**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. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_