Department of Education and Early Childhood Development

English Programs

Specific Curriculum Outcomes Framework

Grades 7-9

2012

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N.B. Core French teachers can find the Core French outcomes in the "Programme d'étude et guide édagogique."

Introduction

The specific curriculum outcomes framework comprises a series of curriculum outcomes statements describing what knowledge, skills, and attitudes students are expected to demonstrate as a result of their cumulative learning experiences in their public school education. Through an ongoing process, the Department of Education and Early Childhood Development is developing a learning outcomes framework for each area of the public school program.

This document provides an overview of the learning outcomes framework organized by grade level and subject area. It is intended to serve as a brief survey of expected learning outcomes and as a tool to assist teachers in program planning.

In designing appropriate learning experiences that enable students to achieve the expected learning outcomes, teachers and administrators are expected to refer to foundation documents and related curriculum guides. In planning the appropriate use of information technologies as tools for learning and teaching, teachers and administrators should also refer to the *Journey On* documents.

Foundation documents provide the framework for general and key-stage curriculum outcomes, outline the focus and key features of the curriculum, and describe contexts for learning and teaching. Curriculum guides elaborate on specific curriculum outcomes and describe other aspects of curriculum, such as program design and components, instructional and assessment strategies, and resources.

General curriculum outcomes are statements which identify what students are expected to know and be able to do upon completion of study in a curriculum area. Key-stage curriculum outcomes are statements which identify what students are expected to know and be able to do by the end of grades 3, 6, 9, and 12 as a result of their cumulative learning experiences in a curriculum area. Specific curriculum outcomes are statements which identify what students are expected to know and be able to do at a particular grade level.

The following overview of the learning outcomes framework notes general curriculum outcomes and specific curriculum outcomes. For some subject areas, key-stage curriculum outcomes are also included.

Intermediate Program Components

Administrators and teachers in schools offering grade 7, 8, and/or 9 intermediate programming should refer to the Minister's Directive 99-05 "Intermediate School Subject Time Allotments" for percentage time allotments for each of the core and exploratory programs. The intermediate program does not include technology education as a subject area; however, the general and key-stage curriculum outcomes for technology education included in this document provide a framework for teachers of grades 7-9 to use in integrating technology education within learning experiences across the curriculum.

Department of Education and Early Childhood Development

English Programs

Specific Curriculum Outcomes Framework

Grade 7

2012

English Language Arts

General Curriculum Outcomes

GCO 1: Students will be expected to speak and listen to explore, extend, clarify, and reflect on their thoughts, ideas, feelings, and experiences.

GCO 2: Students will be expected to communicate information and ideas effectively and clearly, and to respond personally and critically.

GCO 3: Students will be expected to interact with sensitivity and respect, considering the situation, audience, and purpose.

Specific Curriculum Outcomes

- 1.1 recognize that contributions from many participants are needed to generate and sustain discussions
- 1.2 know how and when to ask questions that call for elaboration and clarification; give appropriate responses when asked for the same information
- 1.3 express clearly and with conviction, a personal point of view and be able to support that position
- 1.4 listen attentively to grasp the essential elements of a message and recognize and consider supporting details
- 2.1 participate in small-group conversation and whole-class discussion recognizing that there are a range of strategies that contribute to effective talk
- 2.2 recognize that different purposes and audiences influence communication choices such as vocabulary, sentence structure, rate of speech, and tone during talk; consider appropriate communication choices in various speaking contexts
- 2.3 follow instructions and respond to questions and directions
- 2.4 evaluate speakers and the effectiveness of their talk in particular contexts; identify the verbal and non-verbal language cues used by speakers (e.g., repetition, volume, and eye contact)
- 3.1 demonstrate active speaking and listening skills such as making eye contact, rephrasing when appropriate, clarifying comments, extending, refining, and/or summarizing points already made
- 3.2 demonstrate a respect for others by developing effective ways to express personal opinions such that they reflect sensitivity to others, including differences in culture and language
- 3.3 recognize that spoken language reveals values and attitudes such as bias, beliefs, and prejudice; understand how language is used to influence and manipulate
- 3.4 recognize that different situations (interviews, speeches, debates, conversation) require different speaking and listening conventions (questioning techniques, persuasive talk, formal language) appropriate to the situation

GCO 4: Students will be expected to select, read, and view with understanding a range of literature, information, media, and visual texts.

GCO 5: Students will be expected to interpret, select, and combine information using a variety of strategies, resources, and technologies.

GCO 6: Students will be expected to respond personally to a range of texts.

Specific Curriculum Outcomes

- 4.1 select texts that address their learning needs and range of special interests
- 4.2 read widely and experience a variety of young adult fiction and literature from different provinces and countries
- 4.3 demonstrate an awareness of how authors use pictorial, typographical, and organizational devices such as photos, titles, headings, and bold print to achieve certain purposes in their writing, and use those devices more regularly to construct meaning and enhance understanding
- 4.4 develop some independence for recognizing and using various reading and viewing strategies (predicting, questioning, etc.) and in using cueing systems (graphophonic, contextual, syntactic, etc.) to construct meaning; apply and develop these strategies and systems while reading and viewing increasingly complex print and media texts
- 4.5 talk and write about the various processes and strategies readers and viewers apply when constructing meaning from various texts; recognize and articulate personal processes and strategies used when reading or viewing various texts
- 5.1 identify and articulate personal needs and personal learning needs with growing clarity and some independence
- 5.2 become increasingly aware of and use periodically the many print and non-print avenues and sources (Internet, documentaries, interviews) through which information can be assessed and selected
- 5.3 use research strategies like issue mapping and webbing to guide research
- 6.1 extend personal responses, either orally or in writing, to print and non-print texts by explaining in some detail initial or basic reactions to those texts
- 6.2 make evaluations or judgments about texts and learn to express personal points of view
- 6.3 while learning to express personal points of view, develop the ability to find evidence and examples in texts to support personal views about themes, issues, and situations

GCO 7: Students will be expected to respond critically to a range of texts, applying their understanding of language, form, and genre.

