



Name _____

EARTH'S GREENHOUSE EFFECT

Based on the information from *Earth's Greenhouse Effect* video, use the Word Bank to fill in the blanks.

1. Without an atmosphere, the earth would be 30 degrees Celsius _____ than it is today.
2. The planet emits enough _____ wave radiation into space to balance the _____ radiation absorbed by it (radiative equilibrium).
3. Most of this radiation is emitted by the _____, instead of the earth's surface. Only 10% actually escapes into space.
4. The rest is absorbed by _____ and greenhouse gases.
5. The two most abundant of these gases are _____ and _____.
6. Short-wave radiation from the _____ passes through these gases, but long-wave radiation reflected by the surface of the earth is _____ by them and then is _____ in all directions. About half is directed back toward the surface of the earth.
7. This causes a continual exchange of long-wave radiation between the _____ and the atmosphere above it.
8. Trapping of long-wave energy is called _____, and _____ the surface temperature of the earth.

solar	short	carbon dioxide	sun
long	re-emitted	Greenhouse Effect	enhances
warmer	diminishes	methane gas	atmosphere
nitrous oxide	water vapor	Global Warming	surface of the earth
cooler	clouds	absorbed	

On the back of this page, make a diagram showing one or more of the above statements.