

# Meteorology

**Meteorology** is the study of the atmosphere and weather. A planet's **atmosphere** is the layer of gases that surrounds the planet.

Earth has five layers in its atmosphere:

1. **troposphere** (closest to Earth)
2. **stratosphere**
3. **mesosphere**
4. **thermosphere**
5. **exosphere** (farthest from Earth)

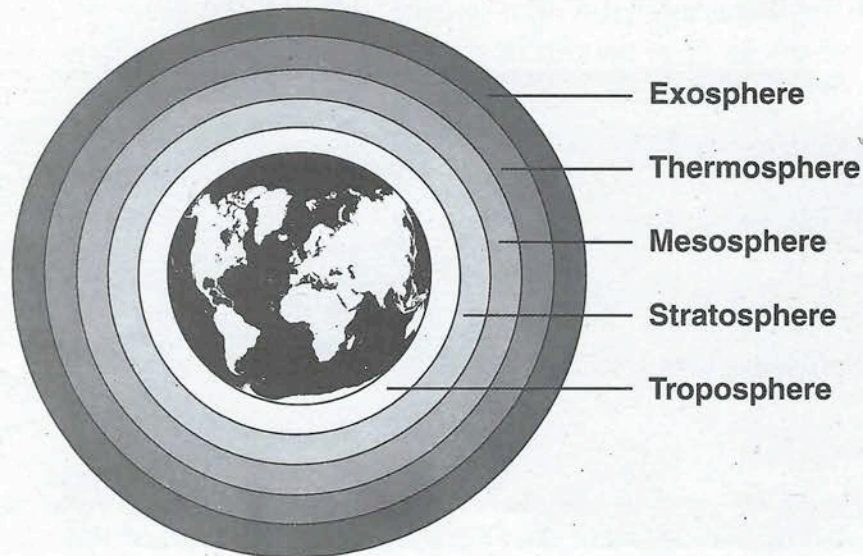
Earth's atmosphere is mostly oxygen and nitrogen, along with carbon dioxide, water vapor, and other gases.

**Weather** refers to the condition of the atmosphere, specifically the troposphere.

Weather may be hot or cold, wet or dry, calm or windy. **Climate** refers to the general or average weather of an area or place.

**Temperature** is the hotness or coldness of the air, while **humidity** is the amount of moisture in the air. **Air pressure**, also called **atmospheric** or **barometric** pressure, is the weight of gases pressing down on Earth. A **barometer** is an instrument used to measure air pressure.

**Wind** is air that is moving. Changes in atmospheric pressure cause wind, and wind changes cause weather changes.



## Answer the Following

1. What causes weather to change? \_\_\_\_\_
2. What are the five layers of the atmosphere? Which is closest to Earth? \_\_\_\_\_  
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3. What is the difference between weather and climate? \_\_\_\_\_  
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4. What is the difference between temperature and humidity? \_\_\_\_\_  
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