## Quizlet

# Earth's Atmosphere Study online at quizlet.com/\_lasb94

#### 1. Atmosphere



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	A mixture of gases that surrounds a planet, such as Earth.			
2. Altitude	Elevation or height above sea level			
3. Density	Mass / Volume			
4. Cycle	A series of events that happen over and over again.			
5. Radiation	Energy that is radiated or transmitted in the form of rays or waves or particles.			
6. Conduction	Form of heat transfer where heat energy is directly transferred between molecules through molecular collisions or direct contact.			
7. Convection	Convection is the movement of molecules within fluids (i.e. liquids, gases) and rheids. It cannot take place in solids, since neither bulk current flows nor significant diffusion can take place in solids.			
8. Troposphere	$\dots$ , the lowest layer of the atmosphere			
9. Stratosphere	2nd layer of atmosphere; extends from 10 to 30 miles up; location of ozone layer; absorbs 95% of Ultraviolet radiation; temperature increases with altitude increase.			
10. Mesosphere	(50-80 km) The layer of the atmosphere above the stratosphere in which temperature decreases as altitude increases. Protects the Earth's surface because most meteoroids burn in the mesosphere producing meteor trails of hot glowing gases. (Meso = middle)			
11. Thermosphere	- The uppermost layer of the atmosphere, in which temperature increases as altitude increases.			
12. Ultraviolet Radiation	a type of energy that comes to Earth from the Sun, can damage skin and cause cancer, and is mostly absorbed by the ozone layer			
13. Infrared radiation	Electromagnetic waves with wavelengths that are longer than visible light but shorter than microwaves			
14. <b>Ozone</b>	A form of oxygen that has three oxygen atoms in each molecule instead of two. Protects us from dangerous ultraviolet radiation from the sun.			

15. Greenhouse effect	Natural situation in which heat is trapped in Earth's atmosphere by carbon dioxide, methane, water vapor, and other gases. Resulting in the heating of the planet.			
16. <b>Greenhouse Gas</b>	Gases such as carbon dioxide, methane, nitrous oxide, water vapor, and ozone in the atmosphere which are involved in the greenhouse effect.			
17. <b>Smog</b>	A thick haze of fog and chemicals.			
18. Global Warming	An increase in the average temperature of the earth's atmosphere (especially a sustained increase that causes climatic changes)			
19. <b>Air Pressure</b>	A force that is the result of the weight of a column of air pushing down on an area.			

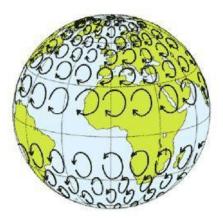
#### 20. Barometer



An instrument that measures atmospheric pressure (air pressure).

21. Weather	Condition of earths atmosphere at a particular time and place
22. Climate	Overall weather in an area over a long period of time
23. <b>Wind</b>	Air in motion
24. Global Wind	Winds that blow steadily from specific directions over long distances

### 25. **Coriolis Effect**



Causes moving air and water to turn left in the southern hemisphere and turn right in the northern hemisphere due to Earth's hemisphere.

26. Jet Stream

A narrow belt of strong winds that blow in the upper troposphere

27. Monsoon

A regional scale wind system that predictably change direction with the passing of the seasons. These winds blow from land to sea in the winter, and from sea to land in the summer. In summer they are often accompanied with precipitation.

28. Evaporation

The change of a liquid to a gas

 ${\tt 29.} \ \, \textbf{Condensation}$ 



Gas to Liquid

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30. Precipitation	Any form of water that falls from clouds and reaches Earth's surface.
31. Humidity	A measure of the amount of water vapor in the air.
32. Saturation	A condition of the atmosphere in which the rates of evaporation and condensation are equal
33. Dew Point	the temperature at which the water vapor in the air becomes saturated and condensation begins
34. Water Cycle	The continuous process by which water moves from Earth's surface to the atmosphere and back

### 35. Cirrus Clouds



wispy, feathery clouds made of ice crystals that form at high levels

### 36. Cumulus Clouds



Dense white clouds with flat bases and a fluffy appearance; usually found around land.

### 37. Stratus Clouds



Layered clouds that cover much of the sky and are dull gray.

#### 38. **Fog**



A clouds on the ground that reduces visibility. A low-lying stratus cloud.

#### 39. Sleet



Formed when rain falls through a layer of freezing air.

#### 40. **Hail**



precipitation of ice pellets when there are strong rising air currents

41. Acid Rain	Rain containing acids that form in the atmosphere when industrial gas emissions (especially sulfur dioxide and nitrogen oxides) combine with water.
42. <b>Air Mass</b>	A huge body of air that has similar temperature, humidity, and air pressure at any given height
43. <b>Front</b>	(meteorology) the atmospheric phenomenon created at the boundary between two different air masses. 3 Types (Cold, Warm, Stationary)
44. High- pressure System	Formed when an air mass cools over an ocean or a cold region on land. This dense system moves outward toward low pressure systems, creating a wind. Causes, clear blue skies, is dry etc.

### 46. **Tropical Storm**

pressure System

precipitation.

45. **Low-**



An air mass in which the air moves toward the low atmospheric pressure at the center of the system

and spirals upward, typically bringing clouds and

Storms with speeds of 34-63 knots

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A severe storm that develops over tropical oceans and whose strong winds of more than 120 km/h spiral in toward the intensely low-pressure storm center

#### 48. Storm Surge

A "dome" of water that sweeps across the coast where a hurricane lands.

#### 49. Blizzard



A storm with widespread snowfall with by strong winds

#### 50. Thunderstorm



A small storm often accompanied by heavy precipitation and frequent thunder and lightning

#### 51. Tornado



A destructive, rotating column of air that has very high wind speeds and that may be visible as a funnel-shaped cloud

#### 52. Meteorologist

A specialist who studies processes in the earth's atmosphere that cause weather conditions

### 53. marine climate

The climate of some coastal regions, with relatively warm winters and cool summers

54. Continental Climate	A climate region in a continental interior, removed from moderating oceanic influences, characterized by hot summers and cold winters. In such a climate, at least one month must average below freezing.
55. <b>ocean current</b>	Global patterns created from the movement of the oceans; such as the Gulf Stream
56. <b>Seasons</b>	Earth has seasons because its axis is tilted as it moves around the sun.