

Name _____ date _____

Chemistry
Characteristics of Elements

Use Chapters 6 and 7 and Appendix A or your textbook, your lab notebook, and the Periodic Table to answer the following questions

1. Bromine

- | | |
|---|----------|
| a. Number of protons | a. _____ |
| b. Group (family) name | b. _____ |
| c. Number of valence electrons | c. _____ |
| d. Metal, nonmetal, metalloid? | d. _____ |
| e. State at room temperature (solid, liquid, gas) | e. _____ |
| f. Color | f. _____ |
| g. Atomic radius | g. _____ |
| h. How does its atomic radius compare to that of chlorine (smaller, larger, the same) | h. _____ |
| i. How does its atomic radius compare to that of arsenic (smaller, larger, the same) | i. _____ |
| j. Formula and charge of most common ion | j. _____ |
| k. Name of most common ion | k. _____ |

2. Magnesium

- | | |
|---|----------|
| a. Number of protons | a. _____ |
| b. Group (family) name | b. _____ |
| c. Number of valence electrons | c. _____ |
| d. Metal, nonmetal, metalloid? | d. _____ |
| e. State at room temperature (solid, liquid, gas) | e. _____ |
| f. Color | f. _____ |
| g. Atomic radius | g. _____ |
| h. How does its atomic radius compare to that of calcium (smaller, larger, the same) | h. _____ |
| i. How does its atomic radius compare to that of aluminum (smaller, larger, the same) | i. _____ |
| j. Formula and charge of most common ion | j. _____ |
| k. Name of most common ion | k. _____ |

3. Potassium

- | | |
|---|----------|
| a. Number of protons | a. _____ |
| b. Group (family) name | b. _____ |
| c. Number of valence electrons | c. _____ |
| d. Metal, nonmetal, metalloid? | d. _____ |
| e. State at room temperature (solid, liquid, gas) | e. _____ |
| f. Color | f. _____ |
| g. Atomic radius | g. _____ |
| h. How does its atomic radius compare to that of sodium (smaller, larger, the same) | h. _____ |
| i. How does its atomic radius compare to that of selenium (smaller, larger, the same) | i. _____ |
| j. Formula and charge of most common ion | j. _____ |
| k. Name of most common ion | k. _____ |



4. Oxygen

- | | |
|--|----------|
| a. Number of protons | a. _____ |
| b. Group (family) name | b. _____ |
| c. Number of valence electrons | c. _____ |
| d. Metal, nonmetal, metalloid? | d. _____ |
| e. State at room temperature (solid, liquid, gas) | e. _____ |
| f. Color | f. _____ |
| g. Atomic radius | g. _____ |
| h. How does its atomic radius compare to that of sulfur (smaller, larger, the same) | h. _____ |
| i. How does its atomic radius compare to that of mercury (smaller, larger, the same) | i. _____ |
| j. Formula and charge of most common ion | j. _____ |
| k. Name of most common ion | k. _____ |

5. Zinc

- | | |
|---|----------|
| a. Number of protons | a. _____ |
| b. Group (family) name | b. _____ |
| c. Number of valence electrons | c. _____ |
| d. Metal, nonmetal, metalloid? | d. _____ |
| e. State at room temperature (solid, liquid, gas) | e. _____ |
| f. Color | f. _____ |
| g. Atomic radius | g. _____ |
| h. How does its atomic radius compare to that of nickel (smaller, larger, the same) | h. _____ |
| i. How does its atomic radius compare to that of barium (smaller, larger, the same) | i. _____ |
| j. Formula and charge of most common ion | j. _____ |
| k. Name of most common ion | k. _____ |

6. Silver

- | | |
|---|----------|
| a. Number of protons | a. _____ |
| b. Group (family) name | b. _____ |
| c. Number of valence electrons | c. _____ |
| d. Metal, nonmetal, metalloid? | d. _____ |
| e. State at room temperature (solid, liquid, gas) | e. _____ |
| f. Color | f. _____ |
| g. Atomic radius | g. _____ |
| h. How does its atomic radius compare to that of gold (smaller, larger, the same) | h. _____ |
| i. How does its atomic radius compare to that of tin (smaller, larger, the same) | i. _____ |
| j. Formula and charge of most common ion | j. _____ |
| k. Name of most common ion | k. _____ |