GCO 8: Students will be expected to use writing and other forms of representing to explore, clarify, and reflect on their thoughts, feelings, experiences, and learnings; and to use their imaginations.

Specific Curriculum Outcomes

- 7.1 recognize that print and media texts can be biased and become aware of some of the ways that information is organized and structured to suit a particular point of view
- 7.2 recognize that print and media texts are constructed for particular readers and purposes; begin to identify the textual elements used by authors
- 7.3 develop an ability to respond critically to various texts in a variety of ways such as identifying, describing, and discussing the form, structure, and content of texts and how they might contribute to meaning construction and understanding
 - recognize that personal knowledge, ideas, values, perceptions, and points of view influence how writers create text
 - become aware of how and when personal background influences meaning, construction, understanding, and textual response
 - recognize that there are values inherent in a text, and begin to identify those values
 - explore how various cultures and realities are portrayed in media texts
- 8.1 experiment with a range of strategies (brainstorming, sketching, freewriting) to extend and explore learning, to reflect on their own and others' ideas, and to identify problems and consider solutions
- 8.2 become aware of and describe the writing strategies that help them learn; express an understanding of their personal growth as language learners and language users
- 8.3 understand that note-making is purposeful and has many purposes (e.g., personal use, gathering information for an assignment, recording what has happened and what others have said) and many forms (e.g., lists, summaries, observations, and descriptions)
- demonstrate an ability to integrate interesting effects in imaginative writing and other forms of representation, such as consider thoughts and feelings in addition to external descriptions and activities; integrate detail that adds richness and density; identify and correct inconsistencies and avoid extraneous detail; make effective language choices relevant to style and purpose; and select more elaborate and sophisticated vocabulary and phrasing

GCO 9: Students will be expected to create texts collaboratively and independently, using a wide variety of forms for a range of audiences and purposes.

GCO 10: Students will be expected to use a range of strategies to develop effective writing and other ways of representing and to enhance their clarity, precision, and effectiveness.

Specific Curriculum Outcomes

- 9.1 produce a range of writing forms, (for example, stories, cartoons, journals, business and personal letters, speeches, reports, interviews, messages, poems, and advertisements)
- 9.2 recognize that a writer's choice of form is influenced by both the writing purpose (to entertain, inform, request, record, describe) and the reader for whom the text is intended (e.g., understand how and why a note to a friend differs from a letter requesting information)
- 9.3 begin to understand that ideas can be represented in more than one way and experiment with using other forms such as dialogue, posters, and advertisements
- 9.4 develop the awareness that content, writing style, tone of voice, language choice, and text organization need to fit the reader and suit the reason for writing
- 9.5 ask for reader feedback while writing and use this feedback when shaping subsequent drafts; consider selfgenerated drafts from a reader's/viewer's/listener's point of view
- 10.1 understand and use conventions for spelling familiar words correctly; rely on knowledge of spelling conventions to attempt difficult words; check for correctness; demonstrate control over most punctuation and standard grammatical structures in writing most of the time; use a variety of sentence patterns, vocabulary, and paragraph structures to aid effective written communication
- 10.2 learn to recognize and begin to use more often the specific prewriting, drafting, revising, editing, proofreading, and presentation strategies that most effectively help to produce various texts
- 10.3 acquire some exposure to the various technologies used for communicating to a variety of audiences for a range of purposes (video, e-mail, word processing, audiotapes)
- 10.4 demonstrate a commitment to crafting pieces of writing and other representations
- 10.5 collect information from several sources (interviews, film, CD-ROMs, texts) and combine ideas in communication

Health

General Curriculum Outcomes

Wellness Choices

Students will make responsible and informed choices to maintain health and to promote safety for self and others.

Specific Curriculum Outcomes

Students will be expected to

Personal Health

- W-7.1 compare personal health choices to standards for health
- W-7.2 evaluate the impact of grooming/cosmetic advertisements on personal grooming habits/choices
- W-7.3 analyse the messages and approaches used by the media to promote certain body images and lifestyle choices
- W-7.4 relate the factors that influence individual food choices to nutritional needs of adolescents
- W-7.5 analyse social factors that may influence avoidance and/or use of particular substances

Safety and Responsibility

- W-7.6 demonstrate an understanding of the concept and possible consequences of various forms of harassment
- W-7.7 analyse differing personal perspectives on safety
- W-7.8 identify characteristics of resiliency

Sexual Health

- W-7.9 describe the human reproductive process, and recognize several misunderstandings associated with sexual development
- W-7.10 identify the effects of social influences on sexuality
- W-7.11 analyse the influences on personal decision making for responsible sexual behavior
- W-7.12 demonstrate an understanding that abstinence and postponement of sexual activity are responsible decisions for adolescents

Relationship Choices

Students will develop effective interpersonal skills that demonstrate responsibility, respect, and caring in order to establish and maintain healthy interactions.

