

The Atmosphere

Define: Envelope of gases

Made of:

- 78% N_2
 - 21% O_2
 - <1% CO_2
- } - Trace gases (Ar, Ne, Kr)
 } - Particulates
 } - Water Vapor

Air Pressure

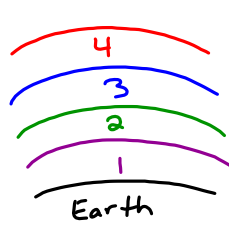
- Measured w/ **barometer**

- ↑ Altitude causes:

Density ↓ = harder to breathe

- * Same mass, bigger Volume = less dense
- Less mass, same volume = less dense

Layers → Based on changes in temp.



- 4. Thermo: Temp ↑ as you go ↑
- Contains exo + ionosphere
- 3. Meso: Temp ↓ as you go ↑
- burns meteors
- 2. Strato: Temp ↑ as you go ↑
- Ozone Layer (O_3)
- 1. Tropo: Temp ↓ as you go ↑
- Weather is here

Green house effect: When heat is trapped in our atmosphere by certain gases.
 - Natural + Necessary process!

Winds

- Caused by different areas of Heat + Pressure
 Cool air sinks = High Press.
 Warm air rises = Low Press. → always moves from:
 * High → Low

Local Winds	vs	Global Winds
Small area 2 types: <u>Sea breeze</u> - Daytime - Wind blows <u>FROM</u> water - warm air ↑ over land = Low press. <u>Land breeze</u> - warm air ↑ over <u>water</u> = Low press. - wind blows <u>FROM</u> Land.	Due to unequal heating	Large area - Effected by the Coriolis Effect (Earth's rotation influencing air) 3 types: 1) Trade: <u>Easterly</u> (E → W) 2) Prev. <u>Westerlies</u> (W → E) 3) Polar <u>Easterlies</u> (E → W)