**The Greenhouse Effect**

Multiple Choice

1. Recall why people use greenhouses.
2. To provide heat to plants during winter.
3. Because they improve property values.
4. To protect plants from sunlight.
5. I don't know, they aren't even green.
6. State how greenhouses contain the heat from sunlight.

Remember, sunlight is short-wave radiation and the warm ground emits long-wave radiation.

1. The roof acts as a magnifying glass and intensifies the sunlight.
2. Heat from the ground cannot pass through the glass.
3. Sunlight can get through the walls, but not the roof.
4. Hot air prevents the heat from the ground from escaping.
5. When comparing the greenhouse effect with an actual greenhouse, recall which of these statements is true.
6. Certain gases in the atmosphere act like the glass walls.
7. Both of them protect plants from rough weather.
8. The greenhouse effect is different because the atmosphere has no walls.
9. If you were to release certain gases into a greenhouse, you would see the greenhouse effect.
10. Recall what greenhouse gases are.
11. Gases in the atmosphere that absorb sunlight.
12. Gases in the atmosphere that reflect long-wave radiation.
13. Gases in the atmosphere that produce heat.
14. Gases in greenhouses.
15. What is the definition of a greenhouse gas?
16. A gas that reflects long-wave radiation.
17. A gas that is produced inside greenhouses.
18. A gas that produces significant amounts of heat.
19. A gas that magnifies the sun’s rays.
20. Recall which of these statements is true.
21. Greenhouse gases produce heat.
22. Greenhouse gases reflect all heat.
23. Greenhouse gases reflect all heat.
24. Greenhouse gases produce sunlight.
25. Identify which of these is not a greenhouse gas.
26. Methane
27. Nitrogen
28. Carbon Dioxide
29. Ozone
30. Identify how greenhouse gases are produced.
31. Natural processes
32. Human activity
33. Both of the above
34. None of the above

Which is the correct answer?

1. **Circle the correct answer.**

Sunlight is **short-wave/ long-wave** radiation, which mostly **can/cannot** pass through the atmosphere.

Warm ground loses heat through **short-wave/long-wave** radiation, which mostly **can/ cannot** pass through the atmosphere.

1. **Circle the correct answer.**

A greenhouse gas is any gas in the atmosphere which reflects **short-wave/long-wave** radiation.

Greenhouse gases can be from **natural sources only/man-made sources only/natural and man-made sources**.

1. **Circle the correct answer.**

The greenhouse effect is **naturally occurring/man-made**. It has been happening **since the industrial revolution/for millions of years** and has **increased the average/maintained a comfortable global temperature**.

1. Circle the correct answer.

The enhanced greenhouse effect is **naturally occurring/man-made**. It has been happening **since the industrial revolution/for millions of years** and has **increased the average/maintained a comfortable global temperature**.