Understanding and Expressing Feelings

- R-7.1 analyse how thinking patterns influence feelings
- R-7.2 demonstrate an understanding for short-term and long-term support for emotional concerns
- R-7.3 identify sources of stress in relationships, and describe positive methods of dealing with such stressors
- R-7.4 examine the role of feedback in effective communication

Specific Curriculum Outcomes

Students will be expected to

Interactions

- R-7.5 examine the characteristics of healthy relationships, and develop strategies to build and enhance them
- R-7.6 evaluate the impact of media violence on relationships
- R-7.7 identify strategies for dealing assertively with conflict

Group Roles and Process

- R-7.8 analyse the potential effects of belonging to a group, team, or gang
- R-7.9 use group goal-setting skills

Life Learning Choices

Students will use resources effectively to manage and explore life roles and career opportunities and challenges.

Learning Strategies

- L-7.1 develop improved organizational and study strategies/ skills by analysing the different ways individuals learn
- L-7.2 identify strategies to extend personal capacity for learning
- L-7.3 differentiate between choice and coercion in decision making for self and others
- L-7.4 identify and revise short-term and long-term goals and priorities based on knowledge of interests, aptitudes, and skills

Life Roles and Career Development

- L-7.5 collect data for a personal portfolio showing evidence of interests, assets, and skills
- L-7.6 examine factors that may influence future life role/ education/career plans

Volunteerism

- L-7.7 determine and use knowledge and skills of the class to promote school and community health
- L-7.8 apply effective group skills to design and implement a school-community health enhancement plan

Home Economics

General Curriculum Outcomes

GCO 1: Students will be expected to evaluate and manage food technology.

Specific Curriculum Outcomes

Students will be expected to

Food

- 1.1 identify food preparation equipment
- 1.2 explain the function of food preparation equipment
- 1.3 demonstrate safe use of food preparation equipment
- 1.4 discuss how technology has changed the equipment available for food preparation
- 1.5 identify the information given in a recipe
- 1.6 describe the meaning of basic food preparation terms
- 1.7 correctly and accurately measure various ingredients

GCO 2: Students will be expected to demonstrate an understanding of their personal responsibility in food preparation.

- 2.1 investigate current problems with improper food handling
- 2.2 apply understanding of safe practices
- 2.3 efficiently clean up work area upon completion of food preparation
- 2.4 evaluate prepared food product
- 2.5 develop a basic recipe or variation of a basic recipe for a simple food product
- 2.6 create a food product using a recipe
- 2.7 create plans for preparing simple meals making effective use of resources
- 2.8 identify the sources, selection, cooking methods, and storage of foods from each food group

GCO 3: Students will be expected to demonstrate an understanding of their personal responsibility in making healthy food choices.

- 3.1 identify the four basic food groups and the "other" category
- 3.2 have a basic understanding of the processes of digestion and absorption
- 3.3 identify the six main nutrient groups and their functions and sources
- 3.4 explore and explain the relationship of food and life style choices to health
- 3.5 identify specific nutrient and related deficiencies

GCO 4: Students will be expected to demonstrate an understanding of the history and evolution of food technology and of its social and cultural implications.

- 4.1 examine the historical evolution of food technologies and predict future developments
- 4.2 investigate the range of table arrangements for various types of food service (buffet, family service, plate style, etc.)

Specific Curriculum Outcomes

Students will be expected to

- 4.3 explain the need for and the development of convenience foods and fast food meals
- 4.4 examine the impact of a multicultural society on our food choices
- 4.5 examine and discuss guidelines for table behavior

GCO 5: Students will be expected to demonstrate an understanding of current and evolving careers and of the influence of food technology on the nature of work.

GCO 6: Students will be expected to understand, evaluate, and manage technology for the purpose of

constructing a sewing project.

5.1 examine the food technologies of specific food production careers and workplaces

Sewing

- 6.1 locate and identify small equipment in the clothing lab
- 6.2 demonstrate care and safety precautions in the use of the sewing equipment
- 6.3 identify the parts of the sewing machine
- 6.4 know the function of each part of the machine
- 6.5 demonstrate the safe use of the sewing machine
- 6.6 become familiar with a pattern
- 6.7 select fabric and prepare it for sewing
- 6.8 practice sewing skills

GCO 7: Students will be expected to demonstrate an understanding of the history and evolution of fabric technology and of its social and cultural implications.

- 7.1 become familiar with fabric/garment labeling
- 7.2 become familiar with laundry procedures
- 7.3 recognize the principles of good buymanship

Industrial Technology

General Curriculum Outcomes

GCO 1: Students will be expected to demonstrate an understanding of safety in technology.

GCO 2: Students will be expected to innovatively use tools, machines, and materials.

Specific Curriculum Outcomes

- identify and use the proper personal safety equipment for student activities
- 1.2 practice good housekeeping and identify/avoid obvious hazards
- 1.3 understand how to select and operate fire safety equipment
- 1.4 identify and use hand tools responsibly
- 1.5 identify and use materials responsibly
- 1.6 identify and use machines responsibly
- 1.7 identify WHMIS symbols
- 1.8 understand the relationship between training and experience to safety
- 1.9 demonstrate an understanding of the safety principal that accidents are preventable and avoidable
- 2.1 demonstrate the innovative use of tools
- 2.2 describe safety precautions for each tool
- 2.3 use tools in a safe, productive manner
- 2.4 name common tools and describe their function
- 2.5 choose and use hand tools appropriately for the intended operations
- 2.6 demonstrate the innovative use of machines and materials
- 2.7 describe safety precautions for each machine and material
- 2.8 use machines and materials in a safe productive manner
- 2.9 name common machines and materials and describe their function
- 2.10 choose and use machines and materials appropriately for the intended use and operations

GCO 3: Students will be expected to design, develop, evaluate, and articulate technological solutions.

