**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.1.1** | Identify a variety of organic and inorganic substancesIdentify common organic and inorganic substances that are essential to living things (carbohydrates, lipids, proteins, nucleic acids) | * **Observation (FOR)**
* **Group Discussion**
* **Workbooks**
 |
| **LEARNING RESOURCES CONSULTED** |
| **Resource #1: Program of Studies** |
| **MATERIALS/ EQUIPMENT/ SET UP** |
| * PowerPoint
* Textbook
* Work booklets
* Lab sheets and materials
 |
| **PROCEDURE** |
| **Introduction** (5 min.)**:** |
| ***Attention Grabber****:* Today we will be doing another lab! But first bellwork! ☺ ***Expectations for Learning and Behaviour:***Expectation talk, rules and behaviours***Assessment of Prior Knowledge****:* Bellwork. ***Transition to Body****:* Take out notebooks.  |
| **Body** (80 min.)**:** |
| ***What are the teacher/students doing?*** **\*Bellwork and review of Lab Demo*****Learning Activity #1:*  PowerPoint Notes*** Students will write down notes about topic 1.3 Common substances essential to living things
* Throughout the PowerPoint I will direct students to the textbook for a greater clarification (ex. nutrient chart)
* I will ask students clarification questions as we go through the notes

*Formative & Summative Assessments:* Observation, group discussion*Transition:* Notebooks away. Only need lab sheets, textbooks, and pencil on your desk***Learning Activity #2:* Testing Organic Molecules Lab*** Students will participate in a lab focusing on organic molecules
* I will split the students up into 5 groups (one for testing glucose, starch, lipids, proteins, unknown samples)
* Each group will be responsible for one aspect of the lab, once everyone is done their section we will review and share our findings as a class
* Students are responsible for listening to each group share and fill in their observation chart
* Students will fill out the questions in their table groups then hand in the lab sheet

*Formative & Summative Assessments:* Observation, group discussion, lab sheets*Transition:* Clean up lab and take out notebooks. ***Learning Activity #3:* Notes** * Students will create their own summary notes for topic 1.4 with the textbook and a handout as a reference.
* I will circulate around the classroom to ensure students are on task
* Once students are done we will go through them as a class

*Formative & Summative Assessments:* Observation, group discussion, workbooks *Transition:* Notes are due tomorrow!  | ***Notes:***   |
| **Closure** (5 min.)**: \* Connect your closure with learning objectives\*** |
| *Consolidation/Assessment of Learning:* Observations, discussion, workbooks*Feedback From Students:* What are the four main classes of organic molecules? *Feedback To Students:* I am very impressed on how well you did they lab today! *Transition To Next Lesson:* Tomorrow we will be going into topic 2.0!  |