Туре	Content	Curriculum	Elaboration	Curricular Competency Group
Big Ideas	Through their interactions, Aboriginal peoples and Francophone communities in Canada influence each other's languages and cultures.	Français langue première 9		
	Computational Thinking			
Content	 software programs as specific and sequential instructions with algorithms that can be reliably repeated by others debugging algorithms and programs by breaking problems down into a series of subproblems binary number system (1s and 0s) to represent data programming languages, including visual programming in relation to text-based programming and programming modular components 	Science 9		
Content	political, social, economic, and technological revolutions	Social Studies 9	 Sample topics: American Revolution French Revolution Industrial Revolution Haitian Revolution Red River Resistance, Northwest Resistance 	0

Туре	Content	Curriculum	Elaboration	Curricular Competency Group
Content	the continuing effects of imperialism and colonialism on indigenous peoples in Canada and around the world	Social Studies 9	 advances in science and technology industrialization new methods of transportation, including the railway, steamships, cars, and aircraft Sample topics: impact of treaties on First Peoples (e.g., numbered treaties, Vancouver Island treaties) impact of the Indian Act, including reservations and the residential school system interactions between Europeans and First Peoples the Scramble for Africa Manifest Destiny in the United States Key questions: What were the motivations for imperialism and colonialism during this period? What role does imperialism and colonialism from this period have on events in present-day Canada and around the world? 	0
Content	global demographic shifts, including patterns of migration and population growth	Social Studies 9	Sample topics:slavery	0

Type	Content	Curriculum		Curricular Competency Group
			 disease, poverty, famine, and the search for land why immigrants (including East and South Asian immigrants) came to BC and Canada, the individual challenges they faced, and their contributions to BC and Canada influences of immigration on Canada's identity historical reasons for the immigration of specific cultural groups to Canada (e.g., Irish potato famine, Chinese railway workforce, World War II refugees, underground railroad, Acadians, western settlement campaign, gold rushes) Key questions: Did immigrants benefit from emigrating to Canada? How did the arrival of new groups of immigrants affect Canadian identity? 	
Content	nationalism and the development of modern nation-states, including Canada	Social Studies	 Sample topics: Canadian Confederation national projects and policies (e.g., the building of the Canadian Pacific Railway, Macdonald's National Policy) 	0

Туре	Content	Curriculum	Elaboration	Curricular Competency Group
			 responsible government Tokugawa Shogunate Meiji Restoration unifications (e.g., Italy, Germany) Key questions: Is nationalism a more positive or negative force in the world? To what extent does nationalism bring people together or drive them apart? What factors influence nationalism and national identity? 	
Content	local, regional, and global conflicts	Social Studies 9	Sample topics: Opium Wars Boxer Rebellion Boer War wars of independence in Latin America Armenian genocide Chilcotin War, Fraser Canyon War Fraser Canyon War American Civil War Franco-Prussian War of 1871 Russian Revolution Crimean War Russo-Japanese War Chinese Rebellion of 1911	0

Type	Content	Curriculum	Elaboration	Curricular Competency Group
Content	discriminatory policies, attitudes, and historical wrongs	Social Studies 9	 World War I Sample topics: Head Tax and other discriminatory immigration policies against people of East and South Asian descent Komagata Maru societal attitudes toward ethnic minorities in Canada (e.g., Chinese railway workers, Sikh loggers, Eastern European farmers, Irish famine refugees, African-American slavery refugees) discriminatory policies toward First Peoples, such as the Indian Act, potlatch ban, residential schools internments social history gender issues suffrage labour history, workers' rights responses to discrimination in Canada Asiatic Exclusion League in BC discrimination against German-Canadians during World War I Key question: 	

Type	Content	Curriculum	Elaboration	Competency Group
			o How might specific examples of past incidents of inequality (e.g., Head Tax on Chinese immigrants, internment of Japanese-Canadians, residential schools, suffrage, discriminatory federal government labour practices related to gender and sexual orientation) be handled today under the Canadian Charter of Rights and Freedoms?	•
			 Sample topic: connections between Canada's natural resources and major economic activities Sample activities: Compare and contrast physical features and natural resources in different regions of Canada 	
Content	physiographic features of Canada and geological processes	Social Studies 9	 Role-play negotiations between a wide range of stakeholders involved in the decision to build a new mine or oil pipeline Key questions: What effect has the physical geography of Canada had on Canadian and regional identity? What perspectives do different groups (e.g., environmental 	0

Type	Content	Curriculum	Elaboration	Curricular Competency Group
			groups, people employed in the forest industry, First Peoples, urban and rural populations) have on the use of natural resources?	
	Personal Development			
Content	 goal-setting strategies self-assessment for career research reflection project management 	Career Education 9	includes inventories of preferences, skills, personal attitudes values, and interests, taking an idea, creating a plan (including timeline and resources), putting the plan into action, and reflecting on the process	
	Connections to Community			
Content	 local and global needs and opportunities cultural and social awareness factors affecting types of jobs in the community career value of volunteering 	Career Education 9	social justice, environmental stewardship, sustainability, effective use of resources, etc.	
	Life and Career Plan			
Content	 graduation requirements role of mentors, family, community, school, and personal network in decision making 	Career Education 9		

