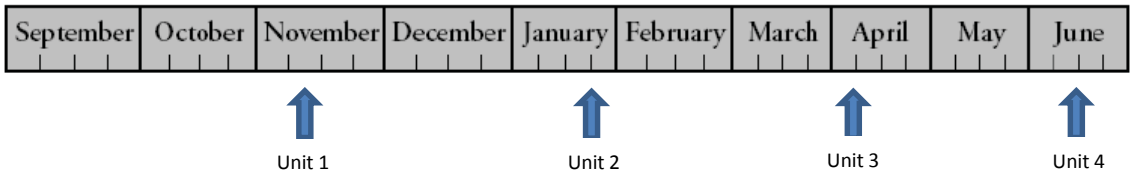
Newfoundland & Labrador English School District

Science 8
Course Description
Level of Instruction: Intermediate

Curriculum Overview:
Grade 8 Science is a Pan-Canadian science course that aims to develop scientific literacy. Scientific literacy is an evolving combination of the science related attitudes, skills, and knowledge students need to develop inquiry, problem-solving, and decision-making abilities; to become lifelong learners; and to maintain a sense of wonder about the world around them.

Authorized Learning Resource:
The Curriculum Guide may be accessed using the following link:
http://www.ed.gov.nl.ca/edu/k12/curriculum/guides/science/index.html English
http://www.ed.gov.nl.ca/edu/k12/french/immersion/sciences/index.html French Immersion
Discovering Science 8 (McGraw-Hill Ryerson, 2009) www.discoveringscience.ca

Estimated Completion



Course Sequence:
Unit 1: Water Systems on Earth's Surface 28%
Core Lab 1: Salinity's Effect on Water Density
Core Lab 2: *Water Health Test, LAB A – Freshwater Environment*
Core STSE 1

Unit 2: Fluids 22%
Core Lab 3: *The Flow Rate of Liquids*
Core Lab 4: *Determining Density*
Core STSE 2

Unit 3: Optics 30%
Core Lab 5: Demonstrating the Law of Reflection and Applying the Law of Reflection
Core Lab 6: Follow that Refracted Ray!
Core STSE 3

Unit 4: Cells, Tissues, Organs, and Systems 20%
Core Lab 7: Setting up and using a Microscope
Core Lab 8: *The Effect of Activity on Heart Rate and Breathing Rate*
Core STSE 4

Assessment and Evaluation: (Eastern Region)
In the Eastern Region Assessment in this course is governed by the *Assessment and Evaluation Policy* of the Newfoundland and Labrador English School District - Eastern Region. This policy and associated regulations are located under "I: Instruction" at https://www.nlesd.ca/about/easternpolicies.jsp. This section may change as the new NLESD Assessment and Evaluation policy is updated.

Evaluation is the process of analysing, reflecting upon, and summarizing assessment information, and making judgments or decisions based upon the information gathered.

Unit Tests (4)	*30%*
Quizzes	*10%*
Performance Assessment	*40%*
Performance Assessment Project	*10%*
Scientific Literacy Assessment	*10%*

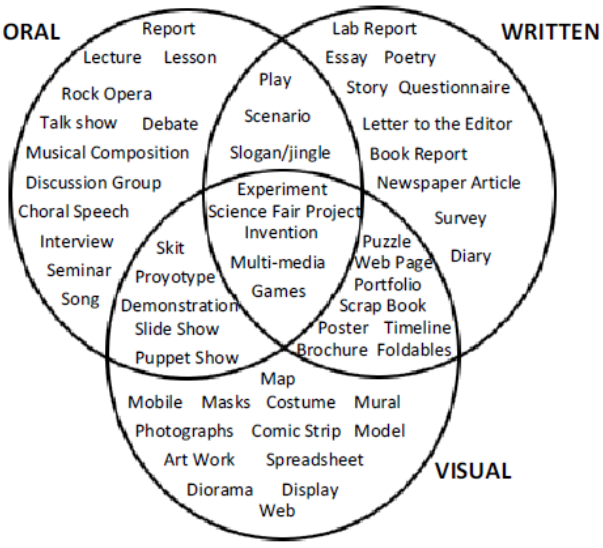
The evaluation of the course shall reflect the percent unit allocations.

Note: All evidence of learning shall be considered when determining a student's final grade. Averaging shall not be used as a sole indicator of a student's level of attainment of the course outcomes.

Suite 601, Atlantic Place · 215 Water Street · St. John's, NL · A1C 6C9
Tel: (709) 758-2372 · Fax: (709) 758-2706
www.nlesd.ca

Assessment:

Assessment is intended to inform instruction, provide feedback to students, and meet the needs of diverse learners. It is used for the purposes of grading, certifying, and promoting students. All assessments should be outcome-based and designed to test students' basic knowledge of content, their understanding and ability to apply content, and ability to synthesize and problem solve. Assessments should provide equal opportunity for all students according to their abilities, needs, and interests. As a result, teachers make adaptations to accommodate the diverse range of learners in their classes.



Source: K. O'Connor, The Mindful School: How to Grade for Learning (Skylight Publications, 1999)

Performance Assessment:

Performance assessments should emphasize project-based learning and require students to show what they can do by using a wide variety of activities that permit students to have their learning styles addressed. Performance assessment should also include student self-assessment.

Rubrics are used to inform and measure learning during performance assessments. A rubric defines the expectations to achieve at a certain level. It also provides information about how well students performed an activity, and it provides a clear indication of what students need to accomplish in the future to better their performance.

Performance Assessment Project:

All students are required to do a major performance project of considerable size and scope where they demonstrate an understanding of science content, processes and skills. This could be an experimental project where students choose to apply their scientific knowledge and background to a specific, real-life situation in an effort to solve a problem. Projects could also consist of an investigation of content related to their grade level curriculum where students further investigate introduced concepts. Opportunity should be provided for students to present their project in a variety of ways.

Scientific Literacy Assessment:

This common assessment is given during the exam period in June. It will include a case study and data analysis.