Grades 6-7

BIG IDEAS

Design can be responsive to identified needs.

Complex tasks require the acquisition of additional skills.

Complex tasks may require multiple tools and technologies.

Curricular Competencies	Content
Students are expected to be able to do the following: Applied Design Understanding context • Empathize with potential users to find issues and uncover needs and potential design opportunities Defining • Choose a design opportunity	Students will experience a minimum of three modules of Applied Design, Skills, and Technologies 6–7 in each of Grades 6 and 7. Schools may choose from among the modules listed below or develop new modules that use the Curricular Competencies of Applied Design, Skills, and Technologies 6–7 with locally developed content. Locally developed modules can be offered in addition to, or instead of, the modules in the provincial curriculum. Computational Thinking
 Identify key features or potential users and their requirements Identify criteria for success and any constraints 	Students are expected to know the following: • simple algorithms that reflect computational thinking
 Ideating Generate potential ideas and add to others' ideas Screen ideas against criteria and constraints Evaluate personal, social, and environmental impacts and ethical 	 visual representations of problems and data evolution of programming languages visual programming Computers and Communications Devices
considerations • Choose an idea to pursue	Students are expected to know the following:
 Prototyping Identify and use sources of information Develop a plan that identifies key stages and resources Explore and test a variety of materials for effective use Construct a first version of the product or a prototype, as appropriate, making changes to tools, materials, and procedures as needed Record iterations of prototyping 	 computer system architecture, including hardware and software, network infrastructure (local), intranet/Internet, and personal communication devices strategies for identifying and troubleshooting simple hardware and software problems function of input and output devices, including 3D printing and adaptive technologies for those with special needs ergonomics in use of computers and computing devices effective and efficient keyboarding techniques

Grades 6-7

Learning Standards (continued)

Curricular Competencies

Testing

- Test the first version of the product or the prototype
- Gather peer and/or user and/or expert feedback and inspiration
- Make changes, troubleshoot, and test again

Making

- Identify and use appropriate tools, technologies, and materials for production
- Make a plan for production that includes key stages, and carry it out, making changes as needed
- · Use materials in ways that minimize waste

Sharing

- Decide on how and with whom to share their product
- Demonstrate their product and describe their process, using appropriate terminology and providing reasons for their selected solution and modifications
- Evaluate their product against their criteria and explain how it contributes to the individual, family, community, and/or environment
- Reflect on their design thinking and processes, and evaluate their ability to work effectively both as individuals and collaboratively in a group, including their ability to share and maintain an efficient co-operative work space
- Identify new design issues

Applied Skills

- Demonstrate an awareness of precautionary and emergency safety procedures in both physical and digital environments
- Identify and evaluate the skills and skill levels needed, individually or as a group, in relation to a specific task, and develop them as needed

Content

Digital Literacy

Students are expected to know the following:

- Internet safety
- digital self-image, citizenship, relationships, and communication
- legal and ethical considerations, including creative credit and copyright, and cyberbullying
- methods for personal media management
- search techniques, how search results are selected and ranked, and criteria for evaluating search results
- strategies to identify personal learning networks

Drafting

Students are expected to know the following:

- technical drawing, including sketching techniques and manual drafting techniques
- · elements of plans and drawings
- simple computer-aided drafting programs

Entrepreneurship and Marketing

Students are expected to know the following:

- role of entrepreneurship in designing and making products and services
- market niche
- branding of products, services, institutions, or places
- pricing product/service, including decision to seek profit or break even
- role of basic financial record-keeping and budgeting



Learning Standards (continued)

