

Science 8 — Outline

Curricular Competencies:

- Use the Scientific Method with a range of investigation types including field work and experiments.
- Measure and control variables
- Construct and use a range of methods to represent patterns or relationships in data, including tables, graphs, keys, models, and digital technologies.
- Seek patterns and connections in data from their own investigations and secondary sources.
- Observe, measure, and record data using equipment and technologies
- Use SI units and perform simple unit conversions
- Apply First Peoples perspectives and local knowledge
- Exercise a healthy, informed skepticism and use scientific knowledge and findings from investigations to evaluate claims in secondary sources.
- Consider social, ethical, and environmental implications of the findings from investigations.
- Cooperatively design projects, communicate ideas, findings, and solutions to problems, using scientific language, representations, and digital technologies.

Content

- [characteristics of life](#)
- [cell theory](#) and [types of cells](#)
- photosynthesis and cellular respiration
- the relationship of [micro-organisms](#) with living things (immune system, vaccination, antibiotics, epidemics, pandemics)
- [kinetic molecular theory \(KMT\)](#)
- [atomic theory models, particles and sub-atomic particles](#)
- [types](#) and [effects](#) of electromagnetic radiation
- light: [properties](#), [behaviours](#), [ways of sensing](#)
- First Peoples knowledge of local geological formations and significant local geological events
- Geological processes, tectonic plates, layers of Earth

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. (This is the goal)	Student demonstrates a sophisticated understanding of the concepts and competencies relevant to the expected learning.