Туре	Content	Curriculum	Elaboration	Curricular Competency
	 influence of technology in learning and working workplace safety hazard evaluation and control rights and responsibilities of the worker emergency procedures role of community, school, personal network, and mentorship in career planning 			Group
Content	French letter patterns	Core French 9	such as groupings of letters that make the same sound (e.g., <i>au</i> , <i>aux</i> , <i>eau</i> , and <i>ô</i>), rhyming words, letter patterns that have consistent pronunciations (e.g., <i>ait</i> , <i>gn</i> , <i>-ille</i> , <i>-ment</i> , <i>oi</i> , <i>th</i> , <i>-tion</i> , <i>ui</i> and others), <i>les liaisons</i> , and <i>les élisions</i>	
Content	 an increasing range of commonly used vocabulary and sentence structures for conveying meaning: asking and responding to various types of questions describing people, objects, places, and personal interests comparing and contrasting sequencing events expressing simple needs 	Core French 9	including inversion questions; for example, Astu un crayon?; Va-t-il au cinéma?; Aimez-vous ce livre?, using expressions such as aussi, mais, plus que, aussi que, moins que, plus de, autant de, moins de, using words that indicate sequence; for example, premièrement, au début, deuxièmement, après, ensuite, troisièmement, finalement, for example, activities, celebrations, clothing, dance, festivals, First Peoples regalia, food, history, land, music, protocol, rituals, traditions	

Туре	 Content expressing opinions describing cultural aspects of communities 	Curriculum	Elaboration	Curricular Competency Group
Content	past, present, and future timeframes	Core French 9	Students should know that sentences change according to when events occur (i.e., a change in timeframe requires a change in wording). Students should understand and be able to express past, present, and future timeframes for common verbs in context; for example, <i>Nous avons une question (maintenant)</i> ; <i>Elle a donné le livre à Marc hier</i> ; <i>Je vais faire mes devoirs ce soir</i> .	
Content	elements of common types of texts	Core French 9	for example, format (letter vs. email message), language, context, audience, register (informal vs. formal), purpose, Text is defined as any piece of oral, visual, or written communication. Texts may be delivered through many different modes, such as face-to-face communication, audio and video recordings, print materials, or digital media. Examples of texts include but are not limited to:	
			advertisements, articles, biographies, blogs, brochures, cartoons, charts, conversations, diagrams, emails, essays, films, First Peoples oral histories, forms, graphs, instructions, interviews, invitations, legends, letters, myths, narratives, news reports, novels, nursery	

Type	Content	Curriculum	Elaboration	Competency Group
			rhymes, online profiles, paintings, photographs, picture books, poems, presentations, songs, speeches, stories, surveys, and text messages	
			Teachers are encouraged to use a wide range of grade-appropriate text types in their classrooms.	•
			Teachers may choose to use adapted or modified Francophone texts with their students. Purposes for using adapted texts include:	
			 to increase student comprehension (e.g., by simplifying the text) to increase student exposure to target vocabulary and patterns (e.g., by repeating key vocabulary or grammatical structures throughout a text) to increase the saliency of high-frequency vocabulary and patterns (e.g., by underlining, bolding, or highlighting) 	
Content	common elements of stories	Core French 9	for example, place, characters, setting, plot, problem and resolution, Stories can be oral, written, or visual, and fictional or non-fictional (for example, a series of pictures, First Peoples	

Type	Content	Curriculum	Elaboration	Curricular Competency Group
Content	cultural practices, traditions, and attitudes in various Francophone regions	Core French 9	oral histories, personal stories, skits, student-created stories) relating to celebrations, holidays, and events (such as <i>Le Tour de France, la bûche de Noël, le Mardi Gras, le poisson d'avril</i>), daily practices (such as meal times), and the idiomatic use of language	
Content	 communication strategies: registers of language speaking to an audience clarification explanation 	Français langue seconde - immersion 9	 colloquial language: language that does not conform to proper usage, is spoken between friends, and can include slang or popular expressions standard language: language that conforms to proper usage and is used in daily life formal language: refined or literary language examples: colloquial: "Ché pas où est ton bouquin." standard: "Je ne sais pas où est ton livre." formal: "Je ne sais point où est placé votre ouvrage." 	
Content	cultural and historical elements	Français langue seconde - immersion 9	, intention, organization, etc.	

Туре	Content	Curriculum	Elaboration	Curricular Competency Group
Content	 characteristics of the novel characteristics of the fable stylistic elements 	Français langue seconde - immersion 9	modes of narration, function of characters, points of view, plot elements, setting, time period, etc., moral, literal meaning, figurative meaning, manners and customs, etc., personification, metaphor, alliteration, comparison, hyperbole, etc.	
Content	 narrative structure portrait descriptive sequences 	Français langue seconde - immersion 9	setting, inciting incident, rising action, falling action and resolution, , introduction, development, central subject with aspects and sub-aspects, and conclusion	
Content	 agreement of past tenses hypothetical sentences pronouns used as direct and indirect object complements verb moods and tenses associated with the genres being studied 	Français langue seconde - immersion 9	present perfect ("passé compose"), imperfect ("imparfait") and pluperfect ("plus-que-parfait") tenses, <i>me</i> , <i>te</i> , <i>se</i> , <i>le</i> , <i>la</i> , <i>les</i> , etc., <i>me</i> , <i>te</i> , <i>nous</i> , <i>vous</i> , <i>lui</i> , <i>leur</i> , <i>y</i> and <i>en</i> , using the pluperfect ("plus-que-parfait") tense and recognizing the simple past ("passé simple") tense	
Content	revision strategies	Français langue seconde - immersion 9	rereading, consulting reference tools, peer review, use of a revision grid, etc.	
Content	elements to enrich a textvaried vocabulary	Français langue		

