E.1 Layers of the Atmosphere Notes KEY

By: Tery Dugger

The Layers of the Atmosphere

Earth

1. Troposphere
2. Stratosphere
3. Mesosphere
4. Thermosphere
5. Exosphere

Troposphere

1. Densest atmospheric layer
2. 90% of the atmosphere's total mass
3. Gases mix continuously

Troposphere

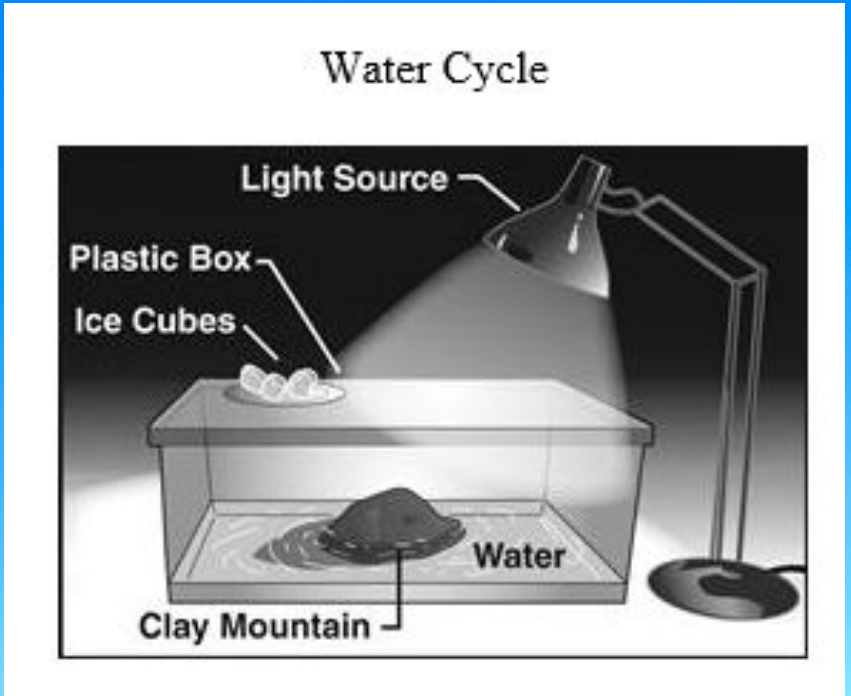
4. Contains almost all the Earth's carbon dioxide, water vapor, clouds, air pollution, weather and life forms.

5. Tropo means "turning" – where gases turn and mix

6. Temperatures vary greatly

Troposphere

1. The water cycle takes place in the troposphere.

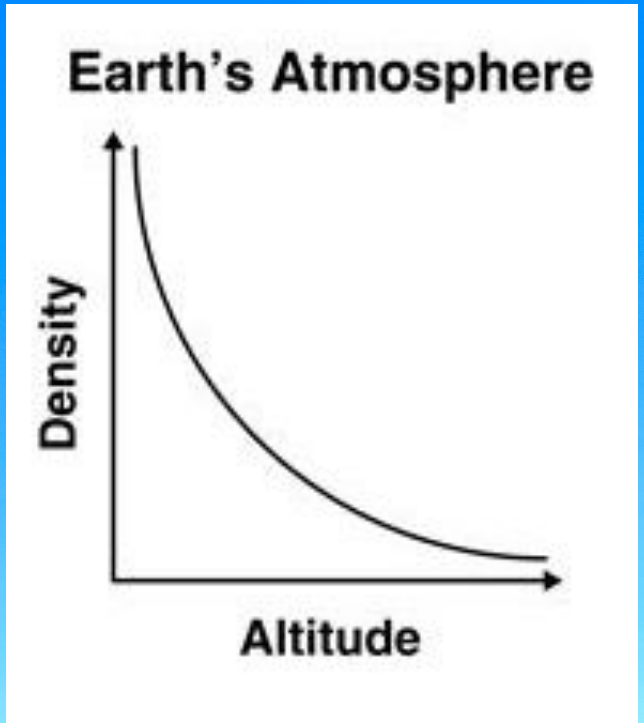


Troposphere

1. The weather takes place in the troposphere.

Troposphere

1. In the troposphere the air gets thinner as the altitude increases.
2. In the troposphere the air gets thicker as the altitude decreases.



Stratosphere

1. Strato means “layer” gases don’t mix much
2. Contains the ozone layer
3. Protects life on Earth by absorbing harmful UV radiation.

Stratosphere

4. Absorbs ultraviolet radiation from the sun which warms the air

5. Temperatures increase with altitude

6. Lower part is extremely cold

Stratosphere

7. Averages -60 degrees C

8. Air is very thin

9. Contains little moisture

Ozone Layer

1. The ozone layer is in the stratosphere.
2. Protects life on Earth by absorbing harmful UV radiation.
3. Absorbs ultraviolet radiation from the sun which warms the air.

Mesosphere

1. Meso means “middle” layer.
2. Temperatures decrease as altitude increases.
3. Coldest layer.
4. Temperatures as low as -93 degrees C.

