TAKE CARE OF TEXAS: EDUCATOR MATERIALS

HANDOUT

Layers of the Atmosphere Fill-in-the-Blank

Name: _____ **Date:** _____

Instructions: After reading and taking notes from the Layers of Atmosphere presentation, fill in the blanks with the correct missing words.

Ozone Layer	**Oxygen**	**Hydrogen**	**Cold**
Exosphere	**Stratosphere**	**Drop**	**Mesosphere**
4,500	**Helium**	**Highest**	**Noctilucent**
Closest	**Colder**	**Rising**	**International Space Station**
Meteors	**Flying**	**Water vapor**	**Warmer**

The Earth's atmosphere covers the planet, keeps us warm, provides _____ to breathe, and is where all weather occurs. Earth's atmosphere has five major layers including the Troposphere, _____, Mesosphere, Thermosphere, and the Exosphere. The Troposphere is the layer _____ to the Earth's surface. This layer is where most of the weather and clouds are generated and formed. It contains 99% of all _____ and aerosols. This is where you will most likely see birds and planes _____. The Stratosphere is the layer where you can find the _____ . Unlike the Troposphere, air at the bottom of this layer is _____ and the air at the top is _____. This is the _____ layer of the atmosphere that jet airplanes can reach. The next layer is called the _____, it is between the Stratosphere and the Thermosphere. In this layer, there is little to no air, so as the altitude rises the temperatures begin to _____. It is here where _____ clouds can form due to such scarce water vapor. Many _____ that come into Earth's atmosphere will burn up in this layer. In the Thermosphere, there is very low density of molecules which results in temperatures _____ as the altitude increases. Temperatures here can reach _____ degrees Fahrenheit. This layer is, also, where the _____ orbits. The final layer is called the _____. _____ and _____ can be found in this layer, albeit with lots of space between them. This layer is very _____ and has no air to breathe.

H-LP25a (Revised 12/25)

How is our customer service? www.tceq.texas.gov/customersurvey

Answer Key

See below for answers.

The Earth's atmosphere covers the planet, keeps us warm, provides **oxygen** to breathe, and is where all weather occurs. Earth's atmosphere has five major layers including the Troposphere, **Stratosphere**, Mesosphere, Thermosphere, and the Exosphere. The Troposphere is the layer **closest** to the Earth's surface. This layer is where most of the weather and clouds are generated and formed. It contains 99% of all **water vapor** and aerosols. This is where you will most likely see birds and planes **flying** The Stratosphere is the layer where you can find the **Ozone Layer** . Unlike the Troposphere, air at the bottom of this layer is **warmer** and the air at the top is **colder**. This is the **highest** layer of the atmosphere that jet airplanes can reach. The next layer is called the **Mesosphere** it is between the Stratosphere and the Thermosphere. In this layer, there is little to no air, so as the altitude rises the temperatures begin to **drop**. It is here where **noctilucent** clouds can form due to such scarce water vapor. Many **meteors** that come into Earth's atmosphere will burn up in this layer. In the Thermosphere, there is very low density of molecules which results in temperatures **rising** as the altitude increases. Temperatures here can reach **4,500** degrees Fahrenheit. This layer is, also, where the **International Space Station** orbits. The final layer is called the **Exosphere**. **Hydrogen** and **helium** can be found in this layer, albeit with lots of space between them. This layer is very **cold** and has no air to breathe.