Type	Content • types of sentences	Curriculum seconde -	Elaboration	Curricular Competency Group
	71	immersion 9	 includes brackets and exponents 	
Content	operations with rational numbers (addition, subtraction, multiplication, division, and order of operations)	Mathematics 9	 simplifying (-3/4) ÷ 1/5 + ((-1/3) x (-5/2)) simplifying 1 - 2 x (4/5)² paddle making 	•
Content	exponents and exponent laws with whole-number exponents	Mathematics 9	 includes variable bases 2⁷ = 2 x 2 x 2 x 2 x 2 x 2 x 2 x 2 x 2 = 128; n⁴ = n x n x n x n exponent laws (e.g., 6⁰ = 1; m¹ = m; n⁵ x n³ = n⁸; y⁷/y³ = y⁴; (5n)³ = 5³ x n³ = 125n³; (m/n)⁵ = m⁵/n⁵; and (3²)⁴ = 3⁸) limited to whole-number exponents and whole-number exponent outcomes when simplified (-3)² does not equal -3² 3x(x - 4) = 3x² - 12x 	•
Content	operations with polynomials , of degree less than or equal to 2	Mathematics 9	 variables, degree, number of terms, and coefficients, including the constant term (x² + 2x - 4) + (2x² - 3x - 4) (5x - 7) - (2x + 3) 2n(n + 7) (15k² -10k) ÷ (5k) using algebra tiles 	•
Content	two-variable linear relations , using graphing, interpolation, and extrapolation	Mathematics 9	 two-variable continuous linear relations; includes rational coordinates horizontal and vertical lines 	•

Type	Content	Curriculum	Elaboration	Curricular Competency Group
Content	multi-step one-variable linear equations	Mathematics 9	 graphing relation and analyzing interpolating and extrapolating approximate values spirit canoe journey predictions and daily checks includes distribution, variables on both sides of the equation, and collecting like terms includes rational coefficients, constants, and solutions solving and verifying 1 + 2x = 3 - 2/3(x + 6) solving symbolically and pictorially scale diagrams, similar triangles and polygons, linear unit conversions 	•
Content	spatial proportional reasoning	Mathematics 9	 limited to metric units drawing a diagram to scale that represents an enlargement or reduction of a given 2D shape solving a scale diagram problem by applying the properties of similar triangles, including measurements integration of scale for First Peoples mural work, use of traditional design in current First Peoples fashion design, use of similar triangles to create longhouses/models 	•
Content	statistics in society	Mathematics 9	 population versus sample, bias, ethics, sampling techniques, misleading stats 	•

Type	Content	Curriculum	Elaboration	Curricular Competency Group
			 analyzing a given set of data (and/or its representation) and identifying potential problems related to bias, use of language, ethics, cost, time and timing, privacy, or cultural sensitivity using First Peoples data on water quality, Statistics Canada data on income, health, housing, population 	
Content	financial literacy — simple budgets and transactions	Mathematics 9	 banking, simple interest, savings, planned purchases creating a budget/plan to host a First Peoples event 	•
	visual arts elements, principles, and image design strategies to create mood and convey ideas, including but not limited to:		describes lightness or darkness, the planned use of visual elements to achieve a desired effect, the arrangement of one or more elements to give a sense of equilibrium in design and proportion (e.g., radial,	
Content	 elements of design: line, shape, space, texture, colour, form, value principles of design: pattern, repetition, balance, contrast, emphasis, rhythm, movement, unity, variety, proportion, harmony image design strategies: elaboration, simplification, 	Arts Education 9	symmetrical, or asymmetrical), the combination of pattern and movement to create a feeling of organized energy, deliberate control of the viewer's visual path across a work (e.g., a strong diagonal thrust of a colour), a sense of oneness created by the relationship among the elements (e.g., colours and lines that work together), the relationship in size of parts, to a whole, and to one another, components of the visual image relate to, and complement each other	

Type	Content	Curriculum	Elaboration	Curricular Competency Group
	magnification, reversal, fragmentation, distortion			-
Content	personal narrative as a means of representing self-perception and identity in artistic works	Arts Education		
Content	the roles of artists and audiences in a variety of contexts	Arts Education 9		
Content	traditional and contemporary Aboriginal worldviews and cross-cultural perspectives as communicated through visual arts	Arts Education		
Content	contributions of innovative artists from a variety of styles, genres, contexts, and movements	Arts Education	for example, artists who trigger change, use technology in different ways, or bring about paradigm shifts	
Content	personal and social responsibility associated with creating, experiencing, and responding to visual art	Arts Education 9		
Content	the ethics of cultural appropriation and plagiarism	Arts Education 9	use of cultural motifs, themes, "voices," images, knowledge, stories, songs, drama, etc. shared without permission or without appropriate context or in a way that may misrepresent the real experience of the people from whose culture it is drawn	
Content	for each of the arts disciplines — dance, drama, music, and visual arts — the specific elements, principles, techniques, vocabulary, and symbols	Arts Education 9	the four discipline-specific curriculum documents include information and elaborations on these items	

