




CHEMISTRY REVISION PACKAGE

10.	5	<p>Give the common ionic form for the following elements (FROM MEMORY):</p> <table border="1" data-bbox="389 230 1297 611"> <thead> <tr> <th data-bbox="389 230 842 264">Ion name</th> <th data-bbox="842 230 1297 264">Ion formula</th> </tr> </thead> <tbody> <tr> <td data-bbox="389 264 842 297">Copper</td> <td data-bbox="842 264 1297 297"></td> </tr> <tr> <td data-bbox="389 297 842 331">Potassium</td> <td data-bbox="842 297 1297 331"></td> </tr> <tr> <td data-bbox="389 331 842 365">Silver</td> <td data-bbox="842 331 1297 365"></td> </tr> <tr> <td data-bbox="389 365 842 398">Oxide</td> <td data-bbox="842 365 1297 398"></td> </tr> <tr> <td data-bbox="389 398 842 432">Nitrate</td> <td data-bbox="842 398 1297 432"></td> </tr> <tr> <td data-bbox="389 432 842 465">Sulfide</td> <td data-bbox="842 432 1297 465"></td> </tr> <tr> <td data-bbox="389 465 842 499">Sulfate</td> <td data-bbox="842 465 1297 499"></td> </tr> <tr> <td data-bbox="389 499 842 533">Hydroxide</td> <td data-bbox="842 499 1297 533"></td> </tr> <tr> <td data-bbox="389 533 842 566">Lead</td> <td data-bbox="842 533 1297 566"></td> </tr> </tbody> </table>	Ion name	Ion formula	Copper		Potassium		Silver		Oxide		Nitrate		Sulfide		Sulfate		Hydroxide		Lead																	
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11.	7, 8	<p>Fill in the table</p> <table border="1" data-bbox="389 649 1476 992"> <thead> <tr> <th data-bbox="389 649 715 723">Chemical Name</th> <th data-bbox="715 649 1249 723">Number and type of atom</th> <th data-bbox="1249 649 1476 723">Chemical Formula</th> </tr> </thead> <tbody> <tr> <td data-bbox="389 723 715 757">Sodium Chloride</td> <td data-bbox="715 723 1249 757">1 Sodium: 1 Chlorine</td> <td data-bbox="1249 723 1476 757">NaCl</td> </tr> <tr> <td data-bbox="389 757 715 790">Lithium Fluoride</td> <td data-bbox="715 757 1249 790"></td> <td data-bbox="1249 757 1476 790"></td> </tr> <tr> <td data-bbox="389 790 715 824"></td> <td data-bbox="715 790 1249 824"></td> <td data-bbox="1249 790 1476 824">CuO</td> </tr> <tr> <td data-bbox="389 824 715 857"></td> <td data-bbox="715 824 1249 857">1 Copper: 2 Chlorine</td> <td data-bbox="1249 824 1476 857"></td> </tr> <tr> <td data-bbox="389 857 715 891">Magnesium Hydroxide</td> <td data-bbox="715 857 1249 891"></td> <td data-bbox="1249 857 1476 891"></td> </tr> <tr> <td data-bbox="389 891 715 925"></td> <td data-bbox="715 891 1249 925"></td> <td data-bbox="1249 891 1476 925">Cu(NO₃)₂</td> </tr> <tr> <td data-bbox="389 925 715 958">Aluminium Carbonate</td> <td data-bbox="715 925 1249 958"></td> <td data-bbox="1249 925 1476 958"></td> </tr> </tbody> </table>	Chemical Name	Number and type of atom	Chemical Formula	Sodium Chloride	1 Sodium: 1 Chlorine	NaCl	Lithium Fluoride					CuO		1 Copper: 2 Chlorine		Magnesium Hydroxide					Cu(NO ₃) ₂	Aluminium Carbonate														
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12.	8	<p>Write balanced ionic formula for the following compounds. This must be done without looking at a valency table.</p> <table border="1" data-bbox="389 1104 1476 1597"> <thead> <tr> <th data-bbox="389 1104 676 1137">Name</th> <th data-bbox="676 1104 906 1137">Positive ion</th> <th data-bbox="906 1104 1161 1137">Negative ion</th> <th data-bbox="1161 1104 1476 1137">Balanced Formula</th> </tr> </thead> <tbody> <tr> <td data-bbox="389 1137 676 1171">Potassium Chloride</td> <td data-bbox="676 1137 906 1171"></td> <td data-bbox="906 1137 1161 1171"></td> <td data-bbox="1161 1137 1476 1171"></td> </tr> <tr> <td data-bbox="389 1171 676 1205">Potassium Oxide</td> <td data-bbox="676 1171 906 1205"></td> <td data-bbox="906 1171 1161 1205"></td> <td data-bbox="1161 1171 1476 1205"></td> </tr> <tr> <td data-bbox="389 1205 676 1238">Zinc Oxide</td> <td data-bbox="676 1205 906 1238"></td> <td data-bbox="906 1205 1161 1238"></td> <td data-bbox="1161 1205 1476 1238"></td> </tr> <tr> <td data-bbox="389 1238 676 1272">Hydrogen Sulfide</td> <td data-bbox="676 1238 906 1272"></td> <td data-bbox="906 1238 1161 1272"></td> <td data-bbox="1161 1238 1476 1272"></td> </tr> <tr> <td data-bbox="389 1272 676 1305">Lead Sulfate</td> <td data-bbox="676 1272 906 1305"></td> <td data-bbox="906 1272 1161 1305"></td> <td data-bbox="1161 1272 1476 1305"></td> </tr> <tr> <td data-bbox="389 1305 676 1339">Lead Nitrate</td> <td data-bbox="676 1305 906 1339"></td> <td data-bbox="906 1305 1161 1339"></td> <td data-bbox="1161 1305 1476 1339"></td> </tr> <tr> <td data-bbox="389 1339 676 1373">Aluminium Hydroxide</td> <td data-bbox="676 1339 906 1373"></td> <td data-bbox="906 1339 1161 1373"></td> <td data-bbox="1161 1339 1476 1373"></td> </tr> <tr> <td data-bbox="389 1373 676 1406">Aluminium Sulfate</td> <td data-bbox="676 1373 906 1406"></td> <td data-bbox="906 1373 1161 1406"></td> <td data-bbox="1161 1373 1476 1406"></td> </tr> </tbody> </table>	Name	Positive ion	Negative ion	Balanced Formula	Potassium Chloride				Potassium Oxide				Zinc Oxide				Hydrogen Sulfide				Lead Sulfate				Lead Nitrate				Aluminium Hydroxide				Aluminium Sulfate			
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13.	9	<p>Which of the following substances do you believe to be metals?</p> <p>Substance A: gas at room temperature, does not conduct electricity</p> <p>Substance B: shiny, soft and conducts electricity</p> <p>Substance C: dull, hard, conducts electricity</p> <p>Substance D: shiny, liquid at room temperature, conducts electricity</p>																																				