Curricular Competencies	Content
Select, and as needed learn about, appropriate tools and technologies to extend their capability to complete a task Identify the personal, social, and environmental impacts, including unintended negative consequences, of the choices they make about technology use Identify how the land, natural resources, and culture influence the development and use of tools and technologies	Food Studies Students are expected to know the following: • basic food handling and simple preparation techniques and equipment • factors in ingredient use, including balanced eating/nutrition, function, and dietary restrictions • factors that influence food choices, including cost, availability, and family and cultural influences Media Arts Students are expected to know the following: • digital and non-digital media, and their distinguishing characteristics and uses • techniques for using images, sounds, and text to communicate information, settings, ideas, and story structure • media technologies and techniques to capture, edit, and manipulate images, sounds, and text for specific purposes • influences of digital media for the purpose of communication and self-expression Metalwork Students are expected to know the following: • characteristics and uses of metals • metalworking techniques and processes using hand tools • metals as a non-renewable resource Power Technology Students are expected to know the following: • power is the rate at which energy is transformed • forms of energy • energy is conserved • devices that transform energy

Grades 6-7

Learning Standards (continued)

Curricular Competencies	Content
	Students are expected to know the following: a robot is a machine capable of carrying out a complex series of actions automatically uses of robotics main components of robots: sensors, control systems, and effectors various ways that objects can move programming and logic for robotics components various platforms for robotics
	Textiles Students are expected to know the following: • range of uses of textiles • variety of textile materials • hand construction techniques for producing and/or repairing textile items • consumer concerns that influence textile choices, including availability, cost, function (e.g., waterproof), and textile care
	Woodwork Students are expected to know the following: ways in which wood is used in local cultural and economic contexts characteristics of wood as a material woodworking techniques and basic joinery using hand tools



Area of Learning: ARTS EDUCATION

Grade 7

BIG IDEAS

Through **art** making, one's sense of identity and community continually evolves.

Experiencing art challenges our point of view and expands our understanding of others.

Dance, drama, music, and visual arts are each unique languages for creating and **communicating**.

Engaging in the arts develops people's ability to understand and express complex ideas.

Learning Standards

Curricular Competencies

Students will be able to use creative processes to:

Exploring and creating

- Intentionally select and apply materials, movements, technologies, environments, tools, and techniques by combining and arranging artistic elements, processes, and principles in art making
- Create artistic works collaboratively and as an individual using ideas inspired by imagination, inquiry, experimentation, and purposeful play
- Explore relationships between identity, place, culture, society, and belonging through the arts
- Demonstrate an understanding and appreciation of personal, social, cultural, historical, and environmental contexts in relation to the arts

Reasoning and reflecting

- Research, describe, interpret and evaluate how artists (dancers, actors, musicians, and visual
 artists) use processes, materials, movements, technologies, tools, techniques, and environments
 in the arts
- Develop and refine ideas, processes, and technical skills in a **variety of art forms** to improve the quality of artistic creations
- Reflect on works of art and creative processes to understand artists' intentions
- Interpret works of art using knowledge and skills from various areas of learning
- Examine relationships between the arts and the wider world

Communicating and documenting

- Adapt learned skills, understandings, and processes for use in new contexts and for different purposes and audiences
- Interpret and communicate ideas using symbols and elements to express meaning through the arts
- Take creative risks to express feelings, ideas, and experiences
- Express, feelings, ideas, and experiences through the arts
- Describe, interpret and respond to works of art
- Experience, document, choreograph, perform, and share creative works in a variety of ways
- Demonstrate increasingly sophisticated application and/or engagement of curricular content

Content

Students are expected to know the following:

- manipulation of elements and principles to create meaning in the arts, including but not limited to:
 - dance: body, space, dynamics, time, relationships, form, and movement principles
 - drama: character, time, place, plot, tension, mood, focus, contrast
 - music: beat/pulse, metre, duration, rhythm, tempo, pitch, timbre, dynamics, form, texture, notation
 - visual arts: elements of design: line, shape, space, texture, colour, form, value;
 principles of design: pattern, repetition, balance, contrast, emphasis, rhythm,
 movement, variety, proportion, unity, harmony
- processes, materials, movements, technologies, tools, strategies, and techniques to support creative works
- choreographic devices
- drama forms and drama conventions
- notation in music and dance to represent sounds, ideas, movement, elements, and actions
- image development strategies
- symbolism and metaphor to explore ideas and perspective
- traditional and contemporary Aboriginal arts and arts-making processes
- a variety of national and international works of art and artistic traditions from diverse cultures, communities, times, and places
- ethical considerations and cultural appropriation related to the arts
- personal and collective responsibility associated with creating, experiencing, or presenting in a safe learning environment

Grades 6-7

BIG IDEAS

Our attitudes toward careers are influenced by our view of ourselves as well as by our friends, family, and community.

Our personal digital identity forms part of our public identity.

Practising respectful, ethical, inclusive behaviour prepares us for the expectations of the workplace. Leadership represents good planning, goalsetting, and collaboration. Safe environments depend on everyone following safety rules. New experiences, both within and outside of school, expand our career skill set and options.

Curricular Competencies	Content
Students are expected to be able to do the following:	Students are expected to know the following:
 Recognize their personal preferences, skills, strengths, and abilities and connect them to possible career choices Question self and others about how their personal public identity can have both positive and negative consequences Examine the importance of service learning and the responsibility of individuals to contribute to the community and the world Appreciate the importance of respect, inclusivity, and other positive behaviours in diverse, collaborative learning, and work environments Question self and others about the reciprocal relationship between self and community Use entrepreneurial and innovative thinking to solve problems Demonstrate leadership skills through collaborative activities in the school and community Demonstrate safety skills in an experiential learning environment Set realistic short- and longer-term learning goals, define a path, and monitor progress Recognize the influence of peers, family, and communities on career choices and attitudes toward work Appreciate the value of new experiences, innovative thinking and risk taking in broadening their career options Explore volunteer opportunities and other new experiences outside school and recognize their value in career development Apply project management skills to support career development 	Personal Development



Area of Learning: ENGLISH LANGUAGE ARTS

Grade 7

BIG IDEAS

Language and **text** can be a source of creativity and joy.

• Transform ideas and information to create original texts

Exploring **stories** and other **texts** helps us understand ourselves and make connections to others and to the world.

Exploring and sharing multiple perspectives extends our thinking.

Developing our understanding of how language works allows us to use it purposefully.

Questioning what we hear, read, and view contributes to our ability to be educated and engaged citizens.

Curricular Competencies	Content
Using oral, written, visual, and digital texts, students are expected individually and collaboratively to be able to:	Students are expected to know the following:
Comprehend and connect (reading, listening, viewing)	Story/text
 Access information and ideas for diverse purposes and from a variety of sources and evaluate their relevance, accuracy, and reliability Apply appropriate strategies to comprehend written, oral, and visual texts, guide inquiry, and extend thinking Synthesize ideas from a variety of sources to build understanding Recognize and appreciate how different features, forms, and genres of texts reflect different purposes, audiences, and messages Think critically, creatively, and reflectively to explore ideas within, between, and beyond texts Recognize and identify the role of personal, social, and cultural contexts, values, and perspectives in texts Recognize how language constructs personal, social, and cultural identity Construct meaningful personal connections between self, text, and world Respond to text in personal, creative, and critical ways Understand how literary elements, techniques, and devices enhance and shape meaning Recognize an increasing range of text structures and how they contribute to meaning Recognize and appreciate the role of story, narrative, and oral tradition in expressing First Peoples perspectives, values, beliefs, and points of view Recognize the validity of First Peoples oral tradition for a range of purposes 	forms, functions, and genres of text text features literary elements literary devices argument Strategies and processes reading strategies oral language strategies metacognitive strategies writing processes Language features, structures, and conventions features of oral language paragraphing language varieties syntax and sentence fluency
Create and communicate (writing, speaking, representing)	conventionspresentation techniques
 Exchange ideas and viewpoints to build shared understanding and extend thinking Use writing and design processes to plan, develop, and create engaging and meaningful literary and informational texts for a variety of purposes and audiences 	
 Assess and refine texts to improve their clarity, effectiveness, and impact according to purpose, audience, and message 	
 Use an increasing repertoire of conventions of Canadian spelling, grammar, and punctuation Use and experiment with oral storytelling processes 	
 Select and use appropriate features, forms, and genres according to audience, purpose, and message 	



Area of Learning: CORE FRENCH

BIG IDEAS

Listening and viewing with intent helps us understand an increasing variety of messages.

