

Name: _____

SNC 2D

Profiling Climate Change

A report in pictures

Task: Imagine that you are a photo journalist for a magazine and since you have a wealth of knowledge of climate change, your supervisor has requested you to do a profile, in pictures, of anthropogenic climate change. Your boss tells you that you must use a minimum of 8 photos in your article, and have an explanation below each picture to explain how the picture relates to climate change. It is up to you to educate the public about climate change and how humans can help to minimize it!

Your goals are to demonstrate:

- A) Global climate change is influenced by both natural and human factors**
 - Discuss the natural vs. anthropogenic greenhouse effect (GHE), and global warming (optional)
 - Give examples of each
 - Explain why the natural GHE is crucial for life on Earth
- B) Climate change affects living things and natural systems**
 - Explain how recent climate changes are affecting (& will affect) each sphere
 - State the specific effects to all 4 spheres that you studied
 - Choose various parts of the world, i.e. not just polar regions, but how developing (poor) countries are/will be affected, how equatorial regions are/will be affected, parts of Canada, etc.
- C) People have the responsibility to assess their impact on climate change**
 - Discuss how humans have contributed to climate change (human activities)
 - Give examples of human activities that have contributed to the GHE
- D) Effective courses of action to reduce humans' impact on climate change**
 - Discuss initiative(s) that failed
 - Present initiative(s) that are working (Drive Clean program, government grants for retrofitting older buildings/houses to be more energy efficient, carbon offset programs, community tree-planting programs, solar panels/farms subsidized by government, composting programs, etc.

How to do it:

- Find a minimum of 8 photos (to a maximum of 12) from the Internet (Google images is a good starting point) that explore the causes & effects of climate change
- Use your notes, your textbook and reputable Internet sites to gather your info.
- Use terms learned in the unit to show your stuff: albedo heat sink, anthropogenic, etc.
- Create your profile in Microsoft Word, Powerpoint, Publisher etc. The choice is yours
- **Put all ideas into your own words**
- Reference all websites you consult and/or draw from (including the pictures)

Profiling Climate Change – Rubric

Criteria	F	Level 1	Level 2	Level 3	Level 4
<u>K & U</u> <i>Knowledge of the 2 types of Greenhouse Effect</i> <i>Understanding of how cc is affected by both types of the GHE</i> <i>Understanding of how spheres are affected by climate change</i>	Does not meet minimum expectations (Incomplete)	Student: - inaccurately defines 1 of the 2 types - only demonstrates understanding of how cc is affected by human factors - accurately explains how a sphere is affected by cc - gives some general examples of how spheres are affected	- accurately defines both types, but in little detail - demonstrates understanding of how cc is affected by both, but in little detail, with 1 ex: - accurately explains how 2 spheres are affected by cc - offers many general examples of how spheres are affected	- accurately defines both types in some detail - demonstrates understanding of how cc is affected by both in some detail, with 2 ex: - accurately explains how 3 spheres are affected by cc - gives some specific, but predictable, ex: of how spheres are affected	- accurately defines both types in depth - defines global warm. & both types of GHE in simple terms and explains relationship - demonstrates understanding of how cc is affected by both in depth, with many examples - accurately explains how all spheres are affected by cc - uses several specific examples from diverse regions around the globe
<u>T & I</u> <i>Planning & organization of profile</i> <i>Referencing of sources</i>	Incomplete	- profile is poorly-organized & untidy - no real flow between photos - consults 5 sources - most references are not in APA format	- is organized, but untidy - little flow from one photo to another - consults 6 sources - some references are in APA, but not in alphabetical order	- is organized & tidy - some flow from one photo to another - consults 7 sources - most references are in APA format & all in alphabetical order	- is well-organized & tidy, with title page on front of profile - seamless transition from/to each photo - consults 8+ sources - APA & alpha. order - includes some non-Internet references
<u>Communication</u> <i>Expression of ideas in written & visual form</i> <i>Creativity of profile</i> <i>Use of vocabulary associated with climate change</i>	Incomplete	- ideas are often unclear - weak link between photo & description - uses little creativity - little use of scientific vocabulary	- ideas are at times unclear - vague link between photo & description - uses some creativity - some scientific vocabulary used, but terms are often not used accurately	- ideas are usually clear - clear link between photo & description - uses some unusual/unique photos in cc profile - cc vocabulary used, but some terms are not purposeful (are used randomly)	- ideas are always clear & concise - obvious link between photo & description - uses many unique photos & interesting (diverse) examples - accurate, frequent & purposeful use of scientific vocab. - chemical formulas of compounds included
<u>Application</u> <i>Assessment of human impacts (activities) that contribute to cc</i> <i>Strategies that failed to improve cc</i> <i>Initiatives to minimize or solve cc</i>	Incomplete	- gives an example of a human activity - inaccurately explains how activities contribute - offers a strategy that failed - gives an initiative to minimize cc accurately	- gives 2 examples of human activities - accurately explains how some activities contribute to cc - accurately explains 1 strategy that failed - gives 2 initiatives to minimize cc accurately	- gives 3 examples of human activities - accurately explains how most activities contribute to cc - accurately explains 2 strategies that failed - offers 3 initiatives to minimize cc, with accuracy	- gives several ex: of human activities - accurately explains how all contribute - in depth - accurately discusses 2+ strategies that failed, and tells why - discusses 4+ initiatives to minimize human impact on cc - also presents practical, easy ones