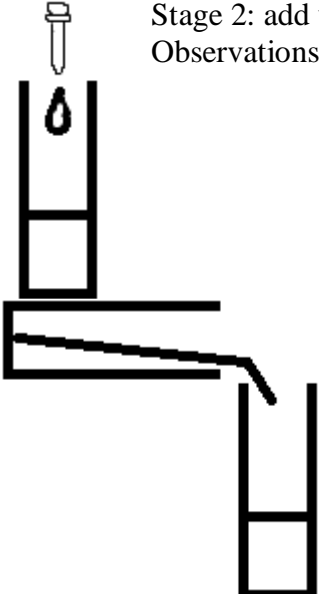
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14.	9	<p>Indicate which elements are non-metals on the periodic table below:</p> 						
15.	12, 13	<p>Separate the following compounds into acids and bases: NaOH, HCl, LiOH, HNO_3, H_2SO_4, CH_3COOH</p> <table border="1" data-bbox="384 770 1422 1048"> <thead> <tr> <th data-bbox="384 770 903 815">Acids</th> <th data-bbox="903 770 1422 815">Bases</th> </tr> </thead> <tbody> <tr> <td data-bbox="384 815 903 1048"></td> <td data-bbox="903 815 1422 1048"></td> </tr> </tbody> </table>	Acids	Bases				
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16.	12, 13, 14	<p>Identify whether each of the substances below is acidic, neutral or basic.</p> <p>Substance A: pH of 3 Substance B: turns universal indicator blue Substance C: has no effect on blue litmus paper and does not turn universal indicator green Substance D: has a pH of 7 Substance E: reacts with a metal to produce hydrogen gas Substance F: turns universal indicator green Substance G: has a sour taste to it Substance H: has a soapy feel</p> <table border="1" data-bbox="384 1451 1422 1615"> <thead> <tr> <th data-bbox="384 1451 730 1496">Acids</th> <th data-bbox="730 1451 1077 1496">Neutral</th> <th data-bbox="1077 1451 1422 1496">Bases</th> </tr> </thead> <tbody> <tr> <td data-bbox="384 1496 730 1615"></td> <td data-bbox="730 1496 1077 1615"></td> <td data-bbox="1077 1496 1422 1615"></td> </tr> </tbody> </table>	Acids	Neutral	Bases			
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17.	12, 13	<p>Write the chemical formula for the following acids and bases:</p> <p>Hydrochloric acid: Sodium hydroxide: Nitric acid: Sulfuric acid: Copper hydroxide: Ethanoic acid:</p>						

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18.	14	<p>My fish tank has a pH of 5. The fish store tells me my fish like to have a pH level of 6.5. Suggest a method of creating the right pH level in my fish tank.</p>
19.	15	<p>Classify the commonly used chemicals below as acids or bases.</p> 
20.	16, 17, 18	<p>Fill in the remainder of the chemical word equations</p> <p>Acid + base -> _____ + _____</p> <p>Acid + metal -> _____ + _____</p> <p>Acid + carbonate -> _____ + _____ + _____</p>
21.	16, 17, 18	<p>Put a circle around the reactants and a rectangle around the products for the following reactions.</p> <p>$\text{Pb} + \text{O}_2 \rightarrow \text{PbO}_2$</p> <p>$\text{NH}_4\text{OH} + \text{HBr} \rightarrow \text{H}_2\text{O} + \text{NH}_4\text{Br}$</p> <p>$\text{CH}_4 + 2 \text{O}_2 \rightarrow \text{CO}_2 + 2 \text{H}_2\text{O}$</p>
22.	16	<p>Write down any observations you would expect to make at each stage of the experiment below.</p>  <p>Stage 1: add universal indicator to 10 ml of 1M acid Observations:</p>

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		 <p>Stage 2: add universal indicator to 10 ml of 1M base Observations:</p> <p>Stage 3: mix the acid with the base Observations:</p>
23.	17	<p>What observations would you expect to make when mixing a magnesium ribbon with hydrochloric acid in a test tube?</p> <p>What are the reasons for these observations?</p>
24.	16, 17, 18	<p>Write the chemical formula and write the name of the salt that would be formed in each of the reactions below.</p> <p>HCl + NaCO₃..... salt formed:</p> <p>Nitric acid + magnesium carbonate..... salt formed:</p> <p>Hydrochloric acid + copper hydroxide..... salt formed:</p> <p>Sulfuric acid + aluminium.... salt formed:</p> <p>HNO₃ + Li.....salt formed:</p>