Using strategies helps us understand and acquire language. With simple French, we can discuss our interests. Reciprocal interactions are possible even with limited French.

Stories allow us to understand ideas in a meaningful way. Deepening our knowledge of Francophone communities helps us develop cultural awareness.

Curricular Competencies	Content
 Curricular Competencies Students are expected to be able to do the following: Recognize the relationship between French letter patterns and pronunciation Use intonation and tone effectively to convey meaning in French Understand increasingly complex key information and supporting details in slow, clear speech and other simple texts Understand simple stories Use strategies to increase understanding Follow instructions to complete a task, including responding to questions or asking relevant follow-up questions Seek clarification of meaning using a variety of statements and questions Exchange ideas and information using complete sentences, orally and in writing: ask and answer questions in context describe important people in their community and key characters in texts describe locations and give simple directions explain reasons for likes, dislikes, and preferences make simple comparisons 	French letter patterns common, high frequency vocabulary and sentence structures for communicating meaning: asking and responding to different types of questions describing others describing locations and giving directions explaining reasons for likes, dislikes, and preferences making simple comparisons describing cultural aspects of communities common elements of stories information about Francophone and Francophone Métis communities across Canada Francophone people live on First Peoples territories across Canada
 describe locations and give simple directions explain reasons for likes, dislikes, and preferences 	CanadaFrancophone people live on First Peoples
Identify cultural aspects of Francophone communities	



Area of Learning: MATHEMATICS

Grade 7

Decimals, fractions, and percents are used to represent and describe parts and wholes of numbers.

Computational fluency and flexibility with numbers extend to operations with integers and decimals.

BIG IDEAS

Linear relations can be represented in many connected ways to identify regularities and make generalizations.

The constant ratio between the circumference and diameter of circles can be used to describe, measure, and compare spatial relationships.

Data from circle graphs can be used to illustrate proportion and to compare and interpret.

Learning Standards

Curricular Competencies Content Students are expected to do the following: Students are expected to know the following: Reasoning and analyzing • multiplication and division facts to 100 (extending Use logic and patterns to solve puzzles and play games computational fluency) Use reasoning and logic to explore, analyze, and apply mathematical ideas operations with integers (addition, subtraction, Estimate reasonably multiplication, division, and order of operations) Demonstrate and apply mental math strategies • operations with decimals (addition, subtraction, Use tools or technology to explore and create patterns and relationships, and test conjectures multiplication, division, and order of operations) **Model** mathematics in contextualized experiences • relationships between decimals, fractions, ratios, and Understanding and solving percents · Apply multiple strategies to solve problems in both abstract and contextualized situations

- Develop, demonstrate, and apply mathematical understanding through play, inquiry, and problem solving
- Visualize to explore mathematical concepts
- 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

Communicating and representing

- Use mathematical vocabulary and language to contribute to mathematical discussions
- Explain and justify mathematical ideas and decisions
- Communicate mathematical thinking in many ways
- Represent mathematical ideas in concrete, pictorial, and symbolic forms

Connecting and reflecting

- Reflect on mathematical thinking
- Connect mathematical concepts to each other and to other areas and personal interests
- Use mathematical arguments to support personal choices
- Incorporate First Peoples worldviews and perspectives to make connections to mathematical concepts

- discrete linear relations, using expressions, tables, and graphs
- two-step equations with whole-number coefficients, constants, and solutions
- circumference and area of circles
- volume of rectangular prisms and cylinders
- Cartesian coordinates and graphing
- combinations of transformations
- circle graphs
- experimental probability with two independent events
- financial literacy financial percentage



Area of Learning: PHYSICAL AND HEALTH EDUCATION

Grade 7

BIG IDEAS

Daily participation in different types of physical activity influences our physical literacy and personal health and fitness goals.

