

The atmosphere - thick layer of gases that surrounds the Earth

1. Composition:

- 78% nitrogen - we can't use it
- 21% oxygen - vital for life
- 0.9% argon
- 0.04% carbon dioxide - greenhouse gas
- 0.4% to 1% water vapour [depending where you measure]

2. Layers

a. Troposphere [0 to 15 km]

- All the weather occurs in this region

b. Stratosphere [15 to 50 km]

- Ozone is found here - protects against UV rays
- Intercontinental airplanes fly here - no turbulence

c. Mesosphere [50 to 85 km]

- Most meteors burn up in this layer

d. Thermosphere [85 to 600 km]

- Very hot layer

e. Ionosphere [in between mesosphere and thermosphere]

- Charged particles from the Sun are trapped here
- Northern Lights

f. Exosphere [up to 10000 km]

- Edge of space

3. Pressure - as you travel higher into the atmosphere

- the pressure gets lower
- the density of the air gets lower

4. Temperature

- Warm near the ground and gets colder the higher you go
- The thermosphere is hot because of solar radiation not blocked by atmosphere

5. Water solubility

- As the temperature decreases the air can't hold as much water vapour

6. Wind - Convection current

7. Global winds

8. Coriolis Effect

The atmosphere -

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16. Coriolis Effect