

What Is Climate Change? Scavenger Hunt

Answer Key

Use the climate change posters to find the information needed to complete these sentences. The headings will help direct you to where the information is located on the posters.

Degrees of Variation: Climate Change in Nunavut

CLIMATE CHANGE: THE BASICS

Climate change is a change or variability in the 'average weather' of a region.

Climate change can occur naturally.

The Earth's temperature is regulated by a natural system known as the 'greenhouse effect'.

Name five naturally occurring greenhouse gases. water vapour, CO₂, methane, nitrous oxide, and ozone

Problems can arise when the concentrations of these naturally occurring gases are increased.

Taking the Chill Off: Climate Change in the Yukon and Northwest Territories

HOW HAS THE CLIMATE CHANGED?

During the last ice age, glaciers covered much of Canada and temperatures were much colder than today in the Arctic.

Major shifts in climate, such as those that resulted in past ice ages, are related to changes in the Earth's position relative to the sun.

Shorter-term changes in climate can occur after major volcanic eruptions.

Changes in the circulation and temperature of the oceans can also cause shifts in climate such as El Niño events.

Temperature Rising: Climate Change in Southwestern British Columbia

IS CLIMATE CHANGING?

Climate is the expected or general pattern of weather for a place or region over extended periods of time.

Scientists are concerned that we are entering a period of unprecedented global warming caused by humans.

The greatest differences (in surface air temperature) are predicted to be at high latitudes and in the interior of continents.

The twentieth century was the warmest century of the last 1000 years, and the 1990s was the warmest decade of that century.

The Winds of Change: Climate Change in the Prairie Provinces

CLIMATES DO CHANGE

Warming and cooling trends are part of the Earth's normal climatic cycles.

There have been frequent changes in climate, with repeated swings from colder to warmer conditions.

Over the past 140 years, Earth's atmosphere has warmed.

Scientists are concerned that we are entering a period of unprecedented global warming caused by human activity.

Weathering the Changes: Climate Change in Ontario

THE CLIMATE SYSTEM – A BALANCING ACT

The main elements of the climate system include the sun, atmosphere, ocean, water, and land.

Changes to any of these elements affect the balance of the entire system.

Without this insulation (of greenhouse gases in the atmosphere), Earth would be about 33°C colder than it is now, making it inhospitable to life.

UPSETTING THE BALANCE

In Canada, the average temperature has increased by 0.9°C since 1948.

This 'enhanced' greenhouse effect has the potential to warm the planet at a rate never before experienced in human history.

A Change in the Wind: Climate Change in Quebec

WHAT IS CLIMATE CHANGE?

Climate change is a change in the 'average weather', affecting these features of weather: temperature, wind patterns, precipitation, and storms.

The enhancement of the greenhouse effect contributes to global warming and may have various environmental repercussions.

Myth: A cool summer or colder than average winter means that global warming is not really a problem.

The Tides of Change: Climate Change in Atlantic Canada

IS CLIMATE CHANGING?

Recent unusual weather conditions have everyone talking about climate.

There is increasingly stronger scientific proof that climate change is real.

The temperature increase has not been steady, but since the 1980s warming has accelerated.

Canada may experience more temperature change over the next several decades than most regions of the world.