

Lesson 3 Recent Climate Change

Skim Lesson 3 in your book. Read the headings and look at the photos and illustrations. Identify three things that you want to learn more about. Write your ideas in your Science Journal.

Main Idea

Regional and Global Climate Change

I found this on page _____.

Human Impact on Climate Change

I found this on page _____.

I found this on page _____.

Details

Summarize Earth's air temperature over the past 100 years.

1880–1900 temperatures _____

1900–1945 temperatures _____

1945–1975 temperatures _____

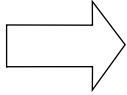
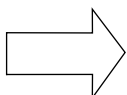
1975–2000+ temperatures _____

Define global warming, and explain the conclusion of the Intergovernmental Panel on Climate Change (IPCC).

Global warming: _____

The IPCC concluded that most of the temperature increase is due to _____ such as burning _____ and _____.

Explain how greenhouse gases affect Earth's temperatures.

Natural Greenhouse Effect		
_____ (CO ₂), _____, and water vapor _____ Earth's outgoing infrared _____		Temperatures suitable for life are _____.
Over the Last 120 Years		
An increase in CO ₂ levels causes _____ _____		Average surface temperatures have been _____.

Lesson 3 | Recent Climate Change (continued)

Main Idea

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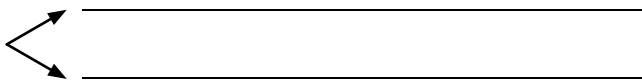
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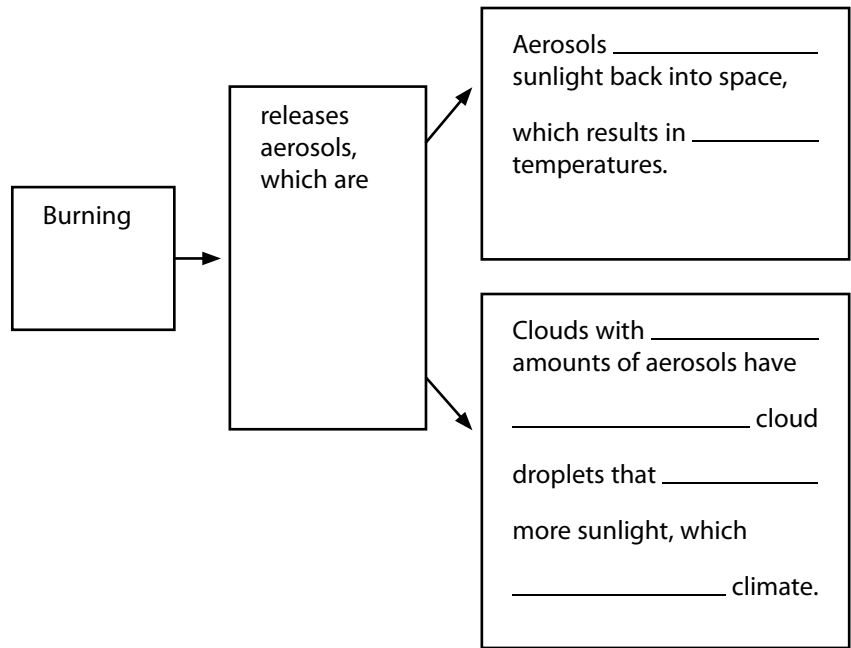
Identify three natural sources of carbon dioxide (CO₂).

1. _____
2. _____
3. _____

Recall two human-caused sources of carbon dioxide (CO₂).

Human sources 

Explain how aerosols are released into the atmosphere.



Climate and Society

I found this on page _____.

Identify the problems climate change poses for society.

Cause	➔	Effect
_____ and _____		food and water shortages
excessive rainfall		

Lesson 3 | Recent Climate Change (continued)

Main Idea

I found this on page _____.

Predicting Climate Change

I found this on page _____.


I found this on page _____.

I found this on page _____.

Details

Explain the environmental impacts of climate change.

Warmer Temperatures
a. cause more water to _____, producing _____ and _____ storms.
b. _____ glaciers and polar ice sheets and cause _____ to rise.
c. melt the frozen _____ in the Arctic, changing _____ patterns.
d. cause _____ weather events to become more common.

 **Define** the global climate model (GCM), and explain the limitations of the model's predictions.

GCM: _____

Describe two activities of increasing human populations that might affect climate.

1. _____
2. _____

Identify two ways people can reduce greenhouse gases.

1. _____
2. _____

 **Synthesize It** Identify ways that people in your community could help to reduce greenhouses gases.

