



# Grade 7-9 Education Package Curriculum Links\*

Below please find curriculum links for Alberta (p.1), British Columbia (p. 6), Ontario (p 8) & Quebec (p 11). We will be adding more provinces shortly.

#### **Alberta**

\*Based on documents available in April 2018

Curriculum links are provided for: Science, Social Studies, English Language Arts, Mathematics

#### KEY

#### Science:

KGO: Knowledge General Outcome

• KSP: Knowledge Specific Outcome

SGO: Skill General Outcome

KGO: Skill Specific Outcome

#### **Social Studies:**

• GO: General Outcome

Skills and Processes

# Language Arts:

General outcomes

#### Mathematics:

• Specific outcomes

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Subject	Grade	Emphasis/Expectations/Outcomes
Science	7, 8, 9	Developing a Science and Technology Emphasis
	7, 8, 9	Developing a Social and Environmental Emphasis
	7	Interactions and Ecosystems
		KGO: Investigate and describe relationships between humans and their environments, and identify related issues and scientific questions
	7	KSO: analyze personal and public decisions that involve consideration of environmental impacts, and identify needs for scientific knowledge that can inform those decisions
	7	KGO: Monitor a local environment, and assess the impacts of environmental factors on the growth, health and reproduction of organisms in that environment
	7	KSO: investigate and interpret evidence of interaction and change
	7	KGO: Describe the relationships among knowledge, decisions and actions in maintaining life-supporting environments
	7	KSO: identify intended and unintended consequences of human activities within local and global environments
	7	KSO: describe and interpret examples of scientific investigations that serve to inform environmental decision making
	7	KSO: analyze a local environmental issue or problem based on evidence from a variety of sources, and identify possible actions and consequences
	9	Biological Diversity: Social and Environmental Emphasis
		KGO: Investigate and interpret diversity among species and within species, and describe how diversity contributes to species survival
	9	KGO: Identify impacts of human action on species survival and variation within species, and analyze related issues for personal and public decision making
	9	KSO: describe ongoing changes in biological diversity through extinction and extirpation of native species, and investigate the role of environmental factors in causing these changes
	9	KSO: evaluate the success and limitations of various local and global strategies for minimizing loss of species diversity

	7, 9	SGO: Ask questions about the relationships between and among observable variables, and plan investigations to address those questions
	7, 9	SSP: identify science-related issues
	7, 9	SGO: Conduct investigations into the relationships between and among observations, and gather and record qualitative and quantitative data
	7, 9	SSP: research information relevant to a given problem or issue
	7	SSP: select and integrate information from various print and electronic sources or from several parts of the same source
	7, 9	SGO: Work collaboratively on problems; and use appropriate language and formats to communicate ideas, procedures and results
	7, 9	SSP: communicate questions, ideas, intentions, plans and results, using lists, notes in point form, sentences, data tables, graphs, drawings, oral language and other means
	7, 9	SSP: defend a given position on an issue, based on their findings
Social Studies	9	GO: Students will demonstrate an understanding and appreciation of how Canada's political processes impact citizenship and identity in an attempt to meet the needs of all Canadians
	7, 8, 9	See table below for <b>Skills &amp; Processes</b> links
English Language Arts	7, 8, 9	Express ideas and develop understanding
	7, 8, 9	Consider the ideas of others
	7, 8, 9	Combine ideas
	7, 8, 9	Extend understanding
Mathematics	7	Demonstrate an understanding of the addition, subtraction, multiplication and division of decimals to solve problems
	8	Demonstrate an understanding of multiplying and dividing positive fractions and mixed numbers, concretely, pictorially and symbolically
	8	Demonstrate an understanding of multiplication and division of integers, concretely, pictorially and symbolically
	9	Demonstrate an understanding of powers with integral bases (excluding base 0) and whole number exponents
	9	Explain and apply the order of operations, including exponents, with and without technology

## **Social Studies**

Skills &	Grade(s)	Specific Outcomes
Processes		
Dimensions of Thinking	7, 8, 9	Develop skills of critical thinking and creative thinking:
	7, 8, 9	- determine the validity of information based on context, bias, source, objectivity, evidence and/or reliability to broaden understanding of a topic or an issue
	7, 8, 9	- evaluate, critically, ideas, information and positions from multiple perspectives
	7, 8, 9	- demonstrate the ability to analyze local and current affairs
	7, 8, 9	- re-evaluate personal opinions to broaden understanding of a topic or an issue
	7, 8, 9	- access diverse viewpoints on particular topics, using appropriate technologies
	7, 8	Demonstrate skills of decision making and problem solving
	7, 8	- identify appropriate materials and tools to use in order to accomplish a plan of action
	7, 8	- evaluate choices and progress in problem solving, then redefine the plan of action as necessary
	9	- propose and apply new ideas and strategies, supported with facts and reasons, to contribute to problem solving and decision making
	7, 8, 9	- articulate clearly a plan of action to use technology to solve a problem
Social Participation as a Democratic Practice	7, 8, 9	Demonstrate skills of cooperation, conflict resolution and consensus building:
Research for Deliberative Inquiry	7, 8, 9	Apply the research process:
	7, 8, 9	- develop a position that is supported by information gathered through research
	7, 8, 9	- draw conclusions based upon research and evidence
	7, 8, 9	- integrate and synthesize concepts to provide an informed point of view on a research question or an issue
	9	- reflect on changes of perspective or opinion based on information gathered and research conducted
Communication	7, 8	Demonstrate skills of oral, written and visual literacy
	7, 8	Develop skills of media literacy