Specific Curriculum Outcomes

- develop a problem solving approach to technological situations
- 3.2 demonstrate an understanding of the design process
 - examine problem situations
 - once a need is established, clearly state the design brief
 - gather information
 - investigate related solutions
 - develop alternative solutions
 - select and develop the best solution (Design Brief)
- 3.3 evaluate the effectiveness of both their own and others' technological solutions
- 3.4 communicate ideas and information about technological solutions

Mathematics

General Curriculum Outcomes

Number (N)

GCO: Develop number sense.

Specific Curriculum Outcomes

Students will be expected to

- N1 Determine and explain why a number is divisible by 2, 3, 4, 5, 6, 8, 9 or 10, and why a number cannot be divided by 0.
- N2 Demonstrate an understanding of the addition, subtraction, multiplication and division of decimals (for more than 1-digit divisors or 2-digit multipliers, the use of technology is expected) to solve problems.
- N3 Solve problems involving percents from 1% to 100%.
- N4 Demonstrate an understanding of the relationship between positive repeating decimals and positive fractions, and positive terminating decimals and positive fractions.
- N5 Demonstrate an understanding of adding and subtracting positive fractions and mixed numbers, with like and unlike denominators, concretely, pictorially and symbolically (limited to positive sums and differences).
- N6 Demonstrate an understanding of addition and subtraction of integers, concretely, pictorially and symbolically.
- N7 Compare and order positive fractions, positive decimals (to thousandths) and whole numbers using:
 - benchmarks;
 - place value;
 - equivalent fractions and/or decimals.

Patterns and Relations (PR)

GCO: Use patterns to describe the world and solve problems.

GCO: Represent algebraic expressions in multiple ways.

- PR1 Demonstrate an understanding of oral and written patterns and their equivalent linear relations.
- PR2 Create a table of values from a linear relation, graph the table of values, and analyse the graph to draw conclusions and solve problems.
- PR3 Demonstrate an understanding of preservation of equality by:
 - modeling preservation of equality, concretely, pictorially, and symbolically;
 - applying preservation of equality to solve equations.
- PR4 Explain the difference between an expression and an equation.
- PR5 Evaluate an expression given the value of the variable(s).

Specific Curriculum Outcomes

Students will be expected to

PR6 Model and solve problems that can be represented by one-step linear equations of the form x + a = b, concretely, pictorially, and symbolically, where a and b are integers.

PR7 Model and solve problems that can be represented by linear equations of the form:

•
$$ax + b = c$$
;

•
$$ax = b$$
;

•
$$\frac{x}{a}$$
 \neq b, a = 0

concretely, pictorially and symbolically, where a, b and c are whole numbers.

Shape and Space (SS)

GCO: Use direct and indirect measure to solve problems.

SS1 Demonstrate an understanding of circles by:

- · describing the relationship among radius, diameter and circumference of circles;
- relating circumference to pi;
- determining the sum of the central angles;
- constructing circles with a given radius or diameter;
- solving problems involving the radii, diameters and circumferences of circles.

SS2 Develop and apply a formula for determining the area of:

- triangles;
- parallelograms;
- circles.

GCO: Describe the characteristics of SS3 Perform geometric constructions, including: 3-D objects and 2-D shapes, and analyse

- perpendicular line segments;
- parallel line segments;
- perpendicular bisectors;
- angle bisectors.

GCO: Describe and analyse position and motion of objects and shapes.

the relationships among them.

SS4 Identify and plot points in the four quadrants of a Cartesian plane using integral ordered pairs.

SS5 Perform and describe transformations (translations, rotations or reflections) of a 2-D plane (limited to integral number vertices).

Statistics and Probability (SP) GCO: Collect, display, and analyse data to solve problems.

GCO: Use experimental or theoretical probabilities to represent and solve problems involving uncertainty.

Specific Curriculum Outcomes

- SP1 Demonstrate an understanding of central tendency and range by:
 - determining the measures of central tendency (mean, median, mode) and range;
 - determining the most appropriate measures of central tendency to report findings.
- SP2 Determine the effect on the mean, median and mode when an outlier is included in a data set.
- SP3 Construct, label and interpret circle graphs to solve problems.
- SP4 Express probabilities as ratios, fractions and percents.
- SP5 Identify the sample space (where the combined sample space has 36 or fewer elements) for a probability experiment involving two independent events.
- SP6 Conduct a probability experiment to compare the theoretical probability (determined using a tree diagram, table or another graphic organizer) and experimental probability of two independent events.

Music

Please refer to the Instrumental Music Curriculum.

Physical Education

Please note: The three goals, Active Living, Skillful Movements, and Relationships will be referred to throughout this section as GCO 1, GCO 2, and GCO 3.

GCO 1: Active Living	GCO 2: Skillful Movement	GCO 3: Relationships
Enjoy and engage in healthy levels of participation in movement activities to support lifelong active living in the context of self, family, and community.	Enhance quality of movement by understanding, developing, and transferring movement concepts, skills, tactics, and strategies to a wide variety of movement activities.	Balance self through safe and respectful personal, social, cultural, and environmental interactions in a wide variety of movement activities.

