**Characteristics Of The Atmosphere** (p. 773 – 780)

**I. Layers Of The Atmosphere**

 **1. Determine which elements are present in the atmosphere** *(based on percentages).*

 78% = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 21% = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 1% = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *(List the main two.)*

 **2. What three factors differentiate one atmospheric layer from another?**

 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 **3. Match the atmospheric layer with the correct definition.**

 1. \_\_\_\_\_\_\_\_ Troposphere A. Contains ozone layer; Site of jet streams; Extends to 31 miles.

 2. \_\_\_\_\_\_\_\_ Stratosphere B. Thickest & hottest layer; Site of auroras; Extends to 298 miles.

 3. \_\_\_\_\_\_\_\_ Mesosphere C. Outermost layer; Site of space shuttle and satellite orbit

 4. \_\_\_\_\_\_\_\_ Thermosphere D. Lowest layer; Site of weather; Extends to 11 miles.

 5. \_\_\_\_\_\_\_\_ Exosphere E. Site of meteors; Coldest layer; Extends 31 to 50 miles.

 **4. Air pressure increases as altitude increases.**

 Circle One : True False

 **5. As altitude increases, so does air density.**

 Circle One : True False

 **6. For every kilometer climbed, the air temperature decreases by \_\_\_\_\_\_\_\_\_ °C.**

 **7. Explain how temperature inversion occurs in Los Angeles.**

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 **8. Define the term ozone layer.**

 Ozone Layer –

 **9. What type of radiation is filtered by the ozone layer?** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 **10. Why is the thermosphere so hot?**

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 **11. Define the term ionosphere.**

 Ionosphere –

 **12. The ionosphere reflects radio waves.**

 Circle One : True False

 **13. Match the atmospheric layer with the correct temperature range.**

 1. \_\_\_\_\_\_\_\_ Troposphere A. 20 °C to -55 °C

 2. \_\_\_\_\_\_\_\_ Stratosphere B. 0 °C to -80 °C

 3. \_\_\_\_\_\_\_\_ Mesosphere C. No air particles present.

 4. \_\_\_\_\_\_\_\_ Thermosphere D. -80 °C to 980 °C

 5. \_\_\_\_\_\_\_\_ Exosphere E. -55 °C to 0 °C

**II. Changes In Earth’s Atmosphere**

 **1. Originally, the Earth possessed an atmosphere with no oxygen.**

 Circle One : True False

 **2. What type of organism initially created the oxygen in Earth’s atmosphere?**

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 **3. Define the term chlorofluorocarbons.**

 Chlorofluorocarbons (CFC’s) –

 **4. What has the United States and other countries done to prevent ozone depletion?**

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 **5. Define the term greenhouse effect.**

 Greenhouse Effect –

 **6. List three greenhouse gases.**

 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 **7. Define the term global warming.**

 Global Warming –

 **8. List six consequences of global warming on Earth.** *(Not all answers in the book.)*

 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 6. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_