## **British Columbia**

\*Based on documents available in April 2018

Curriculum links are provided for: Science, Social Studies, Language Arts, Mathematics

KEY

Core: Core competency

BI: Big Idea

CC: Curricular Competency

Subject	Grade(s)	BI/CC/Content
Core Competencies	7, 8, 9	Communication Thinking Personal and Social Responsibility
Science	7	BI: Evolution by natural selection provides an explanation for the diversity and survival of living things
	9	BI: The biosphere, geosphere, hydrosphere, and atmosphere are interconnected, as matter cycles and energy flows through them
	9	CC: Contribute to finding solutions to problems at a local and/or global level through inquiry
	9	CC: Consider the role of scientists in innovation
	7, 8, 9	CC: Demonstrate a sustained intellectual curiosity about a scientific topic or problem of personal interest
	7, 8, 9	CC: Contribute to care for self, others, community, and world through individual or collaborative approaches
	7. 8, 9	CC: Transfer and apply learning to new situations
	7, 8, 9	CC: Communicate scientific ideas, claims, information, and perhaps a suggested course of action, for a specific purpose and audience, constructing evidence-based arguments and using appropriate scientific language, conventions, and representations
Social Studies	7	BI: Increasingly complex societies required new systems of laws and government.
	8	BI: Human and environmental factors shape changes in population and living standards
	7, 8	CC: Assess the credibility of multiple sources and the adequacy of evidence used to justify conclusions

	7, 8, 9	CC: Use Social Studies inquiry processes and skills to - ask questions; gather, interpret, and analyze ideas; and communicate findings and decisions
Language Arts	7	BI: Exploring and sharing multiple perspectives extends our thinking.
	8, 9	BI: People understand text differently depending on their worldviews and perspectives
	8, 9	BI: Texts are socially, culturally, and historically constructed
	7, 8, 9	BI: Questioning what we hear, read, and view contributes to our ability to be educated and engaged citizens.
	7, 8, 9	CC: Access information and ideas for diverse purposes and from a variety of sources and evaluate their relevance, accuracy, and reliability
	7, 8, 9	CC: Synthesize ideas from a variety of sources to build understanding
	7, 8, 9	CC: Recognize and appreciate how different features, forms, and genres of texts reflect different purposes, audiences, and messages
	7, 8, 9	CC: Recognize and identify the role of personal, social, and cultural contexts, values, and perspectives in texts
	7, 8, 9	CC: Exchange ideas and viewpoints to build shared understanding and extend thinking
Mathematics	7	BI: Decimals, fractions, and percents are used to represent and describe parts and wholes of numbers.
	7	BI: Computational fluency and flexibility with numbers extend to operations with integers and decimals.
	8	BI: Number represents, describes, and compares the quantities of ratios, rates, and percents.
	8	BI: Computational fluency and flexibility extend to operations with fractions.
	9	BI: The principles and processes underlying operations with numbers apply equally to algebraic situations and can be described and analyzed
	9	BI: Computational fluency and flexibility with numbers extend to operations with rational numbers

#### Ontario

\*Based on documents available in April 2018

Curriculum links are provided for: Science and Technology, Biology, Social Studies, Geography, Language, English, Mathematics

KEY

BI: Big Idea

OE: Overall Expectation SE: Specific Expectation

Subject	Grade(s)	Big Idea/Overall Expectation/Specific Expectation
Science and	7	Understanding Life Systems: Interactions in the Environment
Technology		
	7	BI: Ecosystems are in a constant state of change. The changes may be caused by nature or by human intervention.
	7	BI: Human activities have the potential to alter the environment. Humans must be aware of these impacts and try to control them.
	7	OE: assess the impacts of human activities and technologies on the environment, and evaluate ways of controlling these impacts
	7	OE: investigate interactions within the environment, and identify factors that affect the balance between different components of an ecosystem
	7	SE: assess the impact of selected technologies on the environment
	7	SE: analyse the costs and benefits of selected strategies for protecting the environment
	7	SE: use scientific inquiry/research skills to investigate occurrences that affect the balance within a local ecosystem
	7	SE: describe ways in which human activities and technologies alter balances and interactions in the environment
	7	Understanding Structures and Mechanisms: Form and Function
	7	BI: Structures have a purpose
	7	BI: The form of a structure is dependent on its function.
	7	OE: analyse personal, social, economic, and environmental factors that need to be considered in designing and building structures and devices;

