Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Pd: \_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Review of Common Misconceptions**

**AIM:** How do scientists compare and contrast various elements of the atmosphere and climate change?

**OBJECTIVES:**

• Differentiate various characteristics of the atmosphere and climate change

• Investigate the importance of certain aspects of Earth’s atmosphere

*Directions*. Use your prior knowledge, notes and images to describe each essential term.

|  |  |
| --- | --- |
| **Essential Term** | **Description** |
| **Ozone**  **https://encrypted-tbn3.gstatic.com/images?q=tbn:ANd9GcQJxGMb18d3jV6q9vmp11PWWOZZr5uaJfqN13oeUi1BNpgQQJFpPc59j_5r** |  |
| **Ozone Layer**  http://www.nc-climate.ncsu.edu/secc_edu/images/Ozone1.png |  |
| **Greenhouse Effect**  http://i.livescience.com/images/i/000/053/475/i02/Greenhouse-effect.jpg?1370382117 |  |

**Common Misconceptions.**

Depending on who is talking, there can be an enormous difference between global warming and climate change — or no difference at all. A lot of people, including many journalists who write about the topic, use the two terms interchangeably.

Global warming is a more specific term. It refers to increases in the Earth’s average temperature because of greenhouse gas build up in the atmosphere. Climate change is a broader term. It refers to changes (increases and decreases) in climate which involves not just average temperature, but also other factors that vary, such as humidity, cloudiness, rain (or snow), clouds, precipitation, snow cover, ice cover, sea level, etc.

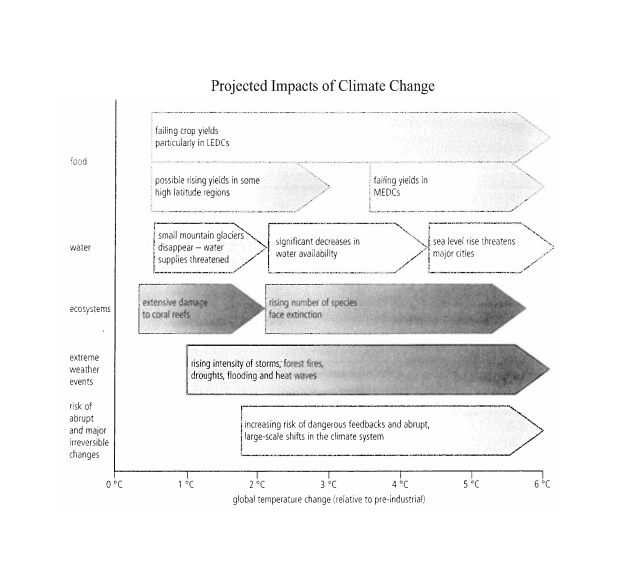
Scientists have learned that raising the Earth’s temperature is very likely to change many of these climatic factors. So while global warming is what’s causing it, what most people are going to notice is not necessarily warming but rather a change in climate.

The bottom line is that while global warming is not wrong, climate change more accurately describes what is happening. But most of the time, whether people use global warming or climate change, they’re almost certainly talking about the same thing.

SOURCE: Climate Central & EPA

**Impact of Temperature Increase on Aspects of the Environment and Society**

|  |  |
| --- | --- |
| **Feature** | **Effect or Impact** |
| *Environmental features* | |
| ice and snow | retreat of polar ice caps and glaciers |
| coastlines | increase in sea level causing coastal flooding |
| water cycle | increased flooding |
| ecosystems | change in biome distribution and species composition |
| *Societal features* | |
| water resources | severe water shortages and possibly wars over supply |
| agriculture | may shift away from drought areas |
| coastal occupation | relocation due to flooding and storms |
| human health | increased disease |

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**Impact of Climate Change on Aspects of the Environment and Society**

**Discuss** the similarities and differences among global warming and climate change.