

Research and Analysis

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Some possible assignments using online literature research:

1. Differentiate between the ozone layer “issue” and global warming
 1. Summarize each.
 2. Explain the main contributors to each.
 3. Explain at least one potential means of “solving” each.
 4. Describe the current status with each.
2. If the atmosphere is thicker and therefore traps the heat from the light rays of the sun, why doesn’t it prevent light rays from entering in the first place?
3. Look at the pictures of the glaciers taken during different years (pgs. 42-59 of *An Inconvenient Truth*). Research one of the glaciers and find the actual date that each picture was taken. Why might a picture of a glacier in the winter time be different than a picture taken in the summer time? In what way? Use this information to draft a letter to Mr. Gore about how he can strengthen his data (or how he might have it wrong).
4. Hurricane Katrina started as a Category 1 hurricane. What does this mean? Where was it a Category 1 hurricane? Where did it increase its intensity? What was the result?
5. Using the information on page 137 of *An Inconvenient Truth*, summarize the alternative fuel sources. Pick one and research it. Answer the following questions:
 1. Is this method currently being used anywhere in the world? In the U.S.?
 2. What are the positives/negatives?
 3. How does the cost compare with currently used energy sources?
 4. What is the biggest obstacle in using this alternative fuel source?
6. Determine the 5 highest sources of carbon dioxide. Make sure you explain the activities that create carbon dioxide. What other gases are considered “greenhouse gases”? What activities create these greenhouse gases?
7. Looking at the pictures of Mount Kilimanjaro (pgs. 42-43 of *An Inconvenient Truth*). What do you notice about the point of view? How might you explain this as evidence of global warming or evidence of no global warming? Research this and determine whether or not you are correct.

Some possible assignments using mathematical/graphing analyses:

1. Using the graph on pages 36-37 of *An Inconvenient Truth*, extrapolate the data to estimate the range of CO₂ (ppm) in 2010, 2020, 2100. Try using a linear model or an exponential model.
2. Explain the graph on pages 78-79 of *An Inconvenient Truth*. Explain the relationship between ocean warming and storm patterns. List examples supporting the positive correlation between ocean warming and more severe storm patterns.
3. What mathematical formula describes the shape of the curves in the figure on page 89 of *An Inconvenient Truth*?
4. Calculate the percentage increase in desertification using the information in the graph on page 119 of *An Inconvenient Truth*. What causes this increase?
5. Using Henry's Law, explain the issue of extra atmospheric CO₂ with the oceans and how this will affect ocean life, including pH. (This assignment could also become a research assignment if the class hasn't learned Henry's Law.)