Physical literacy and fitness contribute to our success in and enjoyment of physical activity.

We experience many changes in our lives that influence how we see ourselves and others.

Healthy choices influence our physical, emotional, and mental well-being.

Learning about similarities and differences in individuals and groups influences community health.

Curricular Competencies	Content
Curricular Competencies Students are expected to be able to do the following: Physical literacy • Develop, refine, and apply fundamental movement skills in a variety of physical activities and environments • Develop and apply a variety of movement concepts and strategies in different physical activities • Apply methods of monitoring and adjusting exertion levels in physical activity • Develop and demonstrate safety, fair play, and leadership in physical activities	Content Students are expected to know the following: • proper technique for fundamental movement skills, including non-locomotor, locomotor, and manipulative skills • movement concepts and strategies • ways to monitor and adjust physical exertion levels • how to participate in different types of physical activities, includin individual and dual activities, rhythmic activities, and games • training principles to enhance personal fitness levels, including the FITT principle, SAID principle, and specificity
 Identify and describe preferred types of physical activity Healthy and active living Participate daily in physical activity designed to enhance and maintain health components of fitness Describe how students' participation in physical activities at school, at home, and in the community can influence their health and fitness Investigate and analyze influences on eating habits Identify factors that influence healthy choices and explain their potential health effects Assess and communicate health information for various health issues Identify and apply strategies to pursue personal healthy-living goals Reflect on outcomes of personal healthy-living goals and assess strategies used 	 effects of different types of physical activity on the body factors that influence personal eating choices practices that reduce the risk of contracting sexually transmitted infections and life-threatening communicable diseases sources of health information basic principles for responding to emergencies strategies to protect themselves and others from potential abuse, exploitation, and harm in a variety of settings consequences of bullying, stereotyping, and discrimination signs and symptoms of stress, anxiety, and depression influences of physical, emotional, and social changes on identities and relationships (continued)



Area of Learning: PHYSICAL AND HEALTH EDUCATION

$Learning\ Standards\ (continued)$

Curricular Competencies	Content
Social and community health	
 Identify and describe strategies for avoiding and/or responding to potentially unsafe, abusive, or exploitive situations Describe and assess strategies for responding to discrimination, stereotyping, and bullying Describe and apply strategies for developing and maintaining healthy relationships Explore strategies for promoting the health and well-being of the school and community 	
Mental well-being	
 Describe and assess strategies for promoting mental well-being, for self and others 	
 Describe and assess strategies for managing problems related to mental well-being and substance use, for others 	
 Create and assess strategies for managing physical, emotional, and social changes during puberty and adolescence 	
Explore the impact of transition and change on identities	



Area of Learning: SCIENCE

Grade 7

BIG IDEAS

Evolution by natural selection provides an explanation for the diversity and survival of living things.

Elements consist of one type of atom, and compounds consist of atoms of different elements chemically combined. The electromagnetic force produces both electricity and magnetism.

Earth and its climate have changed over geological time.

Learning Standards

Curricular Competencies

Students are expected to be able to do the following:

Questioning and predicting

- Demonstrate a sustained intellectual curiosity about a scientific topic or problem of personal interest
- Make observations aimed at identifying their own questions about the natural world
- Identify a question to answer or a problem to solve through scientific inquiry
- Formulate alternative "If...then..." hypotheses based on their questions
- Make predictions about the findings of their inquiry

Planning and conducting

- Collaboratively plan a range of investigation types, including field work and experiments, to answer their questions or solve problems they have identified
- Measure and control variables (dependent and independent) through fair tests
- Observe, measure, and record data (qualitative and quantitative), using equipment, including digital technologies, with accuracy and precision
- Use appropriate SI units and perform simple unit conversions
- Ensure that safety and ethical guidelines are followed in their investigations

