**ATMOSPHERIC LAYERS**

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| **Name** | **Activities that Occur** | **Temperature Trend** | **Altitude Range** | **Unique Characteristics** |
| TROPOSPHERE | - Contains almost all of Earth’s CO2, water vapor, clouds, air pollution, weather and life-forms | - Temperatures vary greatly | - Closest to the Earth’s surface | - Contains almost 90% of the atmosphere’s total mass! |
| STRATOSPHERE | - Ozone layer: protects life on Earth by absorbing harmful ultraviolet radiation. | - In lower stratosphere, average temp is -60oC  - Temperature rises as altitude increases. | - Layer above the troposphere | - Ozone layer |
| MESOSPHERE | - Upper level for aircrafts  - Lower level for space crafts. | - Coldest layer  - Temperature decreases as altitude increases  - As low as -93oC | - Middle layer of the atmosphere | - Coldest layer |
| THERMOSPHERE | - Space between particles in thermosphere is great so not much transfer of energy.  - Density is low | - Temperature increases with altitude  - Temp as high as 1,000oC or higher | - Uppermost atmospheric layer | - Does not feel hot because heat is different than temperature. |
| IONOSPHERE/ EXOSPHERE | - Absorbs harmful solar energy  - Contains electrically charged particles | - Temperature rises | - Upper mesosphere and lower thermosphere | - Auroras |