+ WS 2.8 REVIEW

Identify the # of protons, neutrons, and electrons in the following atoms:

1. $^{31}_{15}P$ p= ____ n= ____ e= ____

2. $^{39}_{20}Ca^{2+}$ p= ____ n= ____ e= ____

3. $^{128}_{52}Te^{4-}$ p= ____ n= ____ e= ____

Write the complete symbol for the atoms which have the following # of p, n, & e's:

4. p= 26 n= 30 e= 26 ☐

5. p= 23 n= 28 e= 18 ☐

6. p= 80 n= 120 e= 79 ☐

Write the **entire** electronic configuration for the following:

7. boron: _____ 8. magnesium: _____

Use the **short-cut** method to write the following electronic configurations:

9. technetium: _____ 10. selenium: _____

11. francium: _____ 12. tungsten: _____

13. How much energy is contained in a photon of green light?
(frequency is 2.05 x 10^{14} Hz?)

14. For the 4p sublevel, n= ____, and ℓ= ____.

15. What are the diatomic gases of the periodic table?

16. What is your all time favorite noble gas?

17. Which has a higher ionization energy, phosphorus or sulfur? Back-up your answer with an electron orbital diagram for each: