

Bridging Student Learning to New Curriculum



Subject: Science Grade 4

Alberta

Highlights of Changes from Previous Grade 4 Curriculum

The new Grade 4 Science Curriculum includes

- explicit content related to waste materials and waste management
- an exploration of non-contact forces, including gravity and magnetism
- an introduction to the interconnectedness of Earth's systems (land, air, water, and organisms) and the role of conservation
- an expectation for students to relate external structures and sensory organs of organisms to their functions
- an introduction to objects in space and their connections to daily life
- an introduction to design processes for creating artifacts that meet intended needs
- a continued focus on investigating types of data and evidence

Suggestions to Support Bridging from Previous Grade 3 Curriculum to New Grade 4 Curriculum

Topic	Previous Science Curriculum: Grade 3	New Science Curriculum: Grade 4	Suggestions to Support Bridging
Forces	There is no content related to forces.	Students investigate how forces can act on objects without contact.	Students may need an introduction to contact forces, including strength and direction of forces.
Earth's Surface	There is limited content regarding the Earth's surface.	Students investigate Earth's systems and reflect on how their interconnections sustain life.	Students will need an introductory knowledge of Earth's surface, including landforms and bodies of water. Students will need an introduction to how natural events, including plant and animal activities, affect Earth's surface.
Computer Science	There is no content related to computer science.	Students examine and apply design processes to meet needs.	Students may need knowledge related to design, including instructions, creativity, and debugging. Students will need an introduction to computational and divergent thinking.
Scientific Methods	There is limited explicit content related to observing and analyzing data.	Students interpret data collected from investigations.	Students will benefit from knowledge from the new curriculum for grades 1 and 2 related to conducting investigations and comparing data. Students may need knowledge of investigations from the new Grade 3 curriculum related to sources, accuracy, and analysis of data.