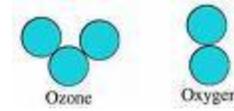


The Earth's Atmosphere Instructions

1. Draw the Layers

- Draw the 4 layers in their correct proportions
- Label and color each layer.
- One inch on paper = 10 miles in atmosphere
- **Troposphere** – Closest to the earth, it's between 6-12 miles thick (average = 10 miles)
- **Stratosphere** – 20 miles thick
- **Mesosphere** – 20 miles thick
- **Thermosphere** – Starts 50 miles above the Earth and fades into space.



2. Do you know where each of these belongs?

- Draw each in the correct layer of the atmosphere
- Weather:** most storms and clouds occur in the Troposphere
- Jets:** jet airplanes fly in the Troposphere above the clouds and storms.
- Meteorites:** (you might call them falling stars) occur in the mesosphere.
- Ozone Layer:** occurs in the Stratosphere. It protects the earth from ultraviolet radiation.
- Ozone Pollution:** occurs in the Troposphere. It is a pollutant that occurs in smog.
- Carbon Dioxide:** This is found in high concentrations in the Troposphere. Carbon dioxide traps heat from our sun, keeping our plant warm. Excessive build up of carbon dioxide is contributing to global warming.
- Particulate Pollution:** particles of dust and soot from forest fires, burning fossil fuels and volcanic eruptions. This is concentrated in the Troposphere.
- Plants and Animals:** All life is in the Troposphere.
- Aurora:** (northern & southern lights) are caused by the ions from the sun reacting with gasses in our atmosphere. Occurs in the Thermosphere.
- Communication Satellites:** Are placed 100 – 22,000 miles up.



3. Atmosphere vocabulary

- Many of the English words we use today come from ancient Greek and Latin languages. Find out about the roots of the words to describe air. **atom** = air
- **sphere** = globe
- **tropo** = to turn
- **strato** = cover or layer
- **meso** = middle
- **thermo** = hot or heated
- **ozo** = smell

- Combine these word parts to make the words you see on this page.

1. _____
2. _____
3. _____
4. _____
5. _____