**[What is Global Warming?](https://earthobservatory.nasa.gov/Features/GlobalWarming/page2.php)**

Global warming is the **unusually** rapid increase in Earth’s average surface temperature over the past century primarily due to the **greenhouse gases** released by people burning **fossil fuels**.

Q/ Give the definition of:

**Unusually:** that is not habitual or common

**greenhouse gases:** a gas that contributes to the greenhouse effect by absorbing solar radiation. Carbon dioxide is an example of greenhouse gas.

**fossil fuels**:

[Fossil fuels are **hydrocarbon-containing materials that are formed in the earth from plant or animal remains and can be burned for energy**](https://www.bing.com/ck/a?!&&p=01a776ca8ab9d757JmltdHM9MTcwMjU5ODQwMCZpZ3VpZD0yZGM0NTM0My03NjBjLTZkYjQtM2I5YS00MDI0Nzc1MzZjY2QmaW5zaWQ9NTk2MA&ptn=3&ver=2&hsh=3&fclid=2dc45343-760c-6db4-3b9a-402477536ccd&psq=fossil+fuels+definition&u=a1aHR0cHM6Ly93d3cuYnJpdGFubmljYS5jb20vc2NpZW5jZS9mb3NzaWwtZnVlbA&ntb=1). [Fossil fuels include coal, oil, and natural gas](https://www.bing.com/ck/a?!&&p=030db02925029d4aJmltdHM9MTcwMjU5ODQwMCZpZ3VpZD0yZGM0NTM0My03NjBjLTZkYjQtM2I5YS00MDI0Nzc1MzZjY2QmaW5zaWQ9NTk2Ng&ptn=3&ver=2&hsh=3&fclid=2dc45343-760c-6db4-3b9a-402477536ccd&psq=fossil+fuels+definition&u=a1aHR0cHM6Ly93d3cubmF0aW9uYWxnZW9ncmFwaGljLm9yZy9lbmN5Y2xvcGVkaWEvZm9zc2lsLWZ1ZWxzLw&ntb=1). [They are non-renewable fuels that supply most of all energy consumed in the world](https://www.bing.com/ck/a?!&&p=147bffa5495b6c2aJmltdHM9MTcwMjU5ODQwMCZpZ3VpZD0yZGM0NTM0My03NjBjLTZkYjQtM2I5YS00MDI0Nzc1MzZjY2QmaW5zaWQ9NTk3MQ&ptn=3&ver=2&hsh=3&fclid=2dc45343-760c-6db4-3b9a-402477536ccd&psq=fossil+fuels+definition&u=a1aHR0cHM6Ly93d3cuYnJpdGFubmljYS5jb20vc2NpZW5jZS9mb3NzaWwtZnVlbA&ntb=1).

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[**How Does Today’s Warming Compare to Past Climate Change?**](https://earthobservatory.nasa.gov/Features/GlobalWarming/page3.php)

Earth has experienced climate change in the past without help from humanity. But the current climatic warming is occurring much more rapidly than past warming events.

**Q/ Answer by true or false, and correct if the response is false.**

* Human activities were the cause of the Earth’s past climate change.
* The past climatic warming occurred much more rapidly than current warming events.

[**Why Do Scientists Think Current Warming Isn’t Natural?**](https://earthobservatory.nasa.gov/Features/GlobalWarming/page4.php)

In Earth’s history before the ------------- Revolution, Earth’s ---------- changed due to---------causes unrelated to human activity. These natural causes are still in play today, but their influence is ------- small, or they occur too slowly to explain the -------warming seen in recent decades.

Q/ Fill in the gaps using the following words.

rapid -too- climate -Industrial- natural

[**How Much More Will Earth Warm?**](https://earthobservatory.nasa.gov/Features/GlobalWarming/page5.php)

Models predict that as the world consumes ever more fossil fuel, greenhouse gas concentrations will continue to rise, and Earth’s average surface temperature will rise with them. Based on plausible emission scenarios, average surface temperatures could rise between 2°C and 6°C by the end of the 21st century. Some of this warming will occur even if future greenhouse gas emissions are reduced, because the Earth system has not yet fully adjusted to environmental changes we have already made.

Q/ Translate the paragraph into Arabic.

تتنبأ النماذج بأنه مع استمرار استهلاك العالم للوقود الأحفوري، ستستمر تراكم تراكيز الغازات الدفيئة، وسترتفع متوسط درجة حرارة سطح الأرض بالتالي. بناءً على سيناريوهات الانبعاث الممكنة، يمكن أن ترتفع متوسط درجات الحرارة السطحية بين 2 درجة مئوية و6 درجات مئوية بحلول نهاية القرن الواحد والعشرين. سيحدث بعض هذا الارتفاع حتى إذا تم تقليل انبعاثات الغازات الدفيئة في المستقبل، لأن نظام الأرض لم يتكيف بشكل كامل بالتغييرات البيئية التي قمنا بها بالفعل.

[**How Will Earth Respond to Warming Temperatures?**](https://earthobservatory.nasa.gov/Features/GlobalWarming/page6.php)

The impact of global warming is far greater than just increasing temperatures. Warming modifies rainfall patterns, amplifies coastal erosion, lengthens the growing season in some regions, melts ice caps and glaciers, and alters the ranges of some infectious diseases. Some of these changes are already occurring.

Q/ Choose the correct answer.

A/ The impact of global warming is primarily dependent on increased temperatures alone and does not have a significant effect on rainfall patterns or coastal erosion.

B/ The impact of global warming extends beyond elevated temperatures.Top of Form

C/ Global warming primarily adjusts high temperatures without significantly influencing changes in growing seasons or infectious diseases.