**Creative Writing Story  
"When Photosynthesis Stopped"**

Please write a fictional story about the "Day Photosynthesis Stopped." Use the materials that you have learned about photosynthesis to create a story with you being a witness to the crisis that would occur if the process of photosynthesis was halted. Give your best thoughts as to what you would witness in the last days of the human race, and complex life as we know it, cease to exist.

**Please include the following components to your story:**

1) What occurred that blocked one of the reactants (CO2, H2O, or Sunlight) or required light or dark reaction components (NADP, Chlorophyll protein, or RuBP) from doing its job in the chloroplasts of leaves and algae. You need to give a possible explanation as to what knocked that component out that then caused the process to stop worldwide. Make it believable. Do not use supernatural explanations (Harry Potter said "Photosynthesis Stoppus World Widous" or "God was disappointed in human behavior and commanded all plants and algae to stop photosynthesis!" ). In this section, you need to explain the light and dark reactions of photosynthesis and be very clear about what is now NOT going to happen. Use your notes from Tuesday and from the 1st half of today's class on the structure of the chloroplast! Using the words chloroplasts, chlorophyll, grana, and stroma would make your instructor smile with pleasure!

2) What events began to occur because the base of the food chain was eliminated. You are momentarily alive in a world that no longer has food being produced for herbivores. You are momentarily alive in a world that has decreasing oxygen rates. Remember, you are in an atmosphere with 21% oxygen. The only process that restores it is photosynthesis. Algae in the ocean accounts for about 70% of your oxygen and the plants on land, the other 30%. Also, photosynthesis is the only process that reduces the carbon dioxide (Earth-warming greenhouse gas) in the atmosphere. Respiration and fossil fuel burning increase it. Bummer! Help us to understand your concerns/terror, your sufferings, and your first hand dealings with the declining world around you.

3) Please end the story with your death. Please be descriptive about your demise to the end. Just stop writing and don't finish this story because, of course, you couldn't. The last sentence needs to be incomplete! A person with an oxygen mask, a scuba tank business, and a granola bar warehouse evidently came by and printed it out for you after pushing your decomposing corpse from the keyboard (please do not say this in your story).

**Rubric for Evaluation**

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| **50% Poor Quality** | **70% Developing** | **85% Good Quality** | **100% Exemplary Quality** |
| Reason given for photosynthesis stopping is NOT detailed, is NOT believable, and it appears the writer was sleeping in class on Tuesday. It made about as much sense as "Avara Cadavara" in science terms. | Reason given for photosynthesis stopping is somewhat detailed, is somewhat believable, and somewhat uses the notes given on Tuesday for content. | Reason given for photosynthesis stopping is pretty detailed, is pretty believable, and uses the notes given on Tuesday for content. | Reason given for photosynthesis stopping is detailed, is believable, and uses the notes given on Tuesday for content about photosynthetic processes. |
| Person reading this paper could NOT really gain a very good understanding of the light and dark reactions of photosynthesis. | Person reading this paper could possibly get some understanding of the light and dark reactions of photosynthesis. | Person reading this paper could gain a good understanding of the light and dark reactions of photosynthesis. | Person reading this paper could gain a very good understanding of the light and dark reactions of photosynthesis. |
| The writer gives a VERY incomplete description of the chain of events that occurred because the base of the food chain and oxygen replenishing was eliminated. | The writer gives a some description of the chain of events that occurred because the base of the food chain and oxygen replenishing was eliminated. | The writer gives a detailed description of the chain of events that occurred because the base of the food chain and oxygen replenishing was eliminated. | The writer gives a VERY detailed description of the chain of events that occurred because the base of the food chain and oxygen replenishing was eliminated. This writer obviously understands ecological concepts concerning trophic levels and was certainly in Pitts' honors biology class 1st 9 weeks! |
| The writer just died and we don't really know what it was like for them. | The writer sort of helps you to feel their pain as he/she ceases to live. | The writer helps you to feel their pain as he/she ceases to live. | The writer really helps you to feel their pain as he/she ceases to live. |
| Writing has so many writing and grammar errors, it is difficult to read and understand. | Writing has noticeable grammar and spelling errors throughout. | Writing has few grammar and spelling errors. | Writing is done without grammar and spelling errors. |
| Organization and word choice make the flow of this paper like traveling in a downtown area with heavy traffic, crazy cab drivers, jay-walking pedestrians, no stop lights, and terrified pets off leash. | Organization and word choice make the flow of this paper somewhat bumpy to the reader. | Organization and word choice make the flow of this paper somewhat smooth to read. | Organization and word choice make the flow of this paper very smooth to read. |
| The length of the paper is less than 400 words of 28 point font writing (don't even go there) or less than 400 words of 12 point font writing. **(50% maximum score)** | The length of the paper is around 500 words of spell-checked, grammar-checked 12 point font writing. **(75% maximum score)** | The length of the paper is just under 600 words but over 550 of spell-checked, grammar-checked 12 point font writing. **(85% max score)** | The length of the paper is over 600 words, spell-checked, & grammar-checked 12 point font writing. |