Thermosphere

1. Thermo means “heat” – Temperatures are the highest
2. Temperatures 1,000 degrees C or higher
3. Temperatures increase with altitude

Thermosphere

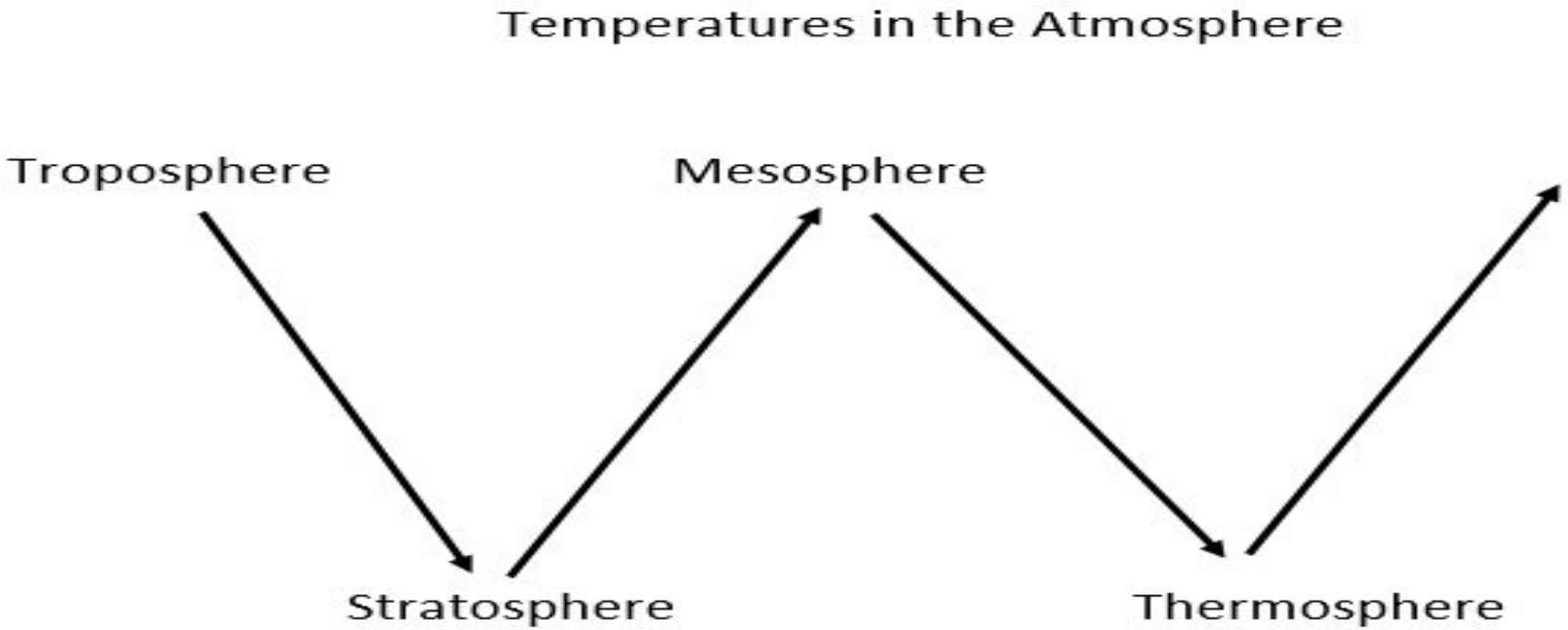
4. Density is low therefore particles do not often collide and transfer energy.

5. Doesn't feel hot, the high temperature means the particles in that layer are moving very fast.

6. Nitrogen and oxygen absorb high-energy solar radiation and release.

Exosphere

1. Ex - means out.
2. Known as outer space
3. Vacuum
4. Void, no gases



The arrows showing increase or decrease in temperature with altitude form a W.

1. Name the Layer

1. Temperatures 1,000 degrees _Thermosphere_ C or higher
2. Temperatures increase with altitude

2. Name the Layer

1. Temperatures increase with _Mesosphere_ altitude

2. Lower part is extremely cold

3. Name the Layer

1. Densest atmospheric layer _Troposphere_
2. 90% of the atmosphere's total mass

4. Name the Layer

1. Contains the ozone layer _Stratosphere_
2. Protects life on Earth by absorbing harmful UV radiation.

5. Name the Layer

1. Vacuum

2. Void, no gases

Exosphere

6. Name the Layer

1. Ex - means out. _Exosphere_
2. Known as outer space

7. Name the Layer

1. Temperatures as low as -93 _Mesosphere_ degrees C.
2. Meso means “middle” layer.

8. Name the Layer

1. Doesn't feel hot, the high temperature means the particles in that layer are moving very fast.

Thermosphere_

2. Nitrogen and oxygen absorb high-energy solar radiation and release.

9. Name the Layer

1. Contains almost all the Earth's carbon dioxide, water vapor, clouds, air pollution, weather and life forms.

Troposphere

10. Name the Layer

1. Temperatures increase with _Stratosphere_ altitude

2. Lower part is extremely cold

11. Name the Layer

1. The layer where water cycle takes place. _Troposphere_
2. The layer where weather takes place.

Memory Sentence

Earth, Troposphere, Stratosphere, Mesosphere, Thermosphere, Exosphere

Teacher: Eve Took Some Money To Evan.

Student: E_ T_ S_ M_ T_ E_


THE END