

# Bridging Student Learning to New Curriculum

Alberta

## Subject: Science Grade 6

### Highlights of Changes from Previous Grade 6 Curriculum

The new Grade 6 Science Curriculum includes

- an exploration of expansion and contraction related to the distance between particles and their speed when matter is heated or cooled
- expectations for students to analyze internal and external forces and their effects on objects
- a stronger focus on the selection, use, and management of energy resources to fulfill energy needs in Alberta
- an increased focus on factors affecting climate, including impact of climate change
- an introduction to ecosystems, including biotic and abiotic factors, relationships between plants and animals, and photosynthesis
- an exploration of celestial bodies and technologies in the solar system
- an introduction on abstractions, coding structures, and impacts of computer technology
- clear connections between scientific explanations and the role of communicating evidence

### Suggestions to Support Bridging from Previous Grade 5 Curriculum to New Grade 6 Curriculum

Topic	Previous Science Curriculum: Grade 5	New Science Curriculum: Grade 6	Suggestions to Support Bridging
Matter	There is no content related to the particle model of matter.	Students investigate how particles of matter behave when heated or cooled and analyze effects on solids, liquids, and gases.	Students will need knowledge of the particle model of matter.
Forces	There is limited content related to forces.	Students analyze forces and relate them to interactions between objects.	Students will need an introductory understanding of strength and direction of forces.
Energy Resources	There is no content related to energy resources.	Students investigate energy resources and explain factors that influence their use.	Students may need a basic understanding of renewable and non-renewable energy resources.
Space	There is no content related to space.	Students analyze and represent celestial bodies of the solar system.	Students may benefit from an understanding of stars and the solar system's place in the universe.
Computer Science	There is no content on computer science.	Students examine abstraction in relation to design and coding, and describe impacts of technologies.	Students will need foundational knowledge from the new curriculum for Kindergarten to Grade 5 related to computer science, including code, artifacts, and algorithms.
Scientific Methods	There is limited explicit content related to the concepts of objectivity and validity.	Students discuss processes that can be used to validate evidence and explanations.	Students will need a foundational knowledge from the new curriculum for grades 3 to 5 related to investigations, data, evidence, and controlled experiments.