

Name _____ Period _____

Periodic Table Practice Worksheet

1. The Periodic Table was first organized by atomic weight by the scientist _____
2. The rows of the periodic table are called periods/groups (circle correct answer)
3. Elements in Group 1 of the periodic table are called _____
4. Elements in Group 2 of the periodic table are called _____
5. Elements in Group 18 of the periodic table are called _____
6. Elements in Group 3-12 of the periodic table are called _____
7. Name the elements that occur in nature as diatomic molecules: _____
8. Name the elements that occur in nature as diatomic molecules:

_____	_____
_____	_____
_____	_____
_____	_____
9. Write the symbol for the elements above in their diatomic state:

_____	_____	_____	_____	_____	_____	_____	_____
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10. The metalloids or semi metals are can be recognized by:

11. all elements to the right/left of the metalloids are _____. all elements to the left are called _____ except _____
12. The radius of the elements increase/decrease/stay the same (circle correct answer) from left to right in each period of the periodic table. Why?
13. The radius of elements increase/decrease/stay the same (circle correct answer) from top to bottom on the periodic table. Why?
14. The electronegativity of the elements increase/decrease/stay the same (circle correct answer) from left to right in each period. Why?
15. The electronegativity of the elements increase/decrease/stay the same (circle correct answer) from top to bottom in each group. Why?
16. _____ is the most electronegative element
17. Ionization energy is the amount of energy it takes to add/remove (circle correct answer) an electron from the outermost shell of the atom.

18. The ionization energy of atoms ncrease/decrease/stay the same (circle correct answer) from left to right in each period of the periodic table. Why?

19. The ionization energy of atoms increase/decrease/stay the same (circle correct answer) from top to bottom in each group of the periodic table. Why?

20. Valence electrons can be found in the outermost ____ and _____ orbitals of an atom

21. Valence electrons can be determined by looking at the column or group on the periodic table.

- a. elements in group 1 have _____ valence electron
- b. group two elements have _____ valence electrons
- c. group 13 has _____
- d. group 14 has _____
- e.up to group 18 which has a stable outer shell with _____ valence electrons.(except He which has 2).

22. The _____ are elements that do not react with other elements.
Why:

23. The _____ and _____ elements are the only elements that have f orbitals

What is the symbol for:

- a. Mercury _____
- b. Tungsten _____
- c. Potassium _____
- d. Tin _____