	7	OE: design and construct a variety of structures, and investigate the relationship between the design and function of these structures and the forces that act on them
	7	SE: evaluate the importance for individuals, society, the economy, and the environment of factors that should be considered in designing and building structures and devices to meet specific needs
	7	SE: design, construct, and use physical models to investigate the effects of various forces on structures
	8	Understanding Structures and Mechanisms: Systems in Action
	8	BI: Systems are designed to accomplish tasks.
	8	OE: assess the personal, social, and/or environmental impacts of a system, and evaluate improvements to a system and/or alternative ways of meeting the same needs
	8	SE: assess the impact on individuals, society, and the environment of alternative ways of meeting needs that are currently met by existing systems, taking different points of view into considerations
	8	SE: identify various types of systems
	8	SE: identify the purpose, inputs, and outputs of various systems
	9	Biology: Sustainable Ecosystems and Human Activity
	9	BI: The sustainability of ecosystems depends on balanced interactions between their components.
	9	BI: Human activity can affect the sustainability of aquatic and terrestrial ecosystems.
	9	OE: analyse the impact of human activity on terrestrial or aquatic ecosystems, and assess the effectiveness of selected initiatives related to environmental sustainability
	9	OE: investigate some factors related to human activity that affect terrestrial or aquatic ecosystems, and describe the consequences that these factors have for the sustainability of these ecosystems
	9	OE: demonstrate an understanding of characteristics of terrestrial and aquatic ecosystems, the interdependence within and between ecosystems, and the impact humans have on the sustainability of these ecosystems SE: analyse, on the basis of research, how a human activity threatens the sustainability of a terrestrial or aquatic ecosystem
	9	SE: assess the effectiveness of a local initiative of personal interest that seeks to ensure the sustainability of a terrestrial or aquatic ecosystem
	9	SE: identify some factors related to human activity that have an impact on ecosystems and explain how these factors affect the equilibrium and survival of populations in terrestrial and aquatic ecosystems
Social Studies / Geography	7	OE: analyse some challenges and opportunities presented by the physical environment and ways in which people have responded to them

	7	OE: use the geographic inquiry process to investigate the impact of natural events and/or human activities that change the physical environment
	8	OE: demonstrate an understanding of significant patterns and trends related to human settlement and of ways in which human settlement affects the environment
	9	OE: Geographic Inquiry: use the geographic inquiry process and the concepts of geographic thinking when investigating issues relating to Canadian geography
	9	SE: interpret and analyse data and information relevant to their investigations, using various tools, strategies, and approaches appropriate for geographic inquiry
	9	SE: apply the concepts of geographic thinking when analysing current events involving geographic issues
	9	SE: analyse environmental, economic, social, and/or political implications of different ideas and beliefs about the value of Canada's natural environment, and explain how these ideas/beliefs affect the use and protection of Canada's natural assets
	9	OE: The Sustainability of Human Systems: analyse issues relating to the sustainability of human systems in Canada
Language / English	7, 8, 9	OE: Writing: generate, gather, and organize ideas and information to write for an intended purpose and audience
	7, 8, 9	OE: Media Literacy: demonstrate an understanding of a variety of media texts
	7, 8, 9	OE: Media Literacy: create a variety of media texts for different purposes and audiences, using appropriate forms, conventions, and techniques
Mathematics	7	OE: demonstrate an understanding of addition and subtraction of fractions and integers, and apply a variety of computational strategies to solve problems involving whole numbers and decimal numbers
	7	OE: collect and organize categorical, discrete, or continuous primary data and secondary data and display the data using charts and graphs
	7	OE: make and evaluate convincing arguments, based on the analysis of data
	7	SE: select an appropriate type of graph to represent a set of data, graph the data using technology, and justify the choice of graph
	8	OE: solve problems involving whole numbers, decimal numbers, fractions, and integers, using a variety of computational strategies
	8	OE: collect and organize categorical, discrete, or continuous primary data and secondary data and display the data using charts and graphs
	9	OE: solve problems involving proportional reasoning

# Quebec Secondary Cycle 1 Education Package

\*Based on documents available in April 2018

Curriculum links are provided for: Science and Technology, Social Sciences, English Language Arts, Mathematics

KEY

GC: General Concept

Subject	Competency/Concept
Science and Technology	Seeks answers or solutions to scientific or technological problems
	Makes to most of his/hear knowledge of science and technology
	GC: Diversity of life forms
	GC: Engineering
Social Sciences	Geography: Interprets a territorial issue
	Geography: Constructs his/her consciousness of global citizenship
	Outcome: The student considers the impact of human actions on the future of the planet
	History: Interprets social phenomena using the historical method
	Research Process

English	Uses language/talk to communicate and learn
Language Arts	
	Represents his/her literacy in different media
Mathematics	Solves a situational problem
	Uses mathematical reasoning
	Arithmetic: Number Sense With Regard to Decimal and Fractional Notation and Operation
	Sense