

Objective

By the end of this lesson, the student will be able to understand the composition and layers of Earth's atmosphere.

Materials and Prep

- Pen and paper
- Access to internet or reference books

No prior knowledge is required for this lesson.

Activities

1. Research: In order to understand the composition and layers of Earth's atmosphere, begin by researching the topic online or using reference books. Take notes on the important information you find.
2. Diagram: Create a labeled diagram of Earth's atmosphere, showing the different layers and their characteristics. Include the troposphere, stratosphere, mesosphere, thermosphere, and exosphere.
3. Quiz: Test your knowledge by creating a short quiz for yourself. Include questions about the composition of the atmosphere, the role of each layer, and any other important details you have learned.

Seventh Grade Talking Points

- "Earth's atmosphere is a layer of gases that surrounds our planet."
- "The atmosphere is made up of several different gases, including nitrogen, oxygen, carbon dioxide, and trace amounts of other gases."
- "The troposphere is the lowest layer of the atmosphere, where weather occurs and most of Earth's air mass is found."
- "Above the troposphere is the stratosphere, which contains the ozone layer that protects us from harmful ultraviolet radiation."
- "The mesosphere is the third layer, where meteors burn up upon entering the atmosphere."
- "The thermosphere is the fourth layer, where the temperature increases with altitude due to the absorption of high-energy solar radiation."
- "The exosphere is the outermost layer, gradually merging with space. It contains very few gas molecules and satellites orbit within this layer."