



Climate Change Facts & Resources: Ideas to Get You Started on Your Video Masterpiece

Climate change is a big topic! Here are some facts, resources, and questions to consider as you start planning your video. Feel free to borrow from these points, explore the links to learn more, and ponder the questions to personalize your video. Check out the terms at the end of this page for an overview of key terms and concepts.

Why should you care about climate change?

1) The signs of climate change are all around us.

Here a few of the signs of climate change we're seeing now:

- o <u>Higher Temperatures</u>
- o <u>Wilder Weather</u>
- o Rising Sea Level
- o <u>More Droughts</u>
- o Changing Rain and Snow Patterns

Visit our <u>Signs of Climate Change</u> web pages (<u>http://www.epa.gov/climatestudents/impacts/signs/index.html</u>) to learn more about the signs of climate change, and see the trends over the decades.

2) The climate you will inherit as adults will be different from your parents' and grandparents' climate.

Climate change means serious impacts on...

• Our health...

Through longer allergy seasons, increased number of heat-related illnesses, and increased air pollution that can worsen asthma.

• The spread of disease...

Warmer temperatures can expand the ranges and lifespans of disease-spreading mosquitoes and ticks

• Heat waves and droughts...

Climate change increases the frequency and intensity of heat waves and droughts. Heat waves increase energy costs for households, lead to blackouts and brownouts, and threaten human health and safety. Droughts can drive up food prices, limit hydroelectricity supplies, and affect manufacturing operations that rely on water to run their businesses.

• Wildfires...

With climate change increasing the likelihood of hot, dry weather in many parts of the country, the risk of wildfires is expected to increase.

• Storms...

Tip: Don't confuse climate with weather!

Weather is the day to day change in what is happening outside (temperature, rainfall, storms, etc.)

Climate refers to average conditions over 30 years or more. If this winter is different from last, it may not be attributable to climate change. But if your parents or grandparents have noticed changes in long-term patterns since their childhood (spring bloom times, average summer heat, extreme weather), then it could be they're noticing climate change. In much of the country, more precipitation will fall in intense, short bursts such as blizzards and downpours, which can lead to flooding. In addition, scientists expect that hurricanes will become more intense, with higher wind speeds and heavier rains.

Learn more about how climate change will affect people and the environment: http://www.epa.gov/climatestudents/impacts/index.html

3) Now is the time to act on climate change.

Reducing carbon pollution, and preparing for the changes that are already underway, is key to solving climate change and reducing the risks we face in the future. A major way carbon pollution gets into the atmosphere is when people burn coal, oil, and natural gas for energy. Everyone uses energy so everyone can be part of the solution!

Learn about technologies that reduce carbon pollution: <u>http://www.epa.gov/climatestudents/solutions/technologies/index.html</u>

What actions are you and your community taking to prepare for climate change?

1. Many families, schools, communities, businesses, and states are already taking action

to reduce carbon pollution and protect themselves and their property from the risks associated with climate change. Discover what actions you and your community can take on at: <u>http://www.epa.gov/climatestudents/solutions/index.html</u> <u>http://www.epa.gov/climatechange/wycd/school.html</u>

Choose a region or topic and then click on the adaptation tab: http://www.epa.gov/climatechange/impacts-adaptation/index.html

2. Small actions, such as walking to school, smart energy use, and smart water use, can add up to big reductions in carbon pollution over time.

Use our online calculator to determine your carbon emissions and the amount of carbon pollution you can reduce: http://www.epa.gov/climatestudents/calc/index.html



Questions to consider

As you are writing your video script, think about how climate change relates to you. Make it personal! Here are some questions to consider as you brainstorm...

 Has your community experienced excessive heat or extreme weather? How did it affect them, or affect you? Is your community prepared to handle more extreme weather events? Climate change will make some extreme weather events more common.

Climate Change Terms

Here are some key terms that might be helpful as you create your masterpiece.

Climate change refers to any significant change in the measures of climate lasting for an extended period of time. In other words, climate change includes major changes in temperature, precipitation, or wind patterns, among others, that occur over several decades or longer.

Greenhouse gases are gases that trap heat in the atmosphere causing the earth to warm. The elevated levels of greenhouse gases seen in recent decades are largely due to human activities, especially the burning of fossil fuels.

Carbon pollution is shorthand for humanmade emissions of carbon-based greenhouse gases, primarily carbon dioxide.

For more definitions related to climate change, check out our glossary at <u>http://epa.gov/climatestudents/glossary.</u> <u>html</u>

- 2. Do you know if your state or city is taking action to reduce carbon pollution?
- 3. Is your community preparing for climate change? What actions are they taking to prepare?

Have fun with your video!

Learn more about climate change science at http://www.epa.gov/climatestudents/