General Curriculum Outcomes

Active Living

GCO₁

7.1 Health Related Fitness

Specific Curriculum Outcomes

Create and implement a personal health-related fitness plan targeting the **health-related** fitness components of **cardiovascular endurance, muscular endurance, and flexibility** that involves setting a goal for improvement, applies the **F.I.T.T. principle** (Frequency, Intensity, Type of activity, and Time), and incorporates daily moderate to vigorous movement activity.

7.2 Body Composition

Examine personal daily nutritional habits and fluid intake practices that support healthy participation in various types of movement activities and the attainment or maintenance of healthy body weight and body composition.

7.3 Skeletal System

Demonstrate an understanding of the effects of exercise and inactivity on the skeletal system (i.e., increased/decreased bone density, increased/decreased bone mass) and the function (i.e., shape, support, protection) of the skeletal system in relation to participating in movement activities.

Specific Curriculum Outcomes

7.4 Cross-training

Examine and apply strategies to incorporate cross-training using different movement activities to improve fitness and skill (e.g., aerobic dance develops coordination and agility used in basketball; gold and hockey develop hand/eye coordination/striking skills) while participating in movement activities.

7.10 Volunteerism & Leadership

Plan, organize, lead, and evaluate cooperatively movement activity, such as intramurals, fitness fun days, and playground games, to engage other students and to connect with others.

7.11 Influences

Examine external influences (i.e., cost, facility availability, practice opportunities outside school) that may affect movement skill development and options for active living in the community.

7.12 Safely & Rules

Analyze and apply the safety guidelines and rules related to net/wall games, striking/fielding games, low-organizational and inventive games, alternate environment activities, and body management activities to develop an appreciation of their impact on self and others.

7.13 Relationship Skills

Role model and practise the behaviours associated with demonstrating responsibility and caring for others to support personal growth in making positive connections while participating in movement activities.

GCO 2

Skillful Movement

7.4 Cross-training

Examine and apply strategies to incorporate cross-training using different movement activities to improve fitness and skill (e.g., aerobic dance develops coordination and agility used in basketball; gold and hockey develop hand/eye coordination/striking skills) while participating in movement activities.

Specific Curriculum Outcomes

7.5 Complex Skills

Demonstrate control, including smooth transitions, of complex movement skills that combine **locomotor** (traveling) skills, **non-locomotor** (non-traveling) skills, and **manipulative** (moving objects) skills as they apply to games and sports (e.g., lay-up in basketball, spike in volleyball, dribbling to a shot in soccer, gathering a grounder and throwing to a base in softball, stick handling to a shot in floor hockey, paddling a kayak, passing a lacrosse ball) while participating in movement activities.

7.6 Biomechanics

Explore, apply, and communicate biomechanical concepts and principles of balance, stability, spin, and rotation as means to enhance independence in learning motor skills involving **locomotor** (traveling), **non-locomotor** (non-traveling), and **manipulative** (moving objects) skills.

7.7 Movement Concepts

Identify and apply, with guidance, movement concepts while participating in:

- net/wall games (e.g., badminton body awareness in ready position to receive a serve)
- **striking/fielding games** (e.g., softball body position to catch a fly ball or grounder).

7.8 Decision Making

Make situational decisions (individual, partner, and team) related to the selection of skills, tactics, and strategies to enhance individual and team performance while participating in:

- net/wall games (e.g., badminton, volleyball, tennis, table tennis, pickleball, paddleball)
- **striking/fielding games** (e.g., softball, longball, kickball, cricket)
- low-organizational, inventive, and co-operative games (e.g., walleyball, king's court).

Specific Curriculum Outcomes

- 7.9 Alternative Environment & Body Management Utilize selected movement skills and combinations of skills (i.e., locomotor, non-locomotor, and manipulative) to participate in a variety of:
 - alternative environment activities (e.g., skating, crosscountry skiing, swimming, snowshoeing, cycling, hiking, tracking, skateboarding, roping, canoeing, downhill skiing, orienteering)
 - body management activities including dance and educational gymnastics, as well as others (e.g., wrestling, track and field, pilates, yoga, and aerobics).

GCO₃

Relationships

7.8 Decision Making

Make situational decisions (individual, partner, and team) related to the selection of skills, tactics, and strategies to enhance individual and team performance while participating in:

- **net/wall games** (e.g., badminton, volleyball, tennis, table tennis, pickleball, paddleball)
- striking/fielding games (e.g., softball, longball, kickball, cricket)
- **low-organizational, inventive, and co-operative games** (e.g., walleyball, king's court).
- 7.9 Alternative Environment & Body Management

Utilize selected movement skills and combinations of skills (i.e., locomotor, non-locomotor, and manipulative) to participate in a variety of:

- alternative environment activities (e.g., skating, crosscountry skiing, swimming, snowshoeing, cycling, hiking, tracking, skateboarding, roping, canoeing, downhill skiing, orienteering)
- **body management activities** including dance and educational gymnastics, as well as others (e.g., wrestling, track and field, pilates, yoga, and aerobics).

Specific Curriculum Outcomes

7.10 Volunteerism & Leadership

Plan, organize, lead, and evaluate cooperatively movement activity, such as intramurals, fitness fun days, and playground games, to engage other students and to connect with others.

7.12 Safely & Rules

Analyze and apply the safety guidelines and rules related to net/wall games, striking/fielding games, low-organizational and inventive games, alternate environment activities, and body management activities to develop an appreciation of their impact on self and others.

7.13 Relationship Skills

Role model and practise the behaviours associated with demonstrating responsibility and caring for others to support personal growth in making positive connections while participating in movement activities.

