Climate Change Quiz Concepts

1. Define each of the following: a. Global Warming b. Climate Change c. Weather d. Climate
2. Explain the difference between global warming and climate change and determine which is the more appropriate term and why.
3. Compare the rate and extent of changes to climate today to previous episodes of climate change in atmospheric history and determine how they are similar or different.
4. Identify the primary cause of modern climate change and provide evidence to support this claim.
5. Compare and contrast the causes of modern climate change to previous incidents of climate change in Earth's history.
6. Summarize how atmospheric data was collected at the Vostok station in Antarctica and what it indicates about modern climate change.
7. Identify the current level of CO_2 it the atmosphere today in ppm and compare this level to those prior to the Industrial Revolution.
8. Define deuterium and state how it relates to temperature.
9. Compare levels of CO_2 and methane in the atmosphere today to prior levels and determine their rate and percent of increase to levels prior to 1850.
10. Compare the energy output of the sun from the 1980's to today and relate this to the change in the Earth's surface temperatures.
11. Explain the meaning and significance of the Milankovitch cycles and summarize how this evidence relates to our current understanding about the causes of modern climate change.
12. Summarize how precipitation is expected to change in different regions across the US as a result of climate change.
13. Summarize how agriculture is expected to change in the US as a result of climate change.
14. Explain how climate change will affect the rate of maturation of crops and how this will affect yields of crops.
15. Summarize all reasons why ocean levels are rising and how warming oceans affect biodiversity.
16. Explain how thermohaline currents work and why they are a concern to climatologists.
17. Predict what would most likely occur if excess CO_2 emissions were eliminated today.
18. Prescribe what actions would be necessary to keep CO_2 levels below 400 ppm.
19. Create a plan of action for individual people to help slow the rate of climate change.