Science 10 Name:  
Number #

**Acids and Bases**

|  |
| --- |
| **Slide 4 – Acids, Bases, and Neutral**   * Acids are chemical compounds with a pH of * Bases are chemical compounds with a pH of * ph of 7 is |

|  |
| --- |
| **Slide 5 – Examples of Acids**   * Stomach acid * Citrus fruits * Vinegar * Car batteries * Acid rain |

|  |
| --- |
| **Slide 6 – Examples of Bases**   * Blood * Baking Soda * Drano * Egg Whites * Bleach * Soap |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Slide 7 – Properties of Acids and Bases**   |  |  | | --- | --- | | Acids | Bases | | * pH less than 7 * Sour taste * Corrosive * Turns blue litmus red * Contains hydrogen ions (H+) * Usually has an H at the left side of the formula | * pH greater than 7 * Bitter taste * Slippery, soapy and corrosive * Turns red litmus blue * Contains hydroxide ions (OH-) * Usually has an OH at the right side of the formula | |

|  |
| --- |
| **Slide 8 – Identifying Acids 101**   * Acids have * Example: HCl, H2SO4, NHO3, etc. |

|  |
| --- |
| **Slide 9 – Identifying Bases 101**   * Bases have * Example: NaOH, Mg(OH)2, Ca(OH)2, etc. |

|  |
| --- |
| **Slide 10 – Warning!!!**   * Some acids/bases are corrosive (can burn through things) * You should NEVER test whether a solution is an acid or base by tasting or touching |

|  |
| --- |
| **Slide 12 – The Safe Way!**   * **pH indicators** are chemicals that change   Examples:   * + Litmus paper   + Methyl Orange   + Bromothymol Blue   + Phenophthalein   + Indigo Carmine   + Magnesium Ribbons |

|  |
| --- |
| **Slide 13 – pH Indicators**  These indicators change color, depending on what they are put in:  0_quiz-5.1-05.gif |

|  |
| --- |
| **Slide 14 – Practice**   * What colour is litmus paper in an acidic solution? * What colour is bromothymol blue at a pH of 5? 7? 9? * Is a solution an acid or a base if you add methyl orange and it turns yellow? * Is a solution an acid or a base if you add phenolphthalein and it’s colourless? |

|  |
| --- |
| **Slide 15 – Lab Tomorrow!**   * Read the pH indicators lab and be prepared to perform this lab tomorrow. * DO NOT LOSE, FORGET, or DESTROY this lab. It is the only copy you will get and if you do lose, forget or destroy it, you will have to write it all out BY HAND! |