


Take notes on a periodic table from me, then try to answer page 1 like it is an exam

QUESTIONS	ANSWERS
<p>1. Explains what happens to the <b>number of orbitals</b> as you move <b>down the periodic table</b>? Relate this to how 'reactive' the elements are.</p> <p>2. <b>*Demo:</b> sodium in water</p>  <p>3. Explain what happens to the number of <b>valence electrons</b> as you move from <b>left to right</b> in the <b>periodic table</b>.</p> <p>4. What is true about the <b>number of valence</b> electrons in a given <b>group or column</b> on the periodic table? For example, how many valence electrons does group 2 have? Group 3? Etc.</p> <p>5. What is true about <b>valence electrons of stable elements</b> (ie- noble gasses)</p> <p>6. What do atoms often do if they <b>do not have full valence orbital's</b>?</p> <p>7. <b>Group 1</b> atoms often <b>react</b> with what other group? Explain why.</p> <p>8. <b>Group 2</b> atoms often <b>react</b> with what other group? Explain why.</p>	<p>Observations:</p> <p>Youtube: <a href="http://www.youtube.com/watch?v=m55kgyApYrY">http://www.youtube.com/watch?v=m55kgyApYrY</a></p>

Use your book for the rest

9. \*Summarize what **mendelev** did.
  
10. What does **periodic** mean?
  
11. What happens to **how metallic** atoms are as you move from **left to right** on the periodic table? **Hint:** where are the metals compared to the non-metals?
  
12. Draw lines on your paper that show what way the **period** would be going on the periodic table? In other words, **are periods horizontal or vertical?** Show with a drawing. (pp 309)
  
13. What **properties** change as you move down the **periods?** (pp 309)
  
14. Draw lines on your paper that show what way the **GROUPS** would be going on the periodic table? In other words, are **GROUPS horizontal or vertical?** Show with a drawing. (pp 309)
  
15. **Why** are elements arranged in **groups?** (pp 309)

**Compare metals, non-metals, and metalloids in the chart below**

	<b>Where are they on the periodic table</b>	<b>Describe their Characteristics. (circle all that apply and state any others)</b>	<b>3 Examples of Elements on the Periodic Table</b>
<b>Metals</b>		Good heat conductors? Good electricity conductor? Malleable? Ductile? Shiny? Other?	
<b>Non-Metals</b>		Good heat conductors? Good electricity conductor? Malleable? Ductile? Shiny? Other?	
<b>Metalloids</b>		Good heat conductors? Good electricity conductor? Malleable? Ductile? Shiny? Other?	

**SUMMARY:** About 3 WELL WRITTEN sentences summarizing the Cornell notes. .

<p><b><u>FOCUS WORDS</u></b> UNDERLINE THEM IN YOUR PARAGRAPH.</p>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
<b>Metals</b>	
<b>Metalloids</b>	
<b>Non-Metals</b>	
<b>Across Periodic Table</b>	
<b>Down Periodic Table</b>	
<b>Reactive</b>	
<b>Valence Electrons</b>	

**Below: NAME EACH GROUP and DESCRIBE THEIR COMMON PROPERTIES**

Group 1:

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\*Group 2:

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Groups 3-12:

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\*Group 13:

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Group 14:

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\*Group 15:

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\*Group 16:

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Group 17:

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Group 18:

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Period	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Group 8	Group 9	Group 10	Group 11	Group 12	Group 13	Group 14	Group 15	Group 16	Group 17	Group 18	
Period 1	1 <b>H</b> Hydrogen 1.0																	2 <b>He</b> Helium 4.0	
Period 2	3 <b>Li</b> Lithium 6.9	4 <b>Be</b> Beryllium 9.0												5 <b>B</b> Boron 10.8	6 <b>C</b> Carbon 12.0	7 <b>N</b> Nitrogen 14.0	8 <b>O</b> Oxygen 16.0	9 <b>F</b> Fluorine 19.0	10 <b>Ne</b> Neon 20.2
Period 3	11 <b>Na</b> Sodium 23.0	12 <b>Mg</b> Magnesium 24.3											13 <b>Al</b> Aluminum 27.0	14 <b>Si</b> Silicon 28.1	15 <b>P</b> Phosphorus 31.0	16 <b>S</b> Sulfur 32.1	17 <b>Cl</b> Chlorine 35.5	18 <b>Ar</b> Argon 39.9	
Period 4	19 <b>K</b> Potassium 39.1	20 <b>Ca</b> Calcium 40.1	21 <b>Sc</b> Scandium 45.0	22 <b>Ti</b> Titanium 47.9	23 <b>V</b> Vanadium 50.9	24 <b>Cr</b> Chromium 52.0	25 <b>Mn</b> Manganese 54.9	26 <b>Fe</b> Iron 55.8	27 <b>Co</b> Cobalt 58.9	28 <b>Ni</b> Nickel 58.7	29 <b>Cu</b> Copper 63.5	30 <b>Zn</b> Zinc 65.4	31 <b>Ga</b> Gallium 69.7	32 <b>Ge</b> Germanium 72.6	33 <b>As</b> Arsenic 74.9	34 <b>Se</b> Selenium 79.0	35 <b>Br</b> Bromine 79.9	36 <b>Kr</b> Krypton 83.8	
Period 5	37 <b>Rb</b> Rubidium 85.5	38 <b>Sr</b> Strontium 87.6	39 <b>Y</b> Yttrium 88.9	40 <b>Zr</b> Zirconium 91.2	41 <b>Nb</b> Niobium 92.9	42 <b>Mo</b> Molybdenum 95.9	43 <b>Tc</b> Technetium (97.9)	44 <b>Ru</b> Ruthenium 101.1	45 <b>Rh</b> Rhodium 102.9	46 <b>Pd</b> Palladium 106.4	47 <b>Ag</b> Silver 107.9	48 <b>Cd</b> Cadmium 112.4	49 <b>In</b> Indium 114.8	50 <b>Sn</b> Tin 118.7	51 <b>Sb</b> Antimony 121.8	52 <b>Te</b> Tellurium 127.6	53 <b>I</b> Iodine 126.9	54 <b>Xe</b> Xenon 131.3	
Period 6	55 <b>Cs</b> Cesium 132.9	56 <b>Ba</b> Barium 137.3	57 <b>La</b> Lanthanum 138.9	72 <b>Hf</b> Hafnium 178.5	73 <b>Ta</b> Tantalum 180.9	74 <b>W</b> Tungsten 183.8	75 <b>Re</b> Rhenium 186.2	76 <b>Os</b> Osmium 190.2	77 <b>Ir</b> Iridium 192.2	78 <b>Pt</b> Platinum 195.1	79 <b>Au</b> Gold 197.0	80 <b>Hg</b> Mercury 200.6	81 <b>Tl</b> Thallium 204.4	82 <b>Pb</b> Lead 207.2	83 <b>Bi</b> Bismuth 209.0	84 <b>Po</b> Polonium (209.0)	85 <b>At</b> Astatine (210.0)	86 <b>Rn</b> Radon (222.0)	
Period 7	87 <b>Fr</b> Francium (223.0)	88 <b>Ra</b> Radium (226.0)	89 <b>Ac</b> Actinium (227.0)	104 <b>Rf</b> Rutherfordium (261.1)	105 <b>Db</b> Dubnium (262.1)	106 <b>Sg</b> Seaborgium (263.1)	107 <b>Bh</b> Bohrium (262.1)	108 <b>Hs</b> Hassium (265)	109 <b>Mt</b> Meitnerium (266)	110 <b>Uun</b> Ununium (271)	111 <b>Uuu</b> Ununium (272)	112 <b>Uub</b> Ununium (277)							

The background color indicates the type of element. Carbon is a nonmetal.

**Background**  
Metals  
Metalloids  
Nonmetals

The color of the chemical symbol indicates the physical state at room temperature. Carbon is a solid.

**Chemical symbol**  
Solid  
Liquid  
Gas

This zigzag line reminds you where the metals, nonmetals, and metalloids are.

The names and symbols of elements 110–112 are temporary. They are based on the atomic number of the element. The official name and symbol will be

Period	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6	Group 7	Group 8	Group 9	Group 10	Group 11	Group 12	Group 13	Group 14	Group 15	Group 16	Group 17	Group 18	
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