Processing and analyzing data and information

- Experience and interpret the local environment
- Apply First Peoples perspectives and knowledge, other ways of knowing, and local knowledge as sources of information
- Construct and use a range of methods to represent patterns or relationships in data, including tables, graphs, keys, models, and digital technologies as appropriate
- Seek patterns and connections in data from their own investigations and secondary sources
- · Use scientific understandings to identify relationships and draw conclusions

Content

Students are expected to know the following:

- organisms have evolved over time
- survival needs
- natural selection
- elements and compounds are pure substances
- crystalline structure of solids
- chemical changes
- · electricity
 - generated in different ways with different environmental impacts
 - electromagnetism
- the fossil record provides evidence for changes in biodiversity over geological time
- First Peoples knowledge of changes in biodiversity over time
- evidence of climate change over geological time and the recent impacts of humans:
 - physical records
 - local First Peoples knowledge of climate change

(continued...)

Area of Learning: SCIENCE (continued)

Grade 7

Curricular Competencies	Content
 Evaluating Reflect on their investigation methods, including the adequacy of controls on variables (dependent and independent) and the quality of the data collected Identify possible sources of error and suggest improvements to their investigation methods Demonstrate an awareness of assumptions and bias in their own work and secondary sources Demonstrate an understanding and appreciation of evidence (qualitative and quantitative) Exercise a healthy, informed skepticism and use scientific knowledge and findings from their own investigations to evaluate claims in secondary sources Consider social, ethical, and environmental implications of the findings from their own and others' investigations 	
Applying and innovating	
 Contribute to care for self, others, community, and world through personal or collaborative approaches Co-operatively design projects Transfer and apply learning to new situations Generate and introduce new or refined ideas when problem solving 	
Communicating	
 Communicate ideas, findings, and solutions to problems, using scientific language, representations, and digital technologies as appropriate Express and reflect on a variety of experiences and perspectives of place 	



Area of Learning: SOCIAL STUDIES — The Ancient World to the 7th Century

Grade 7

BIG IDEAS

Geographic conditions shaped the emergence of civilizations.

Religious and cultural practices that emerged during this period have endured and continue to influence people.

Increasingly complex societies required new systems of laws and government.

Economic specialization and trade networks can lead to conflict and co-operation between societies.

Learning Standards

Curricular Competencies

Students are expected to be able to do the following:

- Use Social Studies inquiry processes and skills to ask questions; gather, interpret, and analyze ideas; and communicate findings and decisions
- Assess the significance of people, places, events, or developments at particular times and places (significance)
- Identify what the creators of accounts, narratives, maps, or texts have determined is significant (significance)
- Assess the credibility of multiple sources and the adequacy of evidence used to justify conclusions (evidence)
- Characterize different time periods in history, including periods of progress and decline, and identify key turning points that marked periods of change (continuity and change)
- Determine which causes most influenced particular decisions, actions, or events, and assess their short- and long-term consequences (cause and consequence)
- Explain different perspectives on past or present people, places, issues, or events, and compare the values, worldviews, and beliefs of human cultures and societies in different times and places (perspective)
- Make ethical judgments about past events, decisions, or actions, and assess the limitations of drawing direct lessons from the past (ethical judgment)

Content

Students are expected to know the following:

- anthropological origins of humans
- human responses to particular geographic challenges and opportunities, including climates, landforms, and natural resources
- features and characteristics of civilizations, and factors that led to their rise and fall
- origins, core beliefs, narratives, practices, and influences of religions, including at least one indigenous to the Americas
- scientific, philosophical, and technological developments
- interactions and exchanges between past civilizations and cultures, including conflict, peace, trade, expansion, and migration
- social, political, legal, governmental, and economic systems and structures, including at least one indigenous to the Americas