

Name: Key Date: 3/17/14

AVERAGE CHEMICAL COMPOSITION OF THE EARTH'S CRUST, HYDROSPHERE, AND TROPOSPHERE

Directions: Use the chart in the ESRT of the same name and answer the following questions.

1. What is the most common element in the troposphere? Nitrogen (78%)
2. What are the two main elements in the hydrosphere, by volume? Hydrogen (66%)
Oxygen (33%)
3. What percent, by volume, of Oxygen is there in the :
Troposphere: 21%
Hydrosphere: 33%
Crust: 94.04%
4. Nitrogen is most common element in the... Troposphere
5. What element is most common, by mass, in the crust? Oxygen
6. How much Silicon is in the crust by mass? 28.20%
by volume? 0.88%
7. Hydrogen is most common in the Hydrosphere
8. Which element makes up 0.49% of the Earth's crust by volume? Iron (Fe)
9. Which two elements make up 99% of the atmosphere's volume? Nitrogen + Oxygen
10. How much Calcium is in the atmosphere? None

Name Key 3/17 Score _____

Free Response HW _____

- 1) Sodium, Calcium, Potassium, Oxygen
least _____ → greatest
- 2) Potassium
- 3) Troposphere
- 4) miles 50 km 80
- 5) Thermosphere
- 6) Troposphere
- 7) 30-40 g/m³
- 8) 15°C
- 9) Stratosphere
- 10) Stratosphere
- 11) 1.0 atm
- 12) Hydrogen and Oxygen
- 13) Outer Core
- 14) 2900 km
- 15) Oceanic Crust (3.0 g/cm³)
- 16) Outer Core
- 17) 6,300(°C)(±)
- 18) Rising
- 19) Temperature 4,200°C Density 4.5 g/cm³(±)
Pressure 8 million atm Zone Stiffer Mantle
- 20) Asthenosphere and Outer Core