

Name

Regents Chemistry

Period

Unit 4 Review: The Periodic Table

<p>1. What are the six noble gases?</p> <p>He, Ne, Ar, Kr, Xe, Rn</p>	<p>2. Define electronegativity.</p> <p>The strength of an atom's attraction for the electrons in a chemical bond</p>	<p>3. What <u>two</u> elements are liquids at STP?</p> <p>Br₂ and Hg</p>
<p>4. Define ionization energy.</p> <p>Amount of energy required to remove an electron from an atom</p>	<p>5. How are elements arranged in the current Periodic Table?</p> <p>In order of increasing atomic number (number of protons)</p>	<p>6. Why are metals good conductors of electricity?</p> <p>They have mobile electrons</p>
<p>7. What kind of metals produce colored solutions?</p> <p>Transition metals</p>	<p>8. Going across a period, from left to right, what happens to the atomic radius of each successive element?</p> <p>decreases</p>	<p>9. Going across a period, from left to right, what happens to the electronegativity of each successive element?</p> <p>increases</p>
<p>10. Going across a period, from left to right, what happens to the metallic character of each successive element?</p> <p>decreases</p>	<p>11. Going across a period, from left to right, what happens to the ionization energy of each successive element?</p> <p>increases</p>	<p>12. Write the formulas for the 7 diatomic elements.</p> <p>Br₂ I₂ N₂ Cl₂ H₂ O₂ F₂</p>

<p>13. List 3 properties of metals.</p> <ul style="list-style-type: none"> • Shiny • Ductile • Malleable • Conduct heat/electricity • Low I.E. • Low E.N. • Lose electrons • Form + ions 	<p>14. List 3 properties of nonmetals.</p> <ul style="list-style-type: none"> • dull • brittle • do not conduct heat/electricity • high I.E. • high E.N. • gain electrons • Form - ions 	<p>15. List the <u>six</u> metalloids.</p> <p>B, Si, Ge, As, Sb, Te</p>
<p>16. What happens to the reactivity of Group 1 metals as you go down the group?</p> <p>Increases</p>	<p>17. What happens to the reactivity of Group 17 nonmetals (halogens) as you go down the group?</p> <p>Decreases</p>	<p>18. As you go across a period, the number of principal energy levels...</p> <p>Remains the same</p>
<p>19. Which element has the highest electronegativity?</p> <p>F</p>	<p>20. Going down a group, what happens to the atomic radius of each successive element?</p> <p>increases</p>	<p>21. Going down a group, what happens to the electronegativity of each successive element?</p> <p>decreases</p>
<p>22. Going down a group, what happens to the metallic character of each successive element?</p> <p>increases</p>	<p>23. Going down a group, what happens to the ionization energy of each successive element?</p> <p>decreases</p>	<p>24. Why do elements in the same group have similar chemical properties?</p> <p>They have the same number of valence electrons</p>