



Samson Class – Climate Change



How is climate change affecting the world?

| Timeline | |
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| 1890s-1940s | Average surface air temperatures increase by about 0.25 °C. |
| 1979 | First World Climate Conference adopts climate change as major issue. |
| 1985 | First major international conference on the greenhouse effect at Villach, Austria. |
| 1987 | Warmest year since records began. |
| 1988 | IPCC Established |
| 1990 | The first report of the IPCC finds that the planet has warmed by 0.5°C in the past century. |
| 1992 | Climate Change Convention, signed by 154 nations in Rio sets initial target of reducing emissions. |
| 1997 | Kyoto Protocol- agrees legally binding emissions cuts for industrialised nations |
| 2005 | On 16 February, the Kyoto Protocol comes into force. |
| 2007 | The fourth Assessment Report of the IPCC places the blame for global warming firmly on humankind. |
| 2008 | The Polar bear is listed on the endangered species list. |
| 2013 | The IPCC's fifth assessment report says scientists are 95% certain that humans are the "dominant cause" of global warming since the 1950s. |
| 2017 | World leaders gather in Paris to demonstrate how billions of dollars could be shifted towards a low-carbon future. |

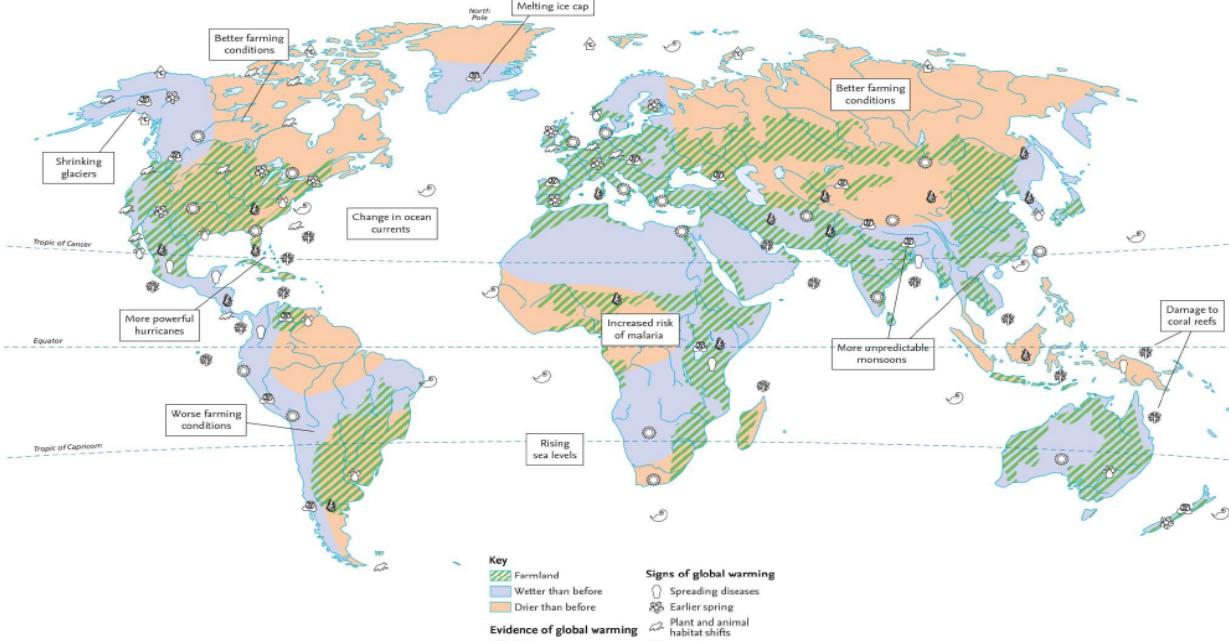
| Key Facts |
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| Climate Change is extremely likely (greater than 95 percent probability) to be the result of human activity since the mid-20th century |
| Each year the amount of carbon dioxide in the atmosphere is increasing and this is contributing to causing global warming. |
| Carbon dioxide is referred to as a greenhouse gas because, along with other gases such as methane, it stops heat bouncing back into space from the Earth's surface. |
| There are more extreme weather events around the world due to Global warming and Climate change, such as long heat waves and droughts in some places and short intense storms with very heavy rainfall and flooding elsewhere. |
| Global warming is causing ice sheets, sea ice and glaciers around the North Pole and South Pole and in high mountain ranges to thaw. |
| Fossil fuels are the main source of carbon dioxide emissions, which, along with other greenhouse gases are the principal cause of changes in weather patterns around the world. |
| Instead of using fossil fuels, government have been developing renewable energy sources. |
| The IPCC (the Intergovernmental Panel on Climate Change) assesses the science behind climate change. |

| Vocabulary Dozen | |
|---------------------------------|--|
| Atmosphere | The gases surrounding the earth or another planet. |
| Carbon Dioxide emissions | is released into Earth's atmosphere mostly by the burning of carbon-containing fuels and the decay of wood and other plant matter. |
| Climate | The general weather conditions that are typical of that area. |
| Climate Change | A change in global or regional climate patterns. |
| Fossil Fuels | A natural fuel such as coal or gas, formed in the past from the remains of living organisms. |
| Greenhouse effect | The trapping of the sun's warmth in a planet's lower atmosphere. |
| Greenhouse gases | A gas that contributes to the greenhouse effect. Carbon dioxide is an example of a greenhouse gas. |
| Global Warming | It is a process that causes the average temperature on Earth to warm up or increase. |
| Landscape | All the visible features of an area of land. |
| Renewable resources | Any resource, such as wood or solar energy, that can or will be replenished(restocked) naturally in the course of time. |
| Sustainability | To develop a sustainable future that meets today's needs, protects the environment and resources for the future. |
| Non-renewable resources | Natural resources(such as coal and gas) that cannot be replaced after they are used. |

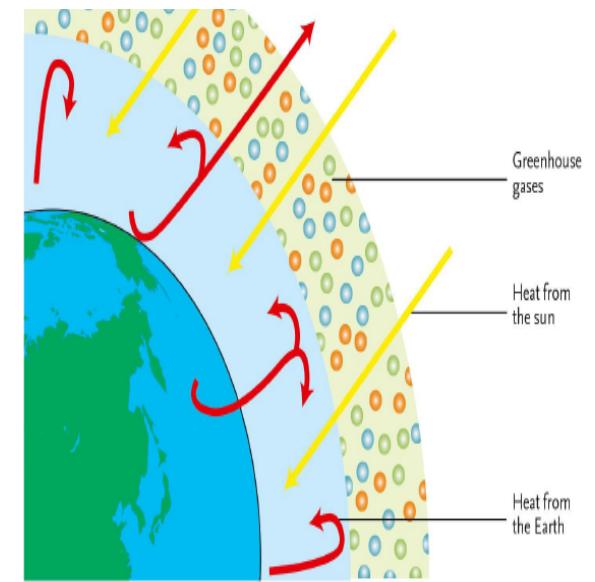
Home Geographer

- Research more about climate change on these website: <https://www.bbc.co.uk/newsround/45880633> and <https://climatekids.nasa.gov/climate-change-meaning/>

A map showing the effects of Climate change around the World.



How Global warming is created. Greenhouse gases are trapped within Earth's atmosphere, blocking the heat from escaping the atmosphere.



Wildfires in Lithgow, Australia



Flooding in Dakar, Senegal



Flooding in Starcross, England



