

Science 9 — Outline

Curricular Competencies:

- Answer questions and communicate findings using the scientific method
- Demonstrate sustained intellectual curiosity
- Experience and interpret the local environment
- Apply Indigenous ways of knowing
- Create and interpret graphs
- Determine cause and effect relationships
- Identify sources of error, confounding variables, alternative explanations
- Determine how to improve investigation and data
- Identify limitations of a model or analogy
- Demonstrate an awareness of assumptions
- Identify bias in own work and secondary sources
- Identify changes in knowledge over time as tech advances
- Connect scientific explorations to careers in science
- Use informed skepticism
- Care for self, others, world
- Apply learning to new situations
- Find solutions to problems globally and locally
- Express and reflect on a variety of experiences, perspectives, and worldviews through place

Content

- asexual reproduction:
mitosis
different forms
 - sexual reproduction:
meiosis
human sexual reproduction
 - element properties as organized in the **periodic table**
 - The arrangement of electrons determines the **compounds** formed by elements
 - **circuits** — must be complete for electrons to flow
 - **voltage, current, and resistance**
 - **effects of solar radiation** on the cycling of matter and energy
 - **matter cycles** within **biotic and abiotic** components of ecosystems
 - **sustainability of systems**
First Peoples knowledge of **interconnectedness** and **sustainability**
-

Assessment will be based on the **Provincial Proficiency Scale for Grades K-9.**

Emerging	Developing	Proficient	Extending
Student demonstrates an initial understanding of the concepts and competencies relevant to expected learning.	Student demonstrates a partial understanding of the concepts and competencies relevant to expected learning.	Student demonstrates a complete understanding of the concepts and competencies relevant to expected learning.	Student demonstrates a sophisticated understanding of the concepts and competencies relevant to the expected learning.