

1. When was the first picture of the Earth taken from space? 1946
2. Within 6 months of that picture, the modern environmental movement had begun.
3. The picture of the Earth taken from Apollo 17 on December 11, 1972 is the most commonly published picture in history.
4. We now believe that the continents of South America and Africa were once joined in a landmass called Pangea.
5. The most vulnerable part of the Earth's ecological system is the atmosphere because it is so thin.
6. The idea of global warming is that the sun's radiation comes into the system in the form of light waves and then heats up the Earth. Some of the energy that is absorbed and warms the Earth is reradiated back into space in the form of infrared radiation.
7. Some of the outgoing infrared radiation is trapped by the layer of Carbon Dioxide and other greenhouse gases and held inside the atmosphere. This is a good thing because it keeps the temperature of Earth within certain boundaries.
8. The concern with global warming is that this layer of atmosphere is being thickened by the pollution that is being put up there, trapping more of the outgoing infrared radiation, causing the atmosphere to heat up worldwide.
9. Carbon dioxide levels go up and down once each year because most of the vegetation in the world is North of the equator and so when the Northern hemisphere is tilted toward the sun, photosynthesis (which uses Carbon Dioxide from the air) increases.
10. Many glaciers all around the world have been retreating or shrinking.
11. Glaciers are important because 50% of the people in the world get their drinking water from river and spring systems that are fed over 50% by water coming off of the glaciers.
12. Scientists hope to look at cores of ice to determine how much CO₂ was in the atmosphere the year the snow that created that ice fell and look at the isotopes (forms) of oxygen to determine the temperature at that time.
13. When looking at the ice core data, carbon dioxide and temperature seem to have a correlation (or they seem to match up).
14. We have temperature records since the American Civil War. The 10 hottest years in that record are within the last 14 years.
15. When the oceans get warmer, this can cause bigger storms.
16. We seem to be having not only more precipitation, but also more of it coming in heavy stronger big storm events.
17. In 2005, Mumbai, India, had 37.1 inches of rain in 24 hours.
18. In spite of the increased flooding, there have also been increased heatwaves.
19. Water evaporation increases with increased temperature.
20. The Polar ice cap has diminished 40 % in 40 years.
21. When sunlight hits ice, more than 90% of it is reflected. When sunlight hits water, more than 90% is absorbed.
22. The Earth's climate is a like a big engine for the redistributing of heat energy from the equator to the poles by the means of ocean and wind currents.
23. FALSE: A worldwide average temperature increase would increase temperature the same amount in all areas of the world.
24. Sea-based ice melting will not cause an increase in ocean levels, while land-based ice melting will.

25. When lakes form in sheets of ice, they create what we call subglacial lakes. The water goes down to the bottom and it lubricates where the ice meets the bedrock.
26. What are the three biggest factors that Mr. Gore is concerned about causing an environmental problem? Climate Change, Biodiversity, and Pollution
27. Almost 15% of all the carbon dioxide that goes up each year into the atmosphere comes from forest burning.
28. Mr. Gore lists what he thinks are three questions the public brings to the global warming issue?
- I. Isn't there a disagreement among scientists about whether the problem is anthropogenic or not?
 - II. Don't we have to choose between the economy and the environment?
 - III. If we accept that this problem is real, maybe it's just too difficult to do anything about.
29. What are three things you can do to help protect the environment?
- Use more environmentally friendly modes of transport
 - Don't waste energy
 - Don't burn things