Atmosphere Notes

Atmosphere

_____ layer of gases that surround the earth.
Supports life on Earth by protecting it from dangerous _____ _____
Creates and controls _____ and _____
Provides _____ plants and animals need to breathe

Composition of the Atmosphere

Nitrogen _____
Oxygen _____
Argon _____
Carbon dioxide _____
Trace gases _____
Neon, _____, Krypton, _____

Gases important to life on Earth

Nitrogen – removed from atmosphere by _____ and _____
N compounds used by _____ for growth and _____.
Oxygen – Released into atmosphere by _____ as they photosynthesize.
Water vapor (H_20) – amount _____ in the atmosphere
Cycles through the _____ water cycle
Carbon dioxide (_____) - Removed from the atmosphere by _____.

Atmospheric Pressure

Pressure exerted on earth by the _____.
Decreases with _____ in altitude.
_____ pounds per square inch

Atmospheric Density

At greater altitudes the same _____ contains fewer _____ of gases.
Measured with a _____

Atmospheric Warming

_____ radiation
Absorbed by earth's surface _____
Reflected back by clouds _____
Absorbed by atmosphere and clouds _____
Scattered by atmosphere _____
Reflected by earth's surface

Atmosphere Notes

Layers of the Atmosphere

_____
_____
_____
_____

Layer Boundaries

Differences in temperatures _____each layer from the one above it.
_____ remains constant through boundary.
Boundaries:
_____
_____
_____

Troposphere

_____ layer
Most atmospheric _____ is found here.
Extends from _____ above earth
Air temperature _____ with height above Earth.
Virtually all weather occurs here

Weather in the Troposphere

Wind – caused by _____ heating of the earth's surface.

Moisture - _____
Moves through the _____ _____
_____ - amount of water vapor in the air, depends on air _____.
Dew point – temperature at which water begins to _____ on surfaces _____
Water vapor condense to form _____

Clouds –
Types
_____ - high level, wispy, curly, composed of ice crystals
_____ - mid level, fluffy, dense, mostly composed of water droplets
_____ - low level, layers like a blanket, composed of water droplets
_____ - extend through all levels, rain, storm

Stratosphere
Air temperature _____ with height above earth due to _____ absorption of sunlight.
_____ above earth
Very _____ layer allows for undisturbed _____
_____ layer found near the _____ of the stratosphere.

Ozone Layer
Included in Mesosphere and _____
Ozone gas _____ absorb _____ radiation
Releases it as _____
Protects Earth from harmful _____ rays

Mesosphere
_____
Air temperature _____ with height above earth.
_____ layer _____
Protects Earth - _____ usually burn up in this layer.

Thermosphere " _____"
_____
Temperature _____ with height above earth _____
_____ Borealis
Space shuttle _____ here
Ionosphere - _____
_____ - the upper part

Ionosphere
_____
Gas particles absorb _____ and _____ radiation from the Sun.
Particles become _____ charged _____
_____ waves are bounced off the _____ and reflect back to Earth.

Exosphere
_____ - thousands of km into _____
Air is very _____
_____ orbit the earth here

Beyond the Atmosphere
Magnetosphere
_____ magnetic field
_____ km above earth's surface
_____ harmful particles from the Sun
Particles concentrate into belts or layers called _____
Cause the _____ in the upper atmosphere