

The Atmosphere

The Air Around You
Air Pressure
Layers of the Atmosphere
Air Quality

The Air Around You



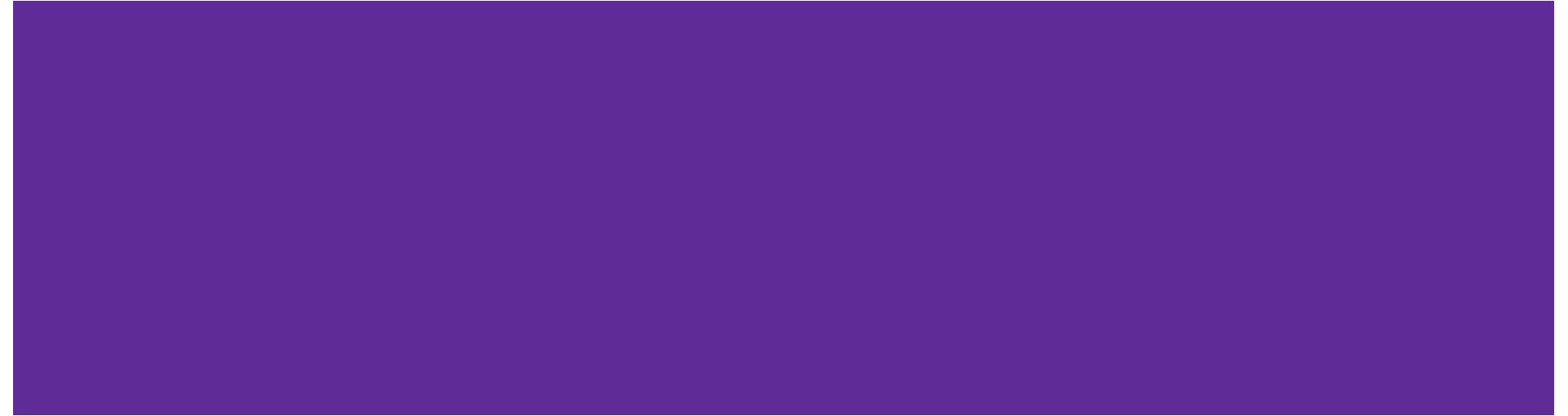
What is the composition of Earth's atmosphere?

- Earth's atmosphere is made up of nitrogen, oxygen, carbon dioxide, water vapor, and many other gases, as well as particles of liquids and solids.

How is the atmosphere important to living things?

- Earth's atmosphere make conditions on Earth suitable for living things.

Air Pressure



What are some of the properties of air?

- Because air has mass, it also has other properties, including density and pressure.

What instruments are used to measure air pressure?

- Two common kinds of barometers are mercury barometers and aneroid barometers.

How does increasing altitude affect air pressure and density?

- Air pressure decreases as altitude increases.
- As air pressure decreases, so does density.

Layers of the Atmosphere



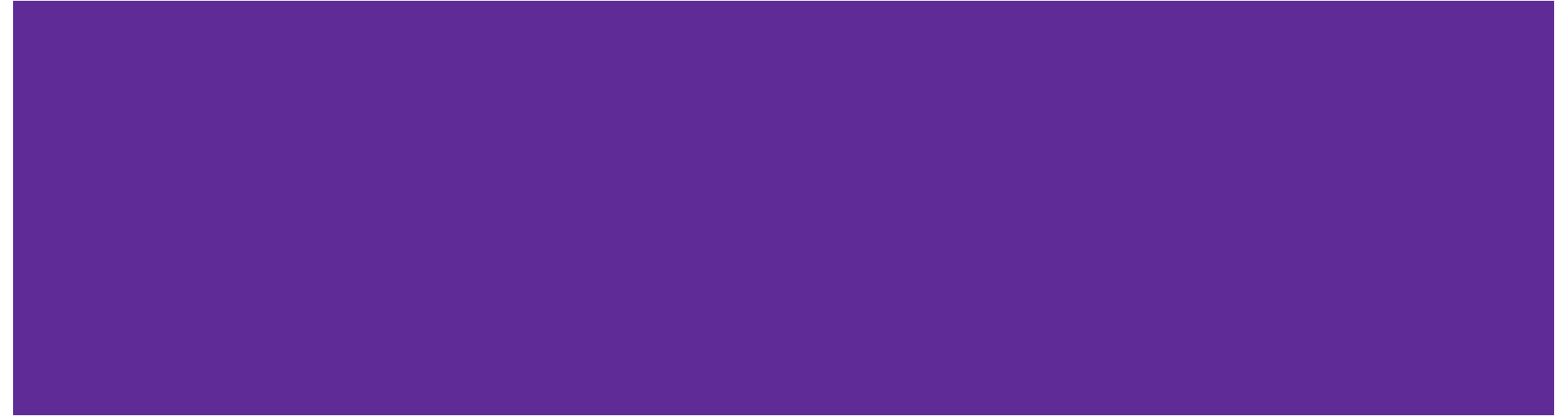
What are the four main layers of the atmosphere?

- Scientists divide Earth's atmosphere into four main layers classified according to changes in temperature.
 - Troposphere
 - Stratosphere
 - Mesosphere
 - Thermosphere

What are the characteristics of each layer?

- Troposphere
 - The layer of the atmosphere in which Earth's weather occurs.
- Stratosphere
 - The second layer of the atmosphere.
 - The ozone layer is part of the stratosphere.
- Mesosphere
 - The layer of the atmosphere that protects Earth's surface from being hit by most meteoroids.
- Thermosphere
 - The outermost layer of Earth's atmosphere.

Air Quality



What are the major sources of air pollution?

- Some air pollution occurs naturally.
- Many types of air pollution are the result of human activity.

What causes smog and acid rain?

- The burning of fossil fuels can cause smog and acid rain.

What can be done to improve air quality?

- In the United States, the federal and state governments have passed a number of laws and regulations to reduce air pollution.