

The in the usual
weather found in



**ASSIGN
BUSTER**

The world is warming, sea levels are rising, and severe weather is happening before our eyes all over the world. Why is this? It's because of climate change and human activity. According to NASA, they said climate change is, " a change in the usual weather found in a place.

This could be a change in how much rain a place usually gets in a year. Or it could be a change in a place's usual temperature for a month or season" (Dunbar 2015). There are some natural causes to climate change, however, it is mostly the human activities on Earth that are causing this problem.

Some natural factors that cause climate change on our Earth is volcanic eruptions, plate tectonic movement, eccentricity, precession, and the tilt of the earth. During a volcanic eruption, it releases carbon dioxide, aerosols, volcanic ash, dust, and sulfur dioxide into the air. All of these things can create a blanket around earth, not allowing the sunlight to reach earth. This causing the planet to cool and lower the temperatures on the planet (NASA). Plate tectonics can affect the patterns of air, ocean currents, and climate on the continents.

Millions of years ago, all of the seven continents were once one big continent known as Pangaea. As these continents were moving, it affected the movement of the ocean current, which can have a big impact on climate change (Society 2009). Lastly, eccentricity, precession, and the tilt are known as the Milankovitch Cycle. This cycle has to do with movement for the orbit around the sun. These three cycles can affect the amount of solar heat the earth receives and can affect climate change (Milankovitch Cycles 2015). Greenhouse gases in the atmosphere also have a big impact on climate

change. These gases include carbon dioxide, methane, water vapor, and other gases.

These gases absorb the sun's heat and keeps the earth warm. When there are too many of these gases in the atmosphere, however, the greenhouse effect becomes very intense and will make the Earth very warm. These gases won't allow any heat to escape and they will be stuck in our atmosphere. If we did not have these greenhouse gases in the atmosphere, earth would become freezing and unlivable (Society 2009). Human activity has had a major impact on our climate change on Earth.

Humans are releasing greenhouse gases by the burning of fossil fuels and cutting down forests that take in carbon dioxide. The burning of fossil fuels like coal and oil has increased the concentration of carbon dioxide and these gases trap heat, making our planet warmer. With the heat being trapped on earth, we will see a rise in global temperature, the oceans warming, ice sheets decreases in mass, sea levels rising, sea ice declining, and a decreases in snow cover (Climate Change Evidence 2017). The graph to the left shows the annual growth rate of CO₂ at Mauna Loa, Hawaii. The graph shows that from 1960 to 2010, that Mauna Loa has experienced dramatic increase of CO₂ in this area (Team 2005). According to CBS, all the nations in the world in 2011 produced almost 38. 2 billion tons of carbon dioxide from the burning of fossil fuels (A.

2012). Antarctica's temperature is increasing and if we don't do anything about it, it will continue to increase. Antarctica could be in big trouble in 50 years if the temperature does not stop rising. Climate change is having a

massive role in the change of Antarctica. Ice shelves will rapidly fall into the ocean, the ice will continue to melt and cause the sea levels to rise ever greater. When the sea level rises, it doesn't just affect Antarctica, it affects the entire world. The coastlines will become flooded and millions of people will have to move inland.

The temperature will continue to increase and the wildlife will decrease. With the Antarctic ice melting, this is and will continue to affect the wildlife living on this continent. Penguins, polar bears, and seals rely on the ice and if all that melts, what would happen to them. These animals have adapted to living in the cold and it will be harder for them to be in warmer weather. If humans don't change their ways and cut back on producing CO₂, all the ice and snow on Antarctica could be gone and our sea levels would be crazy high causing many problems. Climate change is a problem for our planet and it is changing quickly. Temperatures are rising, sea levels are rising, and Antarctica is melting and it is all because of CO₂ and other gases in our atmosphere.

If we don't change our ways, we will be facing serious consequences in our future and we might not be able to reverse it.