7.14 History & Culture

Examine, evaluate, and represent both the historical and present impact of Canada's Northern people on the development of movement activity options as a means of supporting the well-being of self and others.

Science

General Curriculum Outcomes

STSE

GCO 1: Students will develop an understanding of the nature of science and technology, of the relationships between science and technology, and of the social and environmental contexts of science and technology.

Skills

GCO 2: Students will develop the skills required for scientific and technological inquiry, for solving problems, for communicating scientific ideas and results, for working collaboratively, and for making informed decisions.

Knowledge

GCO 3: Students will construct knowledge and understandings of concepts in life science, physical science, and Earth and space science, and apply these understandings to interpret, integrate, and extend their knowledge.

Attitudes

GCO 4: Students will be encouraged to develop attitudes that support the responsible acquisition and application of scientific and technological knowledge to the mutual benefit of self, society, and the environment.

Specific Curriculum Outcomes

Students will be expected to

Life Science: Interactions Within Ecosystems

Components of an Ecosystem

- use instruments effectively and accurately to investigate components of an ecosystem (209-3)
- organize and record data collected in an investigation of an ecosystem (209-4)
- describe interactions between biotic and abiotic factors in an ecosystem (306-3)
- identify the roles of producers, consumers, and decomposers in a local ecosystem and describe both their diversity and their interactions (304-2)
- classify organisms as producers, consumers, and decomposers (210-1)
- distinguish between the following scientific terms:
 - consumer
 - decomposer
 - producer
 - ecosystem
 - habitat
 - photosynthesis (109-12)
- explain how biological classification takes into account the diversity of life on Earth, using the terms producer, consumer, and decomposer (304-1)
- explain that observations and identification of similar characteristics enables classification in an ecosystem (109-1)

Food Webs

- demonstrate the importance of choosing words that are scientifically appropriate by using these words in context:
 - niche
 - habitat
 - population
 - community

Specific Curriculum Outcomes

Students will be expected to

- ecosystem (109-13)
- prepare a chart that describes how energy is supplied to and how it flows through a food web (210-2, 306-1)
- identify the strengths and weaknesses of a diagram showing the flow of energy in an ecosystem (210-3)
- apply the concept of a food web as a tool for interpreting the structure and interactions of a natural system (111-6)
- describe how matter is recycled in an ecosystem through interactions among plants, animals, fungi, and microorganisms (306-2)
- identify and evaluate potential applications of the recycling of matter in an ecosystem (210-12)

Decomposers

- describe conditions essential to the growth and reproduction
 of plants and microorganisms in an ecosystem and relate
 these conditions to various aspects of the human food
 supply:
 - air
 - temperature
 - light
 - moisture (304-3)
- provide examples of how knowledge of microorganisms has resulted in the development of food production and preservation techniques (111-1)

Ecological Succession

- identify signs of ecological succession in a local ecosystem (306-4)
- predict what an ecosystem will look like in the future on the basis of the characteristics of the area and the long-term changes (succession) observed in the site (208-5)

Specific Curriculum Outcomes

Students will be expected to

Action

- propose and defend a course of action to protect the local habitat of a particular organism (113-11, 211-5)
- provide examples of problems that arise in the environment that cannot be solved using scientific or technological knowledge (113-10)

Earth and Space Science: Earth's Crust

Geological Plate Tectonics and Time Scale

- compare some of the catastrophic events, such as earthquakes and volcanic eruptions that occur on or near Earth's surface (311-4)
- organize and analyse data on the geographical and chronological distribution of earthquakes and volcanoes to determine patterns and trends (209-4, 210-6, 311-5)
- describe how plate tectonic theory has evolved in light of new geological evidence (110-4)
- provide examples of ideas and theories used in the past to explain volcanic activity, earthquakes, and mountain building (110-1)
- provide examples of Canadians and Canadian institutions that have contributed to our understanding of local, regional, and global geology (112-12)
- explain the processes of mountain formation and the folding and faulting of the Earth's surface (311-1)
- develop a chronological model or geological time scale of major events in Earth's history (209-4, 311-6)

Rocks and Minerals

- classify minerals on the basis of their physical characteristics by using a dichotomous key (210-1, 310-2a)
- work co-operatively with team members to plan how to determine a geological profile of a land mass by using simulated core sampling techniques (211-3)
- evaluate the individual and group processes in planning how to determine a geological profile of a land mass using simulated core sampling in geological models (210-12, 211-4)

Specific Curriculum Outcomes

Students will be expected to

The Rock Cycle

- identify questions to investigate arising from the study of the rock cycle (208-2)
- use tools and apparatus safely when modelling or simulating the formation of rock types (209-6)
- classify rocks on the basis of their characteristics and method of formation
 - sedimentary
 - igneous
 - metamorphic (310-2b)
- explain how society's needs led to developments in technologies designed to use rocks (112-3)

Weathering

• explain various ways in which rocks can be weathered (311-12)

Soil

- design and conduct a fair test of soil properties (209-1)
- classify various types of soil according to their characteristics, and investigate ways to enrich soils (310-3)
- relate various meteorological, geological, chemical, and biological processes to the formation of soils (311-3)
- identify some positive and negative effects and intended
- describe the composition of the Earth's crust and some of the technologies which have allowed scientists to study geological features in and on the earth's crust (109-7, 111-2, 310-1)

