



(/)

Earth's Atmosphere

(/ionosphere)

The Short Answer:

What is Earth's atmosphere?

Earth's atmosphere is similar to a jacket for our planet. It surrounds our planet, keeps us warm, gives us oxygen to breathe, and it is where our weather happens. Earth's atmosphere has six layers: the troposphere, the stratosphere, the mesosphere, the thermosphere, the ionosphere, and the exosphere.

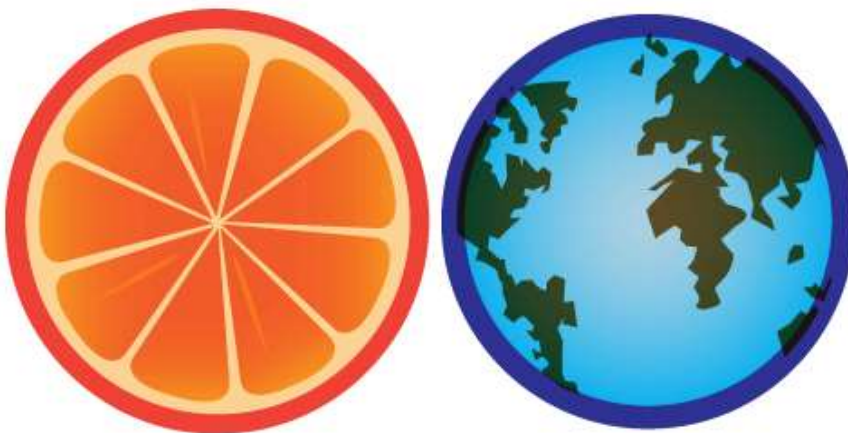
Exosphere

(This is only part of the exosphere. It's actually 12 times bigger than this!)

A jacket for the planet

Earth is a great planet to live on because it has a wonderful **atmosphere** around it. This jacket of gases does a lot for us. It keeps us warm, it gives us oxygen to breathe, and it's where our weather happens.

The atmosphere surrounds our planet like the peel of an orange. But it's not the same everywhere. It has different layers with different qualities.



(/exosphere)

Thermosphere

One atmosphere, many layers

Earth's atmosphere has **six** different layers. They go from the ground all the way to outer space. To learn more about each layer of the atmosphere, click the images below.



[\(/troposphere\)](#)



[\(/stratosphere\)](#)



[\(/mesosphere\)](#)



[\(/thermosphere\)](#)



[\(/ionosphere\)](#)



[\(/exosphere\)](#)

[\(/thermosphere\)](#)

[Mesosphere](#)

[\(/mesosphere\)](#)

[Stratosphere](#)

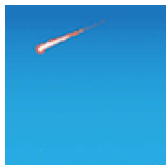
[\(/stratosphere\)](#)

[Troposphere](#)

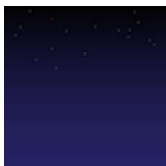
[\(/troposphere\)](#)



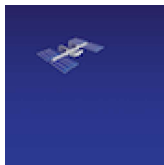
If you liked this, you may like:



[\(/mesosphere\)](#)
Mesosphere
[\(/mesosphere\)](#)



[\(/exosphere\)](#)
Exosphere [\(/exosphere\)](#)



[\(/thermosphere\)](#)
Thermosphere
[\(/thermosphere\)](#)

[\(/menu/play/\)](#) [\(/menu/do/\)](#) [\(/menu/activities/\)](#)

[\(/menu/videos/\)](#)
[\(/glossary/en/\)](#)

Games

Crafts

Activities

Videos

Glossary

Mystery

[\(/subscribe-confirmation/en/\)](#)

[About Us \(/about-us\)](#)

[Privacy Policy \(https://www.nasa.gov/about/highlights/HP_Privacy.html\)](https://www.nasa.gov/about/highlights/HP_Privacy.html)

[Image Use \(/image-use\)](#)

[Accessibility \(https://www.nasa.gov/general/accessibility/\)](https://www.nasa.gov/general/accessibility/)

[Contact NASA Space Place \(mailto:info@spaceplace.nasa.gov\)](mailto:info@spaceplace.nasa.gov)

Last Updated: August 21st, 2024

Ionosphere