**Science 10 – Chemistry Unit Plan**

1st Semester 2017/18

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Teacher: Miss Neubauer

**Big Idea:** Chemical processes require energy change as atoms are rearranged.

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| **Knowledge Targets***“What do I need to know?”* | 1. | I can define the following terms as they relate to our unit: |
| **Acid** | **Element** | **pH** |
| **Activation Energy** | **Endothermic** | **Polymer** |
| **Alkali** | **Equation** | **Product** |
| **Atom** | **Exothermic** | **Proton** |
| **Base** | **Law of conservation of mass** | **Reactant** |
| **Combustion** | **Molecule** | **Reaction** |
| **Corrosion** | **Monomer** | **Salt** |
| **Decomposition** | **Neutralization** | **Single-double replacement** |
|  | **Diatomic** | **Neutron** | **Synthesis** |
|  | **Electron** | **Oxidation** |  |
| 2. | I know what is meant by the term describe and can apply it to scientific topics. |
| 3. | I know what **WHMIS** is short for. |
| 4. | I know what **HHPS** is short for. |
| 5. | I can recognize hazard symbols and say what they mean. |
| 6. | I can write atomic symbols and names for essential elements. |
| 7. | I know what (aq), (s), (l), and (g) indicate. |
| 8. | I can name the seven **diatomic molecules**. |
| 9. | I can state the **Law of Conservation of Mass**. |
| 10. | I can identify **reactants** and **products**. |
| 11. | I can describe and give an example of an **exothermic** **reaction**. |
| 12. | I can describe and give an example of an **endothermic reaction**. |
| 13. | I can describe what happens in a **synthesis reaction** and write the general **equation**. |
| 14. | I can describe what happens in a **decomposition reaction** and write the general **equation**. |
|  | 15. | I can describe what happens in a **single replacement reaction** and write the general **equation**. |
|  | 16. | I can describe what happens in a **double replacement reaction** and write the general **equation**. |
|  | 17. | I can describe what happens in a **neutralization reaction** and write the general **equation**. |
|  | 18. | I can describe what happens in a **combustion reaction** and write the general **equation**. |
|  | 19. | I can state where on the **pH** scale **acids** and **bases** fall. |
|  | 20. | I can give examples of common **acids**. |
|  | 21. | I can give examples of common **bases**. |
|  | 22. | I can state what a **salt** is and how it is formed. |
| **Reasoning Targets***“What can I do with what I know?”* | 23. | I can measure (with significant figures), distinguish between **accuracy** and **precision**, and convert between SI units. |
| 24. | I can write chemical **equations**. |
| 25. | I can balance chemical **equations**. |
| 26. | I can write word **equations**. |
| **Skill Targets***“What can I demonstrate?”* | 27. | I can work safely with glass, chemicals, and Bunsen burners. |
| 28. | I can test for **pH** using a variety of **indicators**. |
| **Product Targets***“What can I make or do to show my learning?”* | 29. | I can design an emergency response plan for a chemical spill in our area. |

**Assessments**

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| **Assignment** | **Target / Goal** | **Your Score** | **Met Target?** |
| Emergency Response Plan |  |  |  |
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