Specific Curriculum Outcomes

Students will be expected to

Physical Science: Heat

Temperature

- select appropriate methods and tools in order to construct and test an air thermometer (208-8, 210-13)
- compile and display data collected in the test of the design of an air thermometer (210-2)
- compare various instruments used to measure temperature (308-1)
- use and read a thermometer safely and properly (209-3)
- provide examples of temperature-measuring technologies used in the past (110-7)

Temperature and Matter

- explain how each state of matter reacts to changes in temperature (308-3)
- explain changes of state using the particle model of matter (308-4)
- explain temperature using the concept of kinetic energy and the particle model of matter (308-2)

Heat Transfer

- compare transmission of heat by conduction, convection, and radiation (308-5)
- describe the science underlying heat transfer in solar heating systems and central heating systems in houses (111-5)
- describe how a technology associated with heat has affected lives (113-4)
- compare, in qualitative terms, the heat capacities of some common materials (308-7)
- identify potential sources of error in data while investigating how various surfaces absorb radiant heat (210-10)
- carry out a procedure to investigate how various surfaces absorb radiant heat and control major variables (209-1)

Specific Curriculum Outcomes

Students will be expected to

- identify, evaluate, and draw a conclusion about the relationship between colour and heat absorption in materials (210-11, 210-12)
- communicate results of experiments and/or investigations related to colour and heat absorption by using language and a variety of tables, charts, and/or graphs (211-2)
- describe how various surfaces absorb radiant heat (308-6)
- describe how our needs related to heat can lead to developments in science and technology (112-1)
- identify examples of science and technology-based careers that are associated with heat and temperature (112-9)
- provide examples of insulating technologies used in the past that were developed through trial and error (109-4)

Physical Science: Mixtures and Solutions

Mixtures

- relate the formation and separation of everyday mixtures and solutions to disciplines such as chemistry and engineering (109-10)
- safely use tools and apparatus, identify and separate the components of a variety of mixtures using
 - mechanical filtration
 - filtration
 - evaporation
 - distillation
 - paper chromatography (209-6, 307-2)
- identify new questions and problems about mixtures that arise from what is learned (210-16)

Solutions

- distinguish between pure substances and mixtures using the particle theory (307-1)
- describe the characteristics of solutions using the particle model of matter and the terms:
 - solute

Specific Curriculum Outcomes

Students will be expected to

- solvent
- dissolving
- soluble (109-14, 307-3)
- describe the science underlying a distillation apparatus (111-5)
- demonstrate a knowledge of WHMIS standards by recognizing and following warning label symbols (209-7)

Concentration of Solutions

- describe the concentration of solutions qualitatively (307-4)
- identify different ways that concentrations can be demonstrated for various substances (109-7)
- calculate concentrations of solutions in g/L (210-9)
- rephrase questions related to solubility in a testable form and clearly define practical problems (208-1)
- design and carry out procedures to study the effect of temperature on solubility (208-6, 209-1)
- identify and suggest explanations for discrepancies in data after carrying out procedures designed to study the effect of temperature on solubility (210-7)
- predict the solubility of a solute by interpolating or extrapolating from graphical data (210-4)
- describe qualitatively the factors that affect solubility (307-5)
- use a commercial or student-made hydrometer effectively and accurately for collecting data (209-3)

Mixtures, Solutions and the Environment

- provide examples of how science and technology, related to mixtures and solutions, affect our lives (112-7)
- identify some positive and negative effects and intended and unintended consequences of a particular scientific or technological development related to mixtures and solutions (113-1)
- provide examples showing the evolution of refining and separation techniques (109-4)

Social Studies

General Curriculum Outcomes

Citizenship, Power, and Governance

GCO: Students will be expected to demonstrate an understanding of the rights and responsibilities of citizenship and the origins, functions, and sources of power, authority, and governance.

Culture and Diversity

GCO: Students will be expected to demonstrate an understanding of culture, diversity, and world view, recognizing the similarities and differences reflected in various personal, cultural, racial, and ethnic perspectives.

Individuals, Societies, and Economic Decisions

GCO: Students will expected to demonstrate the ability to make responsible economic decisions as individuals and as members of society.

Interdependence

GCO: Students will be expected to demonstrate an understanding of the interdependent relationship among individuals, societies, and the environment—locally, nationally, and globally—and the implications for a sustainable future.

People, Place, and Environment

GCO: Students will be expected to demonstrate an understanding of the interactions among people, places, and the environment.

Time, Continuity, and Change

GCO: Students will be expected to demonstrate an understanding of the past and how it affects the present and the future.

Empowerment

Specific Curriculum Outcomes

Students will be expected to

Introduction

- 7.1.1 Explore the general concept of empowerment
 - define power and authority and explain how each influences their own lives
 - identify and categorize sources of power and authority
 - identify groups that are empowered and disempowered in our society (local, national, and global)

Economic Empowerment

- 7.2.1 Analyse how commodities that lead to economic empowerment have changed
 - identify major economic commodities that have been valued over time
 - examine the importance of land and natural resources as economic commodities in Canada's history
 - examine the various economic commodities in contemporary society
- 7.2.2 Investigate the various ways economic systems empower or disempower people
 - explain that people have basic needs that must be met
 - analyse the role that money plays in meeting basic needs
 - explain how capital is empowering
 - investigate and report on the challenges of the poverty cycle
- 7.2.3 Analyse trends that could impact future economic empowerment
 - identify current trends and examine factors that may impact on these trends
 - predict economic commodities and skills that will empower individuals and groups in the future
 - take actions that will provide or enable personal economic empowerment in the future

