

Name _____ Partners _____

THE ATMOSPHERE – layers of gases surrounding the Earth



1. Page 11 of the E.S.R.T. shows the "Average Chemical Composition of Earth's Crust, Hydrosphere, and Troposphere." Most of the Troposphere is composed of two gases, _____ & _____; their percentages are _____ & _____, respectively.
2. Page 15 of the E.S.R.T. shows "Selected Properties of Earth's Atmosphere." According to this chart, as altitude increases, atmospheric pressure _____.
3. The concentration of water vapor varies from about _____ g/m³ to about _____ g/m³ in the Troposphere.
4. Why do you think very little weather occurs in the layers above the Troposphere?

5. The troposphere is about _____ km thick. Its temperature averages about _____ °C on the ground to about _____ °C at the interface with the Stratosphere, called the _____.
6. The Stratosphere is about _____ km thick. Its temperature averages about _____ °C at the Tropopause to about _____ °C at the boundary with the Mesosphere, called the _____.
7. The Mesosphere is about _____ km thick. Its temperature averages about _____ °C at the Stratopause to about _____ °C at the boundary with the Thermosphere, called the _____.
8. The temperature of the Thermosphere averages about _____ °C at the Mesopause to above _____ °C at about _____ km in altitude.
9. Describe the temperature pattern from the ground all the way to the top of the atmosphere.

10. The hottest temperatures are in the _____, while the coldest temperatures are in the _____ and _____.