



## Context

In B.C.'s redesigned curriculum, Indigenous knowledge and perspectives are integrated throughout all areas of learning and are evident in the curriculum's rationale statements, goals, big ideas, mandated learning standards, and elaborations. The First Peoples Principles of Learning offer a crucial lens for curriculum, placing a significant importance on the authentic integration of Indigenous knowledge and perspectives in relevant and meaningful ways.

The intent behind this integration is to promote a growing understanding of Indigenous peoples in B.C. that will contribute to the development of educated citizens who reflect on and support reconciliation. This approach to Indigenous education encourages enlightened discussion among teachers and students in all areas of learning and grade levels, and this approach values and prioritizes Indigenous knowledge and perspectives that can only be found in B.C.

## Purpose

The *Indigenous Knowledge and Perspectives: Cross-Curricular References in Grade 4* resource is intended to support teachers in authentically integrating Indigenous knowledge and perspectives into their classrooms. This resource provides a cross-curricular overview of the explicit and implicit references to Indigenous knowledge and perspectives in the Big Ideas, Curricular Competencies, and Content across all subject areas in the Grade 4 curriculum.

## Explicit References

Explicit references include the Big Ideas, Curricular Competencies, and Content that directly refer to Indigenous knowledge and perspectives. For example, the Grade 4 Science curriculum includes the following explicit reference:

Science, Content, **the effects of the relative positions of the sun, moon, and Earth including local First Peoples perspectives**

⇒ *teachings and stories about the sun and the moon*

## Implicit References

Implicit references are Big Ideas, Curricular Competencies, and Content that indirectly refer to Indigenous knowledge and perspectives. For example, the Grade 4 Français langue seconde – immersion curriculum includes the following implicit reference:

Français langue seconde – immersion, Big Idea, **The diversity of cultural elements in texts reflects the cultural diversity within society.**

⇒ *oral, written, visual*

The implicit references included in this resource represent just one perspective and should not be considered the only interpretation. Identifying implicit references depends on personal and cultural background, prior knowledge and experience, subject-matter expertise, points of view, and connections to place\*. As such, the implicit references in this resource serve only as a guide and should not be viewed as a conclusive list.

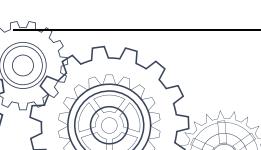
Note on Elaborations: Explicit references to Indigenous knowledge and perspectives that are found within the Elaborations of Big Ideas, Curricular Competencies, or Content are considered *implicit* unless they are accompanied by an explicit reference in the Big Ideas, Curricular Competencies, or Content.

The key below shows how the information in the chart is structured:



Bolted print	Mandated Learning Standard
•	Sub-points of a Learning Standard
⇒	<i>Elaborations</i>
○	<i>Key questions or samples</i>

\***Place** refers to any environment, locality, or context with which people interact to learn, create memory, reflect on history, connect with culture, and establish identity.





# Indigenous Knowledge and Perspectives: Cross-Curricular References K–9

Grade 4

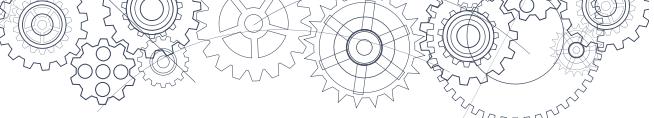
		ADST	Arts	Career Ed.	ELA	Français langue première	Français langue seconde – immersion	Languages	Mathematics	PHE	Science	Social Studies
Big Ideas	Explicit					Aboriginal narratives are part of Canada's Francophone history and culture.						Interactions between First Peoples and Europeans lead to conflict and cooperation, which continues to shape Canada's identity.
	Implicit	Skills are developed through practice, effort, and action.	Creative expression is a means to explore and share one's identity within a community. Dance, drama, music, and visual arts are each unique languages for creating and communicating. Exploring works of art exposes us to diverse values, knowledge, and perspectives.	Public identity is influenced by personal choices and decisions. Leadership requires listening to and respecting the ideas of others. Family and community relationships can be a source of support and guidance when solving problems and making decisions.	Exploring stories and other texts helps us understand ourselves and make connections to others and to the world.  story/stories: ⇒ narrative texts, whether real or imagined, that teach us about human nature, motivation, and experience, and often reflect a personal journey or strengthen a sense of identity. They may also be considered the embodiment of collective wisdom. Stories can be oral, written, or visual, and used to instruct, inspire, and entertain listeners and readers.  Text/texts: ⇒ Text and texts are generic terms referring to all forms of oral, written, visual, and digital communication: - oral texts include speeches, poems, plays, and oral stories, - written texts include novels, articles, and short stories, - visual texts include posters, photographs, and other images, - digital texts include electronic forms of all of the above, - oral, written, and visual elements can be combined (e.g., in dramatic presentations, graphic novels, films, web pages, advertisements).  Texts can be understood from different perspectives.	The diversity of cultural elements in texts reflects the cultural diversity within society. ⇒ oral, written, visual		Fractions and decimals are types of number that can represent quantities. ⇒ What stories live in numbers? ⇒ How do numbers help us communicate and think about place?	Personal choices and social and environmental factors influence our health and well-being. Developing healthy relationships helps us feel connected, supported, and valued.	All living things sense and respond to their environment. ⇒ How is sensing and responding related to interdependence within ecosystems?  The motion of the Earth and the moon cause observable patterns that affect living and non-living systems. ⇒ How do seasons and tides affect living and non-living things? ⇒ What changes are caused by the movements of the Earth?	The pursuit of valuable natural resources has played a key role in changing the land, people, and communities of Canada.	



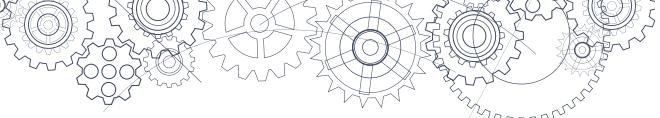


	ADST	Arts	Career Ed.	ELA	Français langue première	Français langue seconde – immersion	Languages	Mathematics	PHE	Science	Social Studies
Curricular Competencies	Explicit			<p>Demonstrate awareness of how story in First Peoples cultures connects people to family and community</p> <p><i>story in First Peoples cultures:</i></p> <ul style="list-style-type: none"><li>⇒ Traditional and contemporary First Peoples stories take many forms (e.g., prose, song, dance, poetry, theatre, carvings, pictures) are told for several purposes: - teaching (e.g., life lessons, community responsibilities, rites of passage), - sharing creation stories, - recording personal, family and community histories, - “mapping” the geography and resources of an area, - ensuring cultural continuity (e.g., knowledge of ancestors, language), - healing, - entertainment</li></ul> <p><b>Identify how story in First Peoples cultures connects people to land</b></p> <p><i>how story in First Peoples cultures connects people to land:</i></p> <ul style="list-style-type: none"><li>⇒ First Peoples stories were created to explain the landscape, the seasons, and local events.</li></ul> <p><b>Explore and appreciate aspects of First Peoples oral traditions</b></p> <p><i>Oral traditions:</i></p> <ul style="list-style-type: none"><li>⇒ the means by which culture is transmitted over generations other than through written records.</li><li>⇒ Among First Peoples, oral tradition may consist of told stories, songs, and other type of distilled wisdom or information, often complemented by dance of various forms of visual representation, such as carvings or masks.</li><li>⇒ In addition to expressing spiritual and emotional truth (e.g., by symbol and metaphor), it provides a record of literal truth (e.g., about events and situations).</li><li>⇒ The oral tradition was once integrated into every facet of life of First Peoples and was the basis of the education system.</li></ul>	Identify how narratives in Aboriginal cultures connect people to their environment	Recognize the diversity of cultural elements from Aboriginal and other cultures, within the same society		<p>Engage in problem-solving experiences that are connected to place, story, cultural practices, and perspectives relevant to local First Peoples communities, the local community, and other cultures</p> <ul style="list-style-type: none"><li>⇒ in daily activities, local and traditional practices, the environment, popular media and news events, cross-curricular integration</li><li>⇒ Have students pose and solve problems or ask questions connected to place, stories, and cultural practices.</li></ul> <p><b>Incorporate First Peoples worldviews and perspectives to make connections to mathematical concepts</b></p> <ul style="list-style-type: none"><li>⇒ Incorporate:<ul style="list-style-type: none"><li>– Invite local First Peoples Elders and knowledge keepers to share their knowledge</li></ul></li><li>⇒ make connections:<ul style="list-style-type: none"><li>– Bishop’s cultural practices: counting, measuring, locating, designing, playing, explaining (<a href="http://csus.edu/div/o/oreyd/ACP.htm_files/abishop.htm">csus.edu/div/o/oreyd/ACP.htm_files/abishop.htm</a>)</li><li>– <a href="http://aboriginaleducation.ca">aboriginaleducation.ca</a></li><li>– Teaching Mathematics in a First Nations Context, FNESC <a href="http://fnesc.ca/k-7/">fnesc.ca/k-7/</a></li></ul></li></ul>		Identify First Peoples perspectives and knowledge as sources of information	

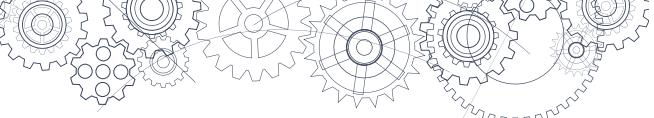




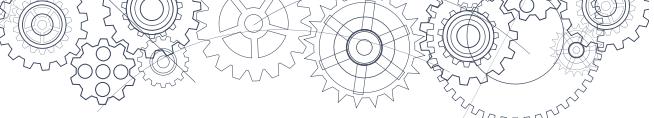
	ADST	Arts	Career Ed.	ELA	Français langue première	Français langue seconde – immersion	Languages	Mathematics	PHE	Science	Social Studies
Curricular Competencies	<b>Implicit</b> <ul style="list-style-type: none"> <li><b>Identify the main objective for the design and any constraints</b> <ul style="list-style-type: none"> <li>⇒ <i>constraints: limiting factors such as task or user requirements, materials, expense, environmental impact, issues of appropriation, and knowledge that is considered sacred</i></li> </ul> </li> <li><b>Determine whether their product meets the objective and contributes to the individual, family, community, and/or environment</b></li> </ul>	<ul style="list-style-type: none"> <li><b>Explore identity, place, culture, and belonging through arts experiences</b></li> <li><b>Explore relationships among cultures, communities, and the arts</b></li> <li><b>Observe, listen, describe, inquire and predict how artists use processes, materials, movements, technologies, tools, techniques, and environments to create and communicate</b> <ul style="list-style-type: none"> <li>⇒ <i>people who create works in any of the arts disciplines (e.g., dancers, actors, musicians, visual artists); also includes the students themselves</i></li> </ul> </li> <li><b>Interpret and communicate ideas using symbolism to express meaning through the arts</b></li> <li><b>Express feelings, ideas, and experiences in creative ways</b></li> <li><b>Describe and respond to works of art and explore artists' intent</b></li> </ul>	<ul style="list-style-type: none"> <li><b>Recognize the need for others who can support their learning and personal growth</b></li> <li><b>Appreciate the influence of peer relationships, family, and community on personal choices and goals</b></li> </ul>	<ul style="list-style-type: none"> <li><b>Consider different purposes, audiences, and perspectives in exploring texts</b></li> <li><b>Identify how differences in context, perspectives, and voice influence meaning in texts</b></li> <li><b>Recognize the role of language in personal, social, and cultural identity</b></li> <li><b>Use personal experience and knowledge to connect to text and deepen understanding of self, community, and world</b></li> <li><b>Exchange ideas and perspectives to build shared understanding</b> <ul style="list-style-type: none"> <li><i>exchanging ideas and perspectives:</i> <ul style="list-style-type: none"> <li>⇒ <i>taking turns in offering ideas related to the topic at hand, engaging in conversation with peers and adults, and showing respect for the contributions of others</i></li> </ul> </li> </ul> </li> <li><b>Use oral storytelling processes</b> <ul style="list-style-type: none"> <li>⇒ <i>creating an original story or finding an existing story (with permission), sharing the story from memory with others, using vocal expression to clarify the meaning of the text, using non-verbal communication expressively to clarify the meaning, attending to stage presence, differentiating the storyteller's natural voice from the characters' voices, presenting the story efficiently, keeping the listener's interest throughout</i></li> </ul> </li> </ul>				<ul style="list-style-type: none"> <li><b>Connect mathematical concepts to each other and to other areas and personal interests</b> <ul style="list-style-type: none"> <li>⇒ <i>to develop a sense of how mathematics helps us understand ourselves and the world around us (e.g., daily activities, local and traditional practices, the environment, popular media and news events, social justice, and cross-curricular integration)</i></li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li><b>Describe and assess strategies for promoting mental well-being</b></li> <li><b>Describe factors that positively influence mental well-being and self-identity</b></li> </ul>	<p><b>Questioning and Predicting:</b></p> <ul style="list-style-type: none"> <li>⇒ <i>Order is a pattern that can be recognized as having levels – big to small, simple to complex – or as a process with a sequence of steps.</i></li> </ul> <p><b>Key questions about order:</b></p> <ul style="list-style-type: none"> <li>○ <i>How is order apparent in the adaptations of forest animals in BC?</i></li> <li>○ <i>How does the order of seasons impact local plants and animals?</i></li> </ul> <p><b>Make observations about living and non-living things in the local environment</b></p> <p><b>Experience and interpret the local environment</b></p> <p><b>Express and reflect on personal experiences of place</b></p> <ul style="list-style-type: none"> <li>⇒ <i>Place is any environment, locality, or context with which people interact to learn, create memory, reflect on history, connect with culture, and establish identity. The connection between people and place is foundational to First Peoples perspectives of the world.</i></li> </ul> <p><b>Key questions about place:</b></p> <ul style="list-style-type: none"> <li>○ <i>How does what you know about place affect your observations, questions, and predictions?</i></li> <li>○ <i>How does understanding place help you analyze information and recognize connections and relationships in your local environment?</i></li> <li>○ <i>How does place connect with stewardship?</i></li> </ul> <p><b>How can you be a steward in your local environment?</b></p>	<p><b>Use Social Studies inquiry processes and skills to ask questions; gather, interpret, and analyze ideas; and communicate findings and decisions</b></p> <ul style="list-style-type: none"> <li>⇒ <i>Identify problems or issues that are local, national, and/or global in focus (e.g., natural disasters, endangered species, poverty, disease)</i></li> </ul> <p><b>Construct arguments defending the significance of individuals/groups, places, events, or developments</b></p> <ul style="list-style-type: none"> <li>⇒ <i>What events are most significant in the story of BC's development?</i></li> </ul> <p><b>Ask questions, corroborate inferences, and draw conclusions about the content and origins of different sources</b></p> <p><b>Sample activities:</b></p> <ul style="list-style-type: none"> <li>○ <i>Use primary sources to make inferences about contemporary attitudes toward First Peoples during the gold rush years</i></li> <li>○ <i>Compare and contrast European and First Peoples accounts of the same event</i></li> </ul> <p><b>Differentiate between intended and unintended consequences of events, decisions, or developments, and speculate about alternative outcomes</b></p>



	ADST	Arts	Career Ed.	ELA	Français langue première	Français langue seconde – immersion	Languages	Mathematics	PHE	Science	Social Studies
<b>Curricular Competencies</b>	<b>Implicit (cont.)</b>										<ul style="list-style-type: none"><li>⇒ Track the positive and negative effects of key events in BC's development on First Peoples</li><li>Construct narratives that capture the attitudes, values, and worldviews commonly held by people at different times or places</li><li>Compare the "discovery" and "exploration" of North America from European and First Peoples perspectives?</li><li>Who benefited most from the early west coast fur trade: First Peoples or Europeans?</li><li>Make ethical judgments about events, decisions, or actions that consider the conditions of a particular time and place</li><li>Identify key events and issues in First Peoples rights and interactions with early governments in Canada (e.g., the Indian Act, the establishment of the residential school system, potlatch ban, reserve system, treaties)</li></ul>



	ADST	Arts	Career Ed.	ELA	Français langue première	Français langue seconde – immersion	Languages	Mathematics	PHE	Science	Social Studies
<b>Content</b>	<b>Explicit</b>	<p>(Note: Students are expected to use the learning standards for Curricular Competencies from Applied Design, Skills, and Technologies K–3 in combination with grade-level content from other areas of learning in cross-curricular activities to develop foundational mindsets and skills in design thinking and making).</p> <p>traditional and contemporary Aboriginal arts and arts-making processes</p> <p>⇒ dances, songs, stories, and objects created by Aboriginal peoples for use in daily life or to serve a purpose inspired by ceremonies or rituals as part of cultural tradition</p>								<p>the effects of relative positions of the sun, moon, and Earth including local First Peoples perspectives</p> <p>⇒ teachings and stories about the sun and the moon</p>	<p>early contact, trade, cooperation, and conflict between First Peoples and European peoples</p> <p><b>Sample topics:</b></p> <ul style="list-style-type: none"><li>○ early explorers: Cabot, Frobisher, Hudson, Cartier, Champlain</li><li>○ voyages of Cook and Vancouver</li><li>○ provision of muskets to First Peoples by Europeans</li><li>○ spread of horses to the Prairies</li><li>○ marriages between First Peoples and Europeans</li><li>○ colonial wars and alliances between Europeans and First Peoples (e.g., between Maquinna (Nuu-chah-nulth) and the Cook expedition or between French colonists and the First Peoples living around the Great Lakes)</li></ul> <p><b>Key questions:</b></p> <ul style="list-style-type: none"><li>○ What motivated explorers and settlers to come to Canada?</li><li>○ How did the geography of Canada affect European exploration?</li></ul> <p><b>the fur trade in pre-Confederation Canada and British Columbia</b></p> <p><b>Sample topics:</b></p> <ul style="list-style-type: none"><li>○ fur trading companies (e.g., the Hudson's Bay Company and the North West Company)</li><li>○ Beaver Wars</li><li>○ explorers: Simon Fraser, Alexander Mackenzie, David Thompson</li><li>○ Russian and Spanish trade on the coast</li><li>○ establishment of trading posts (e.g., Victoria, Fort Langley, and other forts; Métis communities)</li></ul> <p><b>Key questions:</b></p> <ul style="list-style-type: none"><li>○ Why were trading posts established in particular locations?</li></ul> <p><b>demographic changes in pre-Confederation British Columbia in both First Peoples and non-First Peoples communities</b></p> <p>⇒ relocation/resettlement of First Peoples</p> <p><b>the impact of colonization on First Peoples societies in British Columbia and Canada</b></p> <p>⇒ key events and issues regarding First Peoples rights and interactions with early governments in Canada (e.g., the Indian Act, potlatch ban, reserve system, residential schools, treaties)</p> <p><b>the history of the local community and of local First Peoples communities</b></p>



	ADST	Arts	Career Ed.	ELA	Français langue première	Français langue seconde – immersion	Languages	Mathematics	PHE	Science	Social Studies
<b>Content</b>	<b>Implicit</b>	<p><b>symbolism as a means of expressing specific meaning</b>        ⇒ use of objects, words, or actions to represent abstract ideas; includes but is not limited to colours, images, movements, and sounds (e.g., love can be symbolized by the colour red or the cradling of one's arms)</p> <p><b>variety of regional and national works of art and artistic traditions from diverse cultures, communities, times and places</b>        ⇒ the results of creative processes in disciplines such as dance, drama, music, and visual arts</p>	<p><b>cultural and social awareness</b>        ⇒ Achieved by exploring self-identity, acknowledging cultural differences, honouring indigenous traditions, etc.</p> <p><b>generational roles and responsibilities</b></p>	<p><b>forms, functions, and genres of text</b>  <b>oral language strategies</b>  <b>features of oral language</b></p>		<b>cultural elements</b>		<p><b>increasing and decreasing patterns, using tables and charts</b>        ⇒ fish stocks in lakes, life expectancies</p> <p><b>how to tell time with analog and digital clocks, using 12- and 24-hour clocks</b>        ⇒ First Peoples use of numbers in time and seasons, represented by seasonal cycles and moon cycles (e.g., how position of sun, moon, and stars is used to determine times for traditional activities, navigation)</p> <p><b>regular and irregular polygons</b>        ⇒ Yup'ik border patterns</p> <p><b>line symmetry</b>        ⇒ First Peoples art, borders, birchbark biting, canoe building</p> <p>⇒ Visit a structure designed by First Peoples in the local community and have the students examine the symmetry, balance, and patterns within the structure, then replicate simple models of the architecture focusing on the patterns they noted in the original.</p> <p><b>probability experiments</b>        ⇒ Dene/Kaska hand games, Lahal stick games</p>	<p><b>how to participate in different types of physical activities, including individual and dual activities, rhythmic activities, and games</b>        ⇒ traditional Aboriginal games</p> <p><b>factors that influence self-identity, including body image and social media</b>        ⇒ how we see and feel about our bodies; can be influenced by the words and actions of others</p> <p>⇒ students might receive and/or send comments to others around various topics, including:</p> <ul style="list-style-type: none"> <li>– how they look</li> <li>– what they're wearing</li> <li>– what they believe in</li> <li>– what their cultural background might be</li> </ul>	<p><b>local changes caused by Earth's axis, rotation, and orbit</b></p>	