Type	Content	Curriculum	Elaboration	Curricular Competency Group
	that can be used to create mood and convey ideas			
Content	the roles of performers and audiences in a variety of contexts	Arts Education 9		
Content	traditional and contemporary Aboriginal worldviews and cross-cultural perspectives communicated through artistic works	Arts Education 9		
Content	contributions of innovative artists from a variety of genres, communities, times, and places	Arts Education 9		
Content	personal and social responsibility associated with creating, performing, and responding in the arts	Arts Education		
Content	the ethics of cultural appropriation and plagiarism	Arts Education 9		
Content	drama elements, techniques, and vocabulary, to create mood and convey ideas, including but not limited to: character , time, place, plot, tension, mood, focus, contrast, balance	Arts Education	in drama, taking on and exploring the thoughts, perceptions, feelings, and beliefs of another	
Content	a variety of drama forms and drama conventions	Arts Education	a medium for the expression of dramatic meaning (e.g., improvisation, tableau, roleplay, mime, readers theatre, story theatre); may involve the integration of a variety of media and a combination of the arts, established ways of working in drama that explore meaning; drama techniques	

Type	Content	Curriculum	Elaboration	Curricular Competency Group
Content	the roles of performers and audiences in a variety of contexts	Arts Education 9		
Content	traditional and contemporary Aboriginal worldviews and	Arts Education 9		
Content	cross-cultural perspectives communicated through storytelling and drama	Arts Education 9		
Content	contributions of innovative artists from a variety of genres, communities, times, and places	Arts Education 9		
Content	personal and social responsibility associated with creating, performing, and responding in drama	Arts Education 9		
Content	the ethics of cultural appropriation and plagiarism	Arts Education 9	use of cultural motifs, themes, "voices," images, knowledge, stories, songs, drama, etc. shared without permission or without appropriate context or in a way that may misrepresent the real experience of the people from whose culture it is drawn	
Content	dance elements, techniques, and vocabulary to create mood and convey ideas, including but not limited to: body, space, dynamics (dance), time, relationships, form, and movement principles	Arts Education 9	the elements of dance are universally present in all dance forms and grow in sophistication over time, what the body is doing, including whole or partial body action, types of movement (locomotor and non-locomotor), etc., where the body is moving, including place, level, direction, pathway, size/reach, shape, etc., how energy is expended and directed through the body in relation to time (quick/sustained), weight (strong/light), space (direct/indirect),	

Туре	Content	Curriculum	Elaboration	Curricular Competency Group
			and flow (free/bound), how the body moves in relation to time, including beat (underlying pulse), tempo, and rhythmic patterns, with whom or what the body is moving; movement happens in a variety of relationship including pairs, groups, objects, and environments, The shape or structure of a dance; the orderly arrangement of thematic material. For example: phrase, beginning, middle, end, ABA, canon, call and response, narrative, abstract, include alignment (mobility, stability, plumbline), weight transfer, flexibility, strength, balance, and coordination strategies to develop movement, motifs, and	
Content	choreographic devices and notation	Arts Education	phrases (e.g., changing size, levels/planes,	
Content	choreographic choices that impact clarity of intent and purpose	Arts Education 9	ı	
Content	compositional devices, forms, and structures of dance	Arts Education 9	ı	
Content	processes, materials, movements, technologies , strategies, and techniques to support creative works	Arts Education 9	includes both manual and digital technologies a (e.g., electronic media, production elements, information technology, sound equipment and recording technologies, etc.)	

Type	Content	Curriculum	Elaboration	Curricular Competency Group
Content	the roles of performers and audiences in a variety of contexts	Arts Education 9		
Content	traditional and contemporary Aboriginal worldviews and cross-cultural perspectives communicated through movement and dance	Arts Education 9		
Content	contributions of innovative artists from a variety of genres, communities, times, and places	Arts Education 9		
Content	personal and social responsibility associated with creating, performing, and responding in dance	Arts Education	ensuring the physical and emotional safety of self and others when engaging in the arts; being considerate of sensitive content, facilities, and materials	
Content	the ethics of cultural appropriation and plagiarism	Arts Education 9	appropriate context or in a way that may misrepresent the real experience of the people from whose culture it is drawn	
Content	music elements, principles, techniques, vocabulary, notation , and symbols to define style and convey ideas, including but not limited to: beat/pulse, metre , duration , rhythm , tempo , pitch , timbre , dynamics , form (music), texture	Arts Education 9	could include use of traditional and non-traditional notation (e.g., guitar tablature), groupings or patterns of strong and weak beats, the length of a sound or silence in relation to the beat, the arrangement of sounds and silences over time, the frequency or speed of the beat, how high or low a note is, the characteristic quality of a sound independent of pitch and dynamics; tone colour, relative and changing levels of sound volume (e.g., <i>forte</i> ,	

