

# Causes and Effects of Climate Change

**Directions:** Watch the video, do the exercises, then review the answers by having students take turns reading aloud. [https://www.youtube.com/watch?v=G4H1N\\_yXBIA](https://www.youtube.com/watch?v=G4H1N_yXBIA)

Fill in the blanks using the word list below.

Human activities from \_\_\_\_\_ to overpopulating are driving up the earth's temperature and fundamentally changing the world around us. The main cause is a phenomenon known as the \_\_\_\_\_. Gases in the atmosphere, such as \_\_\_\_\_, carbon dioxide, methane, nitrogen oxide, and chlorofluorocarbons let the sun's light in, but keep some of the \_\_\_\_\_ from escaping like the glass walls of a greenhouse. The more greenhouse gases in the atmosphere, the more heat gets \_\_\_\_\_, strengthening the greenhouse effect and increasing the earth's temperature. Human activities, like the burning of \_\_\_\_\_ have increased the amount of CO<sub>2</sub> in the atmosphere by more than a third since the Industrial Revolution. The rapid increase in the greenhouse gases in the atmosphere has warmed the planet at an alarming rate. While Earth's climate has fluctuated in the past, atmospheric carbon dioxide hasn't reached today's levels in hundreds of thousands of years. Climate change has consequences for our \_\_\_\_\_, our \_\_\_\_\_, our food sources and our \_\_\_\_\_.

|              |           |                   |
|--------------|-----------|-------------------|
| heat         | weather   | water vapor       |
| oceans       | pollution | health            |
| fossil fuels | trapped   | greenhouse effect |

Match the blue words below by filling in the definition number.

| # | word                  | #  | definition                                                                                                                                                                         |
|---|-----------------------|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   | fundamentally         | 1  | can be reproduced as quickly as produced, clean                                                                                                                                    |
|   | phenomenon            | 2  | rise and fall irregularly in number or amount                                                                                                                                      |
|   | Industrial Revolution | 3  | to become less in size and importance                                                                                                                                              |
|   | alarming              | 4  | a lung sickness that will not go away                                                                                                                                              |
|   | fossil fuels          | 5  | fog made heavier and darker of smoke and chemical fumes                                                                                                                            |
|   | diminish              | 6  | changes in manufacturing and transportation when fewer things were being made by hand or moved by human power, but instead by transportation machines or in large scale factories. |
|   | smog                  | 7  | basic or essential                                                                                                                                                                 |
|   | asthma                | 8  | come from old life forms decomposed a long time ago like coal, oil, and natural gas.                                                                                               |
|   | renewable             | 9  | an observable fact or event                                                                                                                                                        |
|   | fluctuated            | 10 | causing people to feel worried or frightened                                                                                                                                       |

**Multiple Choice.** Fill in the blank with the entire answer.

### Oceans

In Greenland and Antarctica \_\_\_\_\_.

- a. coastal regions are flooded. b. the sea level is melting c. ice sheets are melting.

The extra water \_\_\_\_\_.

- a. causes sea level to melt b. causes flooding of coastal regions. C. causes flooding of glaciers

### Weather

Warmer temperatures lead to \_\_\_\_\_.

- a. fluids b. draws c. droughts d. steam

### Food

Growing crops becomes more difficult \_\_\_\_\_.

- a. because the plants diminish b. because there is not enough water c. because there is too much water d. because the animals run away.

### Health

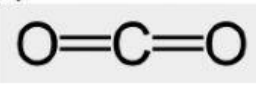
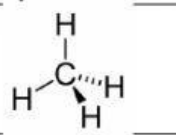
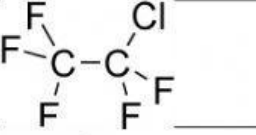
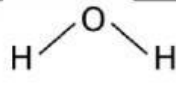
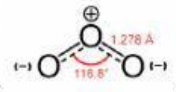
In urban areas the warmer atmosphere creates an environment that traps and increases the amount of \_\_\_\_\_. This is because smog contains ozone particles which increase rapidly at higher temperatures. Exposure to higher levels of smog can cause health problems such as asthma, heart disease and lung cancer.

**Fill in the missing words with the word list below.**

While the rapid rate of climate change is \_\_\_\_\_ by humans, humans are also the ones who can \_\_\_\_\_ it. If we work to replace fossil fuels with \_\_\_\_\_ like solar and wind which don't produce greenhouse gas \_\_\_\_\_, we might still be able to prevent some of the worse effects of climate changes.

|           |           |        |      |       |
|-----------|-----------|--------|------|-------|
| renewable | emissions | caused | smog | fight |
|-----------|-----------|--------|------|-------|

**Match the molecule with its symbol.**

| # | molecule      | # | symbol                                                                              | # | molecule             | # | symbol                                                                                |
|---|---------------|---|-------------------------------------------------------------------------------------|---|----------------------|---|---------------------------------------------------------------------------------------|
|   | nitrous oxide | 1 |  |   | water vapor          | 4 |  |
|   | ozone         | 2 |  |   | chloro-fluorocarbons | 5 |  |
|   | methane       | 3 | $N_2O$                                                                              |   | carbon dioxide       | 6 |  |

