wild voices

Middle (7 – 9) - Science

	Big Ideas Include:	Curricular Competencies Include:	Content Includes:
7	• Evolution by natural selection provides an explanation for the diversity and survival of living things. • Earth and its climate have changed over geological time.	▪ Demonstrate a sustained intellectual curiosity about a scientific topic or problem • Make observations aimed at identifying their own questions about the natural world ▪ Collaboratively plan a range of investigation types, including field work and experiments ▪ Experience and interpret the local environment ▪ Express and reflect on a variety of experiences and perspectives of place	– organisms have evolved over time – survival needs / natural selection – electricity: generated in different ways with different environmental impacts – the fossil record provides evidence for changes in biodiversity over geological time – First Peoples knowledge of changes in biodiversity over time – evidence of climate change over geological time and the recent impacts of humans
8	• Life processes are performed at the cellular level. • The theory of plate tectonics is the unifying theory that explains Earth's geological processes.		– characteristics of life – cell theory and types of cells – photosynthesis and cellular respiration – the relationship of micro-organisms with living things – kinetic molecular theory (KMT) – atomic theory and models – types and effects of electromagnetic radiation – light: properties, behaviours, ways of sensing – plate tectonic movement – major geological events of local significance – First Peoples knowledge of: local geological formations / events – layers of Earth
9	• Cells are derived from cells. • The biosphere, geosphere, hydrosphere, and atmosphere are interconnected, as matter cycles and energy flows through them.	▪ Collaboratively and individually plan, select, and use appropriate investigation methods, including field work to collect reliable data ▪ Experience and interpret the local environment ▪ Apply First Peoples perspectives and knowledge, other ways of knowing, and local knowledge as sources of information ▪ Seek and analyze patterns, trends, and connections in data ▪ Express and reflect on a variety of experiences, perspectives, and worldviews through place	– asexual / sexual reproduction – 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

Source: https://curriculum.gov.bc.ca/sites/curriculum.gov.bc.ca/files/pdf/science_learning_standards.pdf