Type	Content	Curriculum	Elaboration	Curricular Competency Group
			<i>piano</i> , <i>decrescendo</i>), the structure of a musical work, simultaneous layering of sounds (e.g., multi-part music making)	
Content	musical interpretation and choices impact performance	Arts Education 9		
Content	the roles of performers and audiences in a variety of contexts	Arts Education 9		
Content	traditional and contemporary Aboriginal worldviews and cross-cultural perspectives communicated through song	Arts Education		
Content	contributions of innovative musicians and composers from a variety of genres, communities, times, and places	Arts Education 9	including but not limited to performers, composers, and those who develop technologies for music making	
Content	personal and social responsibility associated with creating, performing, and responding in music	Arts Education		
Content	the ethics of cultural appropriation and plagiarism	Arts Education 9	use of cultural motifs, themes, "voices," images, knowledge, stories, songs, drama, etc. shared without permission or without appropriate context or in a way that may misrepresent the real experience of the people from whose culture it is drawn	
Content	 Story/text forms, functions, and genres of text text features 	English Language Arts 9	such as narrative, exposition, report, purposes of text, literary or thematic categories such as fantasy, humour, adventure, biography, <i>Text</i> and <i>texts</i> are generic terms referring to all	

Туре	Content	Curriculum	Elaboration	Curricular Competency Group
	literary elementsliterary deviceselements of visual/graphic texts	S	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 the above. Oral, written, and visual elements can be combined (e.g., in dramatic presentations, graphic novels, films, web pages, advertisements). 	
			, how text and visuals are displayed, characterization, narrative structures, setting, sensory detail (e.g., imagery, sound devices); figurative language (e.g., metaphor, simile, hyperbole); irony, paradox, oxymoron, layout, infographics, emoticons, icons, symbols, interactive visuals, hypertext, colour; illustration style (realism, cartoon, sketch, outline)	
Content	 Strategies and processes reading strategies oral language strategies metacognitive strategies 	English Language Arts	using contextual clues; using phonics and word structure; visualizing; questioning; predicting; previewing text; summarizing; making inferences, focusing on the speaker, asking questions to clarify, listening for specifics,	

Type	Content	Curriculum	Elaboration	Curricular Competency Group
	• writing processes		expressing opinions, speaking with expression, staying on topic, taking turns, talking and thinking about learning (e.g., through reflecting, questioning, goal setting, self-evaluating) to develop awareness of self as a reader and as a writer, may include revising, editing, considering audience such as tone, volume, inflection, pace,	
Content	Language features, structures, and conventions • features of oral language • multi-paragraphing • language change • elements of style • usage • syntax and sentence fluency • conventions • presentation techniques • rhetorical devices • connotation and denotation	English Language Arts 9	gestures, developing multi-paragraph compositions that are characterized by unity, development, and coherence, Languages change slowly but continually (e.g., Old English to Modern English):, diction, figurative language, tone, inclusive language, and degree of formality, such as avoiding double negatives, mixed metaphors, malapropisms, word misuse, use of a mix of simple compound, and complex sentences:	

Type	Content	Curriculum	Elaboration	Curricular Competency Group
			emotional language, logic, direct address, rhetorical questions, and allusion	
Content	 mitosis different forms	Science 9	the process through which pre-existing cells make two identical copies of themselves, different forms of asexual reproduction: fission, budding, cloning, spores, grafting	
	sexual reproduction:		the process through which sex cells (eggs and sperm) are formed by the dividing of a parent	
Content	meiosishuman sexual reproduction	Science 9	cell twice, resulting in four daughter cells, the result of humans having two parents is that offspring are not genetically identical to either parent	
Content	element properties as organized in the periodic table	Science 9	The periodic table groups elements according to their atomic number and properties (e.g., atomic size, metals/non-metals/semi-metals, chemical families, diatomic elements).	
Content	The arrangement of electrons determines the compounds formed by elements	Science 9	ionic and covalentnames and formulas	•
Content	circuits — must be complete for electrons to flow	Science 9	 basic components include power source, load/resistor (lightbulbs, etc.), conductor and switch types of circuits include series, parallel, short circuits current flow in a circuit: alternating current (AC) and direct current (DC) 	•
Content	voltage, current, and resistance	Science 9	voltage, current, and resistance are related: • Ohm's Law (V=IR)	•

Type	Content	Curriculum	Elaboration	Curricular Competency Group
Content	effects of solar radiation on the cycling of matter and energy	Science 9	• relative dangers of current and voltage solar radiation provides the energy required for most life on Earth, and is the root cause of wind and ocean currents, which distribute energy and nutrients around the planet, as well as the energy sources for the water cycle	
Content	matter cycles within biotic and abiotic components of ecosystems	Science 9	 e.g., water, nitrogen, carbon, phosphorous, etc. human impacts on sources and sinks (e.g., climate change, deforestation, agriculture, etc.) bioaccumulation and biomagnification 	•
Content	sustainability of systems	Science 9	a systems approach to sustainability sees all matter and energy as interconnected and existing in dynamic equilibrium (e.g., carbon as a key factor in climate change, greenhouse effect, water cycle, etc.)	
Content	First Peoples knowledge of interconnectedness and sustainability	Science 9	everything is connected, from local to global; First Peoples perspectives on interconnectedness, First Peoples perspectives on sustainability of systems	
Content	 drafting technique, including dimensioning and standards drafting styles, including perspective, mechanical, and architectural 	Applied Design, Skills and Technologies 9	computer-aided drafting and design, computer-aided manufacturing, computer numerical control, for example, for the purpose of editing to send to output devices, for example, plotters, vinyl cutters, and 3D printers; CNC machines, for example, layout and planning of a project, creating plans for a model	

