

Chem I

Name _____

Date _____ Per _____

Worksheet #C19: Valence Electrons and Electron Configurations and Atomic Sizes

1. Draw the arrow diagram yet again in the space below if you use it instead of the colored chart:

2. What is the full electron configuration of Cu? _____

3. Use either the arrow chart or your colored chart to write out the noble gas shortcut for these:

a. Se _____ f. Ce _____

b. Rh _____ g. C _____

c. U _____ h. Pb _____

d. Mg _____ i. Br _____

e. Sb _____ j. Na _____

4. What are valence electrons? _____

5. What two kinds of orbitals contribute to the valence electrons? _____ and _____

6. How many valence electrons do each of the elements in the d and f blocks have? _____

a. When might there be an exception to this? _____

7. Why are valence electrons important? _____

8. How many valence electrons do each of the following have?

a. Li _____ d. As _____ g. Se _____ j. Ca _____ m. Na _____

b. P _____ e. C _____ h. In _____ k. Rb _____ n. O _____

c. S _____ f. K _____ i. Sr _____ l. Po _____ o. Bi _____