

Name: _____

Block: _____

Periodic Table Scavenger Hunt

Give the symbol for the element that matches each of the following descriptions.

- _____ 1. Which element has one valence electron and is in period 4.
- _____ 2. Which element is the only metalloid in group 16 (VI A).
- _____ 3. Which element is a liquid halogen?
- _____ 4. Which metal is in period 4 and forms colored ions with five different charges.
- _____ 5. Which is the heaviest naturally-occurring actinide.
- _____ 6. Which alkaline earth metal forms an ion with the same electron configuration as krypton.
- _____ 7. Which metalloid forms a -3 ion.
- _____ 8. Which is the only liquid metal.
- _____ 9. Which is the heaviest noble gas.
- _____ 10. What is the only non-metal in group 13 (III A).
- _____ 11. Which element is a metal: Ba or At?
- _____ 12. Which period is Ca in?
- _____ 13. The *chalcogens* is a term sometimes used for the group that includes mostly nonmetals that form ions with a -2 charge. What is the number of this group?
- _____ 14. The *pnictogens* is a term sometimes used for the group that includes two nonmetals that form ions with a -3 charge, plus two metalloids and at least one metal. What is the number of this group?
- _____ 15. Which rare earth metal forms a $+3$ ion that has a half-filled f sub-level. (Hint: two of the electrons that are taken away when it forms the ion are its valence electrons.)
- _____ 16. Which noble gas cannot exist as a solid at atmospheric pressure, even at absolute zero.
- _____ 17. Which is the only non-metal in group 1 (I A).
- _____ 18. Which of the following ions is colored when dissolved in water: Ca^{+2} , Al^{+3} , S^{-2} , Mn^{+7} , or K^{+1} ?
- _____ 19. Which of the following would react most violently with water: Cr, K, N_2 , Au, or Yb?
- _____ 20. Which of the following would be the best substance to use in an electrical wire: C, Ag, Si, P, or Ne?