Туре	Content	Curriculum	Elaboration	Curricular Competency Group
	 CADD/CAM, CNC and 3D printing function of models basic code digital output devices virtual creation using CAD/CAM 			
	Electronics and Robotics			
Content	 uses of electronics and robotics components of an electric circuit ways in which various electrical components affect the path of electricity Ohm's law platforms for PCB (printed circuit board) production basic robot behaviours using input/output devices, movement- and sensor-based responses, and microcontrollers mechanical devices for the transfer of mechanical energy mechanical advantage and power efficiency, including friction, force, and torque robotics coding 	Applied Design, Skills and Technologies 9	power source, conductor, load, for example, diodes, LEDs, resistors, capacitors, transistors, ICs (integrated circuits), SCRs (silicon controlled rectifiers), regulators, describes how voltage, current, and resistance are related: V=IR, for example, VEX, VEX IQ, LEGO Mindstorms/NXT, Arduino, EasyC, RobotC, Scratch for Arduino, for example, gyro sensors, bump, motion, sound, light, infrared, for example, gears, belts, pulleys, chains, sprockets, linear actuators, pneumatics, bearings, slides, for example, G-code, C++, Sketch	

Туре	Contentvarious platforms for robotics programming	Curriculum	Elaboration	Curricular Competency Group
	Entrepreneurship and Marketing			
Content	 risks and benefits of entrepreneurship the role of social entrepreneurship in First Nations communities ways of decreasing production costs through training and technological advancement flow of goods and services from producers to consumers identification of a good or service that ensures brand recognition marketing strategies using the 4 Ps: product, price, promotion, and placement market segmentation by demographic, geographic, psychographic, and purchasing pattern evolving consumer needs and wants role of online technologies in expanding access to goods and services 	Applied Design, Skills and Technologies 9	for example, business name, slogan, logo, age, gender, occupation, and education of customers, size and location of a market area, general personality and lifestyle preferences of a customer base, buying behaviour of customers, for example, banks, private lending firms, crowdfunding, government grants, profit, loss, asset, liability; financial documents to represent health of a business	

Туре	 Content sources of financing for a new venture or start-up business measurement of financial success and failure 	Curriculum	Elaboration	Curricular Competency Group
Content	 pathogenic microbes associated with food-borne illnesses components of food preparation, including use and adaptations of ingredients, techniques, and equipment health, economic, and environmental factors that influence availability and choice of food in personal, local, and global contexts ethical issues related to food systems First Peoples traditional food use, including ingredients, harvesting/gathering, storage, preparation, and preservation 	Applied Design, Skills and Technologies 9	for example, salmonella, E. coli 0157:H7, staphylococcus, for example, global food systems, balanced eating/nutrition, food waste, food marketing, food trends, ethics, for example, environment, conditions, rights of workers and animals	
Content	Information and Communications Technologies • text-based coding	Applied Design, Skills and	HTML, CSS, JavaScript, for example, Vizwik, for example, Arduino, Raspberry Pi, LEGO Mindstorms, for example, Cloud 9, GitHub, for example, NFID, Bluetooth, mobile payments,	

- binary representation of various Technologies data types, including text, sound, 9 pictures, video
- drag-and-drop mobile development
- programming modular components
- development and collaboration in a cloud-based environment
- design and function of networking hardware and topology, including wired and wireless network router types, switches, hubs, wireless transfer systems, and client-server relationships
- functions of operating systems, including mobile, open source, and proprietary systems
- current and future **impacts** of evolving web standards and cloud-based technologies
- design for the web
- strategies for curating and managing personal digital content, including management, personalization, organization, maintenance, contribution, creation, and publishing of digital content

potential to support collaboration, sharing, and communication; data storage and privacy, digital creation and manipulation of videos and images for a web-based purpose, for example, local and global impacts of evolving communication and mobile devices, socioeconomic digital divide, technology and gender, social media and social movements, social media and politics, inequality of access, technology and democracy, information as a commodity, personalized digital instructional tools to share and authenticate learning, web forums, tutorials, videos, digital resources, listservs, global communities, group communication and etiquette, online learning, MOOCS, open courseware, broadcasting, for example, physical hand and foot placement, posture, development of touch typing skills, use of "home row" ASDFJKL techniques

Туре	Content	Curriculum	Elaboration	Curricular Competency Group
	 relationships between technology and social change strategies to manage and maintain personal learning networks, including content consumption and creation keyboarding techniques 			
Content	 digital and non-digital media technologies, their distinguishing characteristics and uses techniques for organizing ideas to structure information and story through media conventions media production skills standards-compliant technology ethical, moral, legal considerations and regulatory issues technical and symbolic elements that can be used in storytelling specific features and purposes of media artworks from the present and the past to explore viewpoints, including those of First Peoples 		for example video production, layout and design, graphics and images, photography (digital and traditional), new emerging media processes (performance art, collaborative work, sound art, network art, kinetic art, biotechnical art, robotic art, space art), traditional or culturally accepted ways of doing things based on audience expectations. Each media form has hundreds of conventions that have been built up over time and are widely accepted by audiences., editing and publishing to shape the technical and symbolic elements of images, sounds, and text, layout conventions, mark-up language, current web standards, or other digital media compliance requirements ethical, moral, legal considerations and regulatory issues: for example, in relation to duplication, copyright, appropriation, and ownership of rights, for example, in relation to duplication, copyright, appropriation, and ownership of rights	

