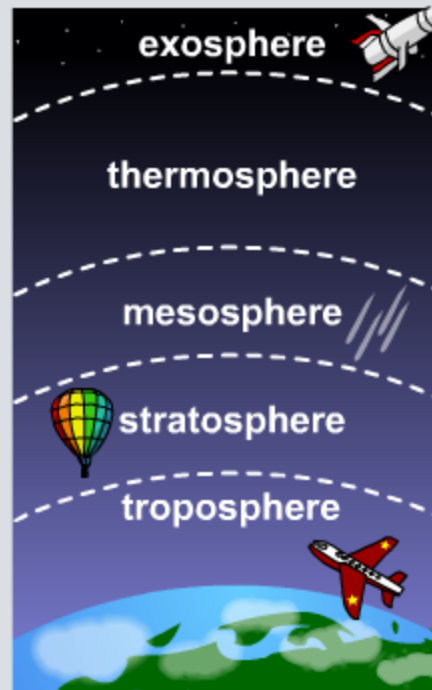


The Atmosphere



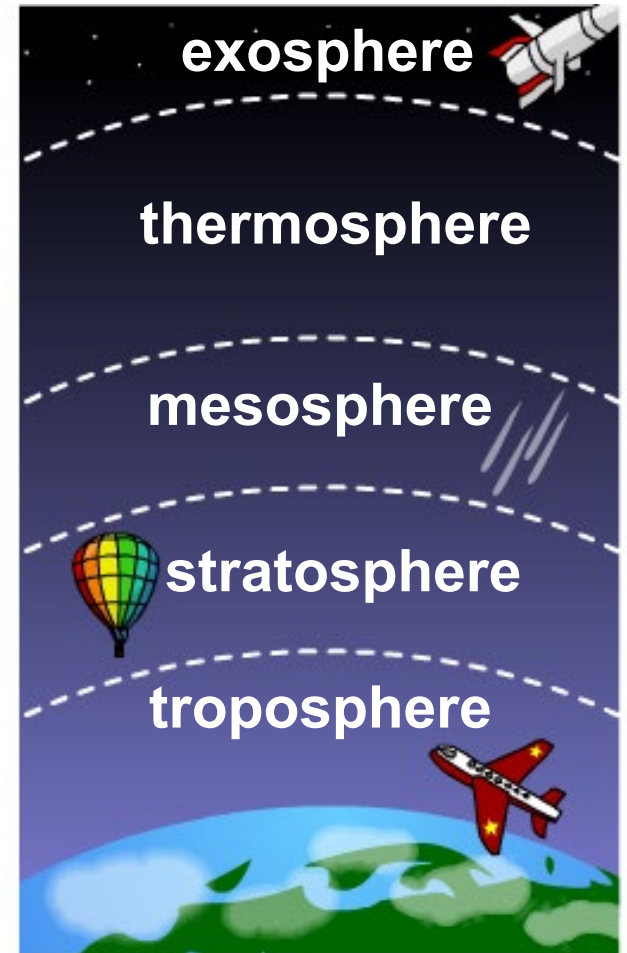
What is the atmosphere?

The Earth is different than the other planets in our solar system because it has an **atmosphere** that can support life.

The atmosphere is an envelope of different gases (**air**) surrounding Earth.

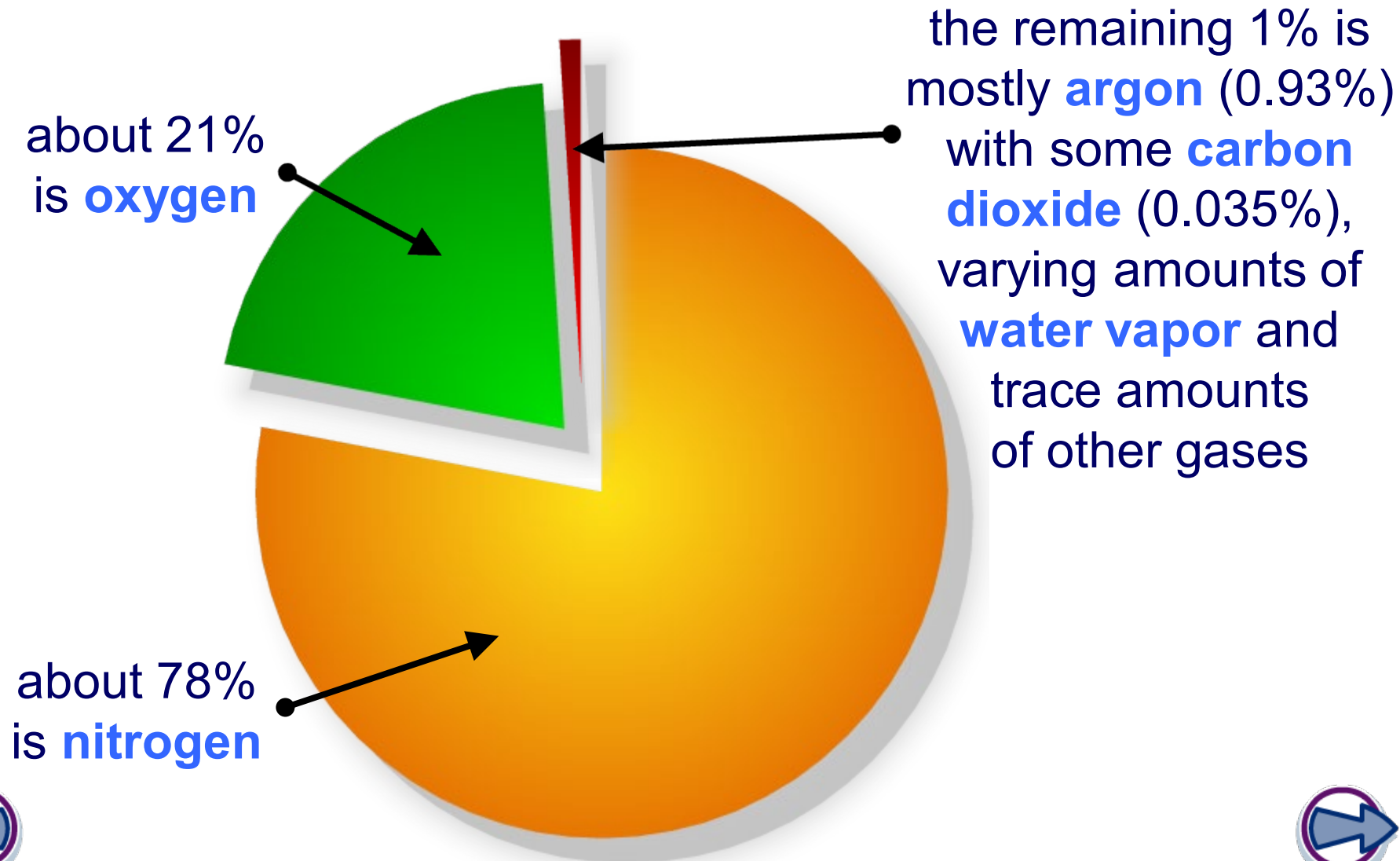
The atmosphere is divided into five major layers.

These layers are divided based on temperature.



What is the atmosphere made of?

The gases that make up the atmosphere are:



Why is the atmosphere important?

Although each layer of the atmosphere has unique properties, all layers are necessary to sustain life on Earth.



The atmosphere protects our planet's surface from harmful radiation. It also retains some of the Sun's heat, keeping Earth warm enough for life to exist.



80% of atmospheric gases are in the **troposphere**: the 15km of the atmosphere closest to Earth. This is a very thin layer compared to the Earth's diameter, which is 12,756 kilometers.

Atmospheric gases are made up of tiny particles, each of which exerts pressure in all directions. Higher up in the atmosphere, there are fewer particles, which causes a decrease in air pressure.

Nearly all weather takes place in the troposphere.

