

# When it comes to the Trends of the Periodic Table, I can...

(write the answers on this handout now)

1. I can classify elements as metals, nonmetals, or metalloids based upon their location on the Periodic Table.

Classify each element as a metal (M), a nonmetal (NM), or a metalloid (MTLD).

B	K	Li	C	Ar
Sb	H	Fe	Au	S
F	Si	Fr	He	Rn
Ge	Al	As	Bi	I

2. I can state the group names for groups 1, 2, 17, and 18.
3. I can explain why elements in the same group have similar chemical properties.
4. I can explain why the elements in Group 18 don't usually react with the other elements.
5. I can state the meaning of "STP" and where on the Reference Table it can be found.
6. I can state the names & symbols for the 2 elements that are liquids at STP.
7. I can state the names and symbols of the 11 elements that are always gases at STP.
8. I can state how the elements on the Periodic Table are arranged.
9. I can list the 7 diatomic elements.
10. I can define electronegativity.
11. I can define arbitrary + relative scales.
12. I can define 1st ionization energy.

13. Skip this one!
14. I can define atomic radius and ionic radius.
15. I can define net nuclear charge.
16. I can define metallic + non-metallic character of atoms.
17. I can define allotrope.
18. I can state the group trend + period trend for electronegativity and explain why it occurs.
19. I can state the group trend + period trend for 1<sup>st</sup> ionization energy + explain why it occurs.
20. I can state the group trend and period trend for atomic radius and explain why it occurs.
21. I can state the group trend + period trend for metallic character + explain why it occurs.
22. I can state the group trend & period trend for nonmetallic character, and why it occurs.
23. I can state the group trend and period trend for net nuclear charge and why it occurs.
24. I can state the group trend and period trend for cation radius and why it occurs.
25. I can state the group trend and period trend for anion radius and why it occurs.
26. I can list 10 properties of metals.
27. I can list 8 properties of nonmetals.

If you can do all of this, you will be 79 on the celebration.  
I hope you got that joke, you will likely score over 90%, not 79 (duh).