Specific Curriculum Outcomes

Students will be expected to

Political Empowerment

- 7.3.1 Evaluate the conditions of everyday life for diverse peoples living in British North America in the mid-1800s, including Aboriginal peoples, African-Canadians, and Acadians
 - identify, locate, and map, using geographic tools, the various lands and colonies in what is now Canada, circa 1850
 - identify, using geographic tools, the diverse peoples that lived in these lands and colonies, circa 1850
 - describe employment opportunities available to various classes, diverse peoples, and genders in urban and rural
 - identify and describe religious, health, and educational organizations which were available to various classes, genders, and diverse peoples in urban and rural areas
 - compare the importance of recreation and creative arts in urban and rural geographic areas
- 7.3.2 Analyse how the struggle for responsible government was an issue of political empowerment and disempowerment
 - research the roles played by the churches, media,
 reformers, and oligarchies in the struggle for responsible government
 - identify and assess the significance of reports and newspaper articles which impacted the creation of responsible government
 - assess the impact of the rebellions of 1837 in the struggle for responsible government
 - analyse the extent to which responsible government empowered the diverse peoples of the colonies
- 7.3.3 Analyse the internal and external factors that led to Confederation
 - identify the British North American colonies' perspectives on Confederation
 - identify the key individuals with power and explain their involvement in making Confederation happen
 - investigate the extent to which external factors affected the Confederation debate
 - determine if Confederation was a democratic process by today's standards

Specific Curriculum Outcomes

Students will be expected to

- 7.3.4 Examine the political structure of Canada as a result of Confederation
 - describe the concept of Federalism
 - chart the structure of the Canadian government after Confederation
 - compare the power given to the different levels of government by the BNA Act
 - explain the role of the individual in the democratic process in Canada

Cultural Empowerment

- 7.4.1 Explain how the expansion and development of Canada during the 1870s and early 1880s affected its various peoples and regions
 - trace the political growth of Canada in the early 1870s
 - explain the key factors of the Red River Rebellion of 1870
 - identify the outcomes of the Rebellion
 - investigate how the National Policy empowered and disempowered the peoples and regions of Canada
- 7.4.2 Analyse the events of the Northwest Rebellion to determine its impact on internal relations in Canada
 - research the key factors that led to the Northwest Rebellion of 1885
 - identify the events and results of the Northwest Rebellion
 - assess past and present perspectives on Louis Riel's role in Canada's history
 - identify the long-term impact of the rebellions on Canadian internal relations
- 7.4.3 Analyse the degree of empowerment and disempowerment for Aboriginal peoples in present-day Atlantic Canada during this period
 - identify the various Aboriginal groups in present day Atlantic Canada during this period
 - describe the way of life of Aboriginal peoples in present day Atlantic Canada during this period
 - explore how national policies, treaties, and the Indian Act impacted the Aboriginal peoples of present-day Atlantic Canada

Specific Curriculum Outcomes

Students will be expected to

- 7.4.4 Analyse the struggle for empowerment by new cultural groups immigrating to Canada between 1870 and 1914
 - identify the various cultural groups that came to Canada between 1870 and 1914
 - investigate the push and pull factors that brought these groups to Canada
 - describe the conditions these groups faced in Canada
 - explain why it is important for ethnic groups to retain their cultural and linguistic identity, heritage, tradition, and spirituality
 - determine whether and how they became more empowered or less empowered by moving to Canada
 - compare Canada's immigration policies during the 20th century to identify examples of prejudice

Societal Empowerment

- 7.5.1 Evaluate the conditions of everyday life for the peoples of Canada at the turn of the 20th century
 - describe the geo-political make-up of Canada in the early 1900s
 - research and describe Canadian society and the technological changes that were affecting it at the turn of the 20th Century
 - compare the conditions of everyday life for Canadians at the turn of the 20th century based on the following criteria: socio-economic status, geographic region, ethnic group, urban/rural, and gender
 - account for the disparities that were evident in society at this time
- 7.5.2 Describe the impact of the Industrial Revolution on industry and workers in Newfoundland and Labrador, the Maritimes, and across Canada
 - describe the typical workday, working conditions, and regulations for the following groups of workers: factory workers, resource industry workers, and women and children in the work force
 - explain the emergence and development of the labour movement and unions in Canada
 - explain the impact that unions had on improving wages and working conditions

Specific Curriculum Outcomes

Students will be expected to

- 7.5.3 Examine how women became more empowered through their role in the social reform movements of the late 19th and early 20th centuries
 - describe the social reform movements that occurred, including education and health reform, prison reform, and living and working conditions reform
 - identify key individuals and groups active in promoting these social changes
 - analyse the impact of these movements on other women's lives
 - explain how women gained more rights and opportunities as a result of their work with social and political reform
 - take age-appropriate action on contemporary social issues

National Empowerment

- 7.6.1 Explain how events in the early-20th century led Canada toward independence
 - explain the different perspectives on what the peoples of Canada at that time felt about Canada, Britain, and the United States
 - explain how events like the Boer War, the Alaskan Boundary Dispute, and the Naval Crisis affected the relationships between Canada and Britain, and Canada and the United States
- 7.6.2. Explain Canada's participation in WWI
 - explain what caused WWI and why Canada became involved
 - explain how advances in technology changed how the war was fought
 - demonstrate an understanding of Canada's role in WWI
- 7.6.3. Analyse the impact of WWI on Canada and its people
 - examine the human and social impact of WWI on Canadians
 - examine the economic changes that resulted from Canada's participation in WWI
 - analyse some of the political issues resulting from Canada's participation in WWI

Reflection

7.