**Lesson Plan**

Grade/Subject: Science 9 Unit: Environmental Chemistry Lesson Duration: 90mins

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| **SPECIFIC OUTCOMES FROM ALBERTA PROGRAM OF STUDIES** | **LEARNING OBJECTIVES**  (2-3, clear, and measurable)  **Students will:** | **Formative & Summative ASSESSMENTS (How will you know they met learning objectives?)**  (Observations, Key Questions, Products/Performances) |
| **C.2.3** | Identify factors in the environment that influence water quality  Identify factors in the environment that influence air quality (sulfur dioxide, nitrogen oxides, carbon monoxide | * **Observation (FOR)** * **Group Discussion** * **Workbooks** |
| **C.2.4** | Calculate and measure chemical concentration in parts per million |
| **LEARNING RESOURCES CONSULTED** | | |
| **Resource #1: Program of Studies** | | |
| **MATERIALS/ EQUIPMENT/ SET UP** | | |
| * PowerPoint * Textbook * Work booklets | | |
| **PROCEDURE** | | |
| **Introduction** (5 min.)**:** | | |
| ***Attention Grabber****:* Get to play with the whiteboards today! ☺  ***Expectations for Learning and Behaviour:***Expectation talk, rules and behaviours  ***Assessment of Prior Knowledge****:* Bellwork.  ***Transition to Body****:* Pass out whiteboards and markers. | | |
| **Body** (80 min.)**:** | | |
| ***What are the teacher/students doing?***  **\*Bellwork**  ***Learning Activity #1:* Topic 2.1 Notes/Questions**   * We will go through questions 1-12 as a class * We will watch <https://www.youtube.com/watch?v=FmNsC5Esk6g> 🡪 big bang theory 18 parts per million, I will teach ppm (parts per million) to the class using the food colouring example from yesterday * Using whiteboards we will do skill practice together (pg. 217), students will complete check and reflect question 8, and questions 13 &14 in workbooks * We will watch (<https://www.youtube.com/watch?v=oVW5LAzd7Ec> 🡪 Dissolved Oxygen) to introduce the next section of 2.1 * Students will continue to work in their workbooks and complete questions 15-27, we will go over them as a class   *Formative & Summative Assessments:* Observation, group discussion, workbooks  *Transition:* Eyes on me. Pencils down!  ***Learning Activity #2:* Topic 2.2**   * I will show the Lorax video to engage the students on the new topic! I will read the first few paragraphs with the students * Students will work in partners to complete questions 28-43   *Formative & Summative Assessments:* Observation, group discussion, workbooks  *Transition:* Eyes on me. Pencils down! | | ***Notes:*** |
| **Closure** (5 min.)**: \* Connect your closure with learning objectives\*** | | |
| *Consolidation/Assessment of Learning:* Observations, discussion, workbooks  *Feedback From Students:* Thumbs up, medium or down for topic 2.2?  *Feedback To Students:* I am very impressed on how hard you guys worked today!  *Transition To Next Lesson:* Tomorrow we will continue 2.2 and move into 2.3! | | |