Туре	• specific purposes of media use in the social advocacy of First	Curriculum	Elaboration	Curricular Competency Group
	Peoples in Canadainfluences of digital media in society			
Content	 basic metallurgy range of uses of metalwork welding fabrication techniques and processes using hand tools and stationary equipment foundry processes, including creating patterns and moulds, and casting recycling and repurposing of materials 	Applied Design, Skills and Technologies 9	identification, characteristics, and properties of different metals, and characteristics of metal in a variety of formats and gauges, for example, art metal, jewellery, stained glass, tools, sheet metal boxes, medieval armour, for example, arc, oxygen-acetylene, and MIG welding, for example, plasma and gas cutting, machining (turning, milling, forming, knurling), boring, for example, wrench, socket, ratchet, ignition tools, hammer, chisel, punch, extractor, HeliCoil, ring compressor/expander, honing tool, hand valve grinding tool, for example, sandblaster, band saw, drill press, grinder, sander, buffing wheel, lathe, horizontal band saw, Beverly shear, Whitney punch, benders, hydraulic press, spincaster, forge, for example, lost wax casting, sand casting, investment casting, spin casting	
Content	Power Technologyenergy transmission and applications	Applied Design, Skills and Technologies 9	relationship between heat and other forms of energy, for example, ignition, fuel system, combustion cycle, for example, torque wrench, feeler gauge, telescopic, micrometer, Vernier caliper, Plastigauge, for example, wrench,	

Type	Content	Curriculum	Elaboration	Curricular Competency Group
	 efficiency, including energy loss in the form of thermal energy thermodynamics types of fuels and methods of converting fuels to mechanical energy alternative energy sources small engine systems mechanical measurement devices power technology hand tools effects of forces on devices manuals as information sources 		socket, ratchet, ignition tools, hammer, chisel, punch, extractor, HeliCoil, ring compressor/expander, honing tool, hand valve grinding tool, for example, tension, torsion, torque, shear, bending, compression	
	Textiles			
Content	 natural and manufactured fibres, including their origins, characteristics, uses, and care strategies for using and modifying simple patterns elements of design used in the design of a textile item social factors that influence textile choices and the impact of those choices on local communities role of textiles in First Peoples cultures 	Applied Design, Skills and Technologies 9		

Type	Content	Curriculum	Elaboration	Curricular Competency Group
	Woodwork			
Content	 importance of woodwork in historical and cultural contexts, locally and throughout Canada identification, characteristics, properties, and uses of wood from various tree species techniques for adjusting plans and drawings woodworking techniques and traditional and non-traditional joinery using a variety of tools and equipment, including stationary power equipment the relationship between First Peoples culturally modified trees and the sustainable use of wood issues in the sustainable use of wood 	Applied Design, Skills and Technologies 9	for example, shaping, laminating, turning, abrasives, adhesives, finishing, for example, box joint, splined mitre, lapped joint, for example, biscuits, brads, for example, jointer, planer, lathe, router table, table saw, chop saw, band saw, thickness sander, disc/belt sander, spindle sander, mortise machine, drill press, scroll saw, rate of harvest; effects of logging and replanting on ecosystems	
	text organization:		setting, inciting incident, rising action, falling	
Content	narrative structurestructure of the fablecomparative essays	Français langue première 9	action, resolution, exposition, action, resolution, the comparative essay presents comparisons between elements in the same work or between two works. It highlights similarities and differences.	

Туре	Content	Curriculum	Elaboration	Curricular Competency Group
Content	 characters characteristics of the fable characteristics of the play stylistic devices 	Français langue première 9	hero versus antihero, stereotypes, direct and indirect characterization, symbols (names, costumes, objects), poetics, moral, brevity in storytelling, stage direction, dialogue, monologue, and the aside, in particular, allegory and personification	
Content	 types of discourse registers of language 	Français langue première 9	direct and indirect discourse	
Content	 strategies: communication and socialization reading writing 	Français langue première 9	stage presence and theatricality (posture, facial expressions, gestures), prior knowledge, visualization, prediction, asking questions, main idea, making connections, important information, inference, referents, planning, draft, correction, writing, revision, publication	
Content	 elements for enriching a text: imagery idiomatic expressions richness and variety of vocabulary lexical field 	Français langue première 9		

Туре	Content	Curriculum	Elaboration	Curricular Competency Group
			movements performed "on the spot" without travelling across the floor or surface; could include: • balancing • bending	
			 twisting lifting , movement skills that incorporate travelling across the floor or surface; could include:	
Content	locometer locometer and	Physical and Health Education 9	rollingjumpinghoppingrunninggalloping	•
			, movement skills involving the control of objects, such as balls, primarily with the hands or feet; may also involve racquets or bats; could include:	
			bouncingthrowingcatchingkickingstriking	

Type	Content	Curriculum	Elaboration include:	Curricular Competency Group
Content	movement concepts and strategies	Physical and Health Education 9	 body awareness (e.g., parts of the body, weight transfer) spatial awareness (e.g., general spacing, directions, pathways) effort awareness (e.g., speed, force) relationships to/with others and objects , plans and/or ideas that will help a player or team successfully achieve a movement outcome or goal (e.g., moving into space away from an opponent to receive a pass) 	
Content	ways to monitor and adjust physical exertion levels	Physical and Health Education 9	 using heart rate monitors checking pulse checking rate of perceived exertion (e.g., a five-point scale to self-assess physical exertion level) activities that can be done individually and/or with others; could include: 	•
Content	how to participate in different types of physical activities, including individual and dual activities, rhythmic activities, and games	Physical and Health Education 9	 jumping rope swimming running bicycling Hula Hoop 	•

Туре	Content	Curriculum	Elaboration	Curricular Competency Group
			, activities designed to move our bodies in rhythm could include:	
			dancinggymnastics	
			, types of play activities that usually involve rules, challenges, and social interaction; could include:	
			 tag parachute activities co-operative challenges Simon Says team games traditional Aboriginal games a guideline to help develop and organize personal fitness goals based on: 	
Content	training principles to enhance personal fitness levels, including the FITT principle, SAID principle, and specificity	Physical and Health Education 9	 Frequency — how many days per week Intensity — how hard one exercises in the activity (e.g., percentage of maximum heart rate) Type — the type of activity or exercise, focusing on the fitness goal (e.g., jogging for cardio endurance) Time — how long the exercise session lasts 	

Туре	Content	Curriculum	Elaboration	Curricular Competency Group
			, (Specific Adaptation to Imposed Demand): the body will react and respond to the type of demand placed on it (e.g., a student's flexibility will eventually improve if he or she participates in regular stretching activities), the types of exercises chosen will determine the kinds of fitness improvements (e.g., a student who wants to improve his or her flexibility levels would participate in stretching exercises) effects on the body produced by physical activities could include:	
Content	effects of different types of physical activity on the body	Physical and Health Education 9	 strengthening muscles and bones in activities where you have to move and/or control some type of weight (e.g., fitness circuits and/or jumping and landing) strengthening heart and lungs in activities where you are moving at a fast pace (e.g., jogging or running) for periods of time (e.g., games, swimming, biking) reducing stress and/or anxiety levels in activities where you can participate outside and/or elevate the heart rate 	•
Content	healthy sexual decision making	Physical and Health Education 9		

Туре	Content	Curriculum	Elaboration	Curricular Competency Group
Content	potential short- and long-term consequences of health decisions, including those involving nutrition, protection from sexually transmitted infections, and sleep routines	Physical and Health Education 9	could include:	
Content	sources of health information	Physical and Health Education 9	 medical professionals websites magazine and TV advertisements retail stores (e.g., vitamin/supplement stores) 	•
Content	basic principles for responding to emergencies	Physical and Health Education 9	 following safety guidelines having an emergency response plan knowing how to get help could include: 	•
Content	strategies to protect themselves and others from potential abuse, exploitation, and harm in a variety of settings	Physical and Health Education 9	 telling a trusted adult being assertive avoiding potentially unsafe situations safe use of the Internet identifying tricks and lures used by predators 	•
Content	consequences of bullying, stereotyping, and discrimination	Physical and Health Education 9	-	

Type	Content	Curriculum	Elaboration	Curricular Competency Group
Content	physical, emotional, and social aspects of psychoactive substance use and potentially addictive behaviours	Physical and Health Education 9	 alcohol tobacco illicit drugs solvents 	•
Content	signs and symptoms of stress, anxiety, and depression	Physical and Health Education 9	 problems sleeping restlessness loss of appetite and energy wanting to be away from friends and/or family 	•
Content	influences of physical , emotional , and social changes on identities and relationships	Physical and Health Education 9	how students' bodies are growing and changing during puberty and adolescence, how students' thoughts and feelings might evolve or change during puberty and adolescence, how students interact with others and how their relationships might evolve or change during puberty and adolescence	
Curricular Competency	Identify and analyze cultural values and symbols in Aboriginal and other texts	Français langue seconde - immersion 9	oral, written, visual	Exploring and Reflecting
Curricular Competency	Demonstrate increasingly sophisticated application and/or engagement of curricular content	Arts Education		Connecting and expanding

Type	Content	Curriculum	Elaboration	Competency Group
Curricular Competency	Demonstrate increasingly sophisticated application and/or engagement of curricular content	Arts Education		Connecting and expanding
Curricular Competency	Demonstrate increasingly sophisticated application and/or engagement of curricular content	Arts Education		Connecting and expanding
Curricular Competency	Demonstrate increasingly sophisticated application and/or engagement of curricular content	Arts Education		Connecting and expanding
Curricular Competency	Demonstrate increasingly sophisticated application and/or engagement of curricular content	Arts Education		Connecting and expanding
Curricular Competency	Recognize the literary diversity in the French-speaking world and among Aboriginal communities.	Français langue première 9		Exploring and Reflecting