the sun emits maximum radiation at \_\_\_\_\_ wavelengths.
10. If the present concentration of CO<sub>2</sub> doubles, climatic models predict that for the earth's average temperature to rise by as much as 4.5°C, the gas \_\_\_\_\_ must also increase in concentration.
11. The wavelength range where neither water vapor nor carbon dioxide absorbs much of the earth's infrared radiation is known as the atmospheric \_\_\_\_\_.
12. Air that sinks, warms by \_\_\_\_\_.
13. The temperature at which the earth is both absorbing solar radiation and emitting infrared radiation at equal rates is called the Earth's \_\_\_\_\_.
14. In the Northern Hemisphere another name for the northern lights is the \_\_\_\_\_.
15. Sunlight deflected in all directions after striking very small objects is said to be \_\_\_\_\_.

## Multiple Choice

*in class*

1. As the average speed of air molecules decreases, the temperature of the air:
  - a. increases
  - b. decreases
  - c. does not change