Moisture in the Atmosphere

Dew Point

Varies by how much water is in the atmosphere

Condensation temp

Dry air cools at about 10\*/1000m

Moist air cools at 6\*/1000m

Air pressure and density

Air near the Earth’s surface is denser that air further up

Higher you go, the lower the pressure

Temp rises, pressure rises----direct relationship

Temp rises, density falls----inverse relationship

Wind

Results from differences in temp

Clouds

Warm, moist air rising

Air cools and expands

Air reaches dew point

Water droplets condense

Orographic lifting

Mountain forces air up, cools

Cold front

Warm air encounters cold air

Clouds

Altitude and shape

Circo-alto-strato by height

Cirrus-whispy

Cumulus-puffy

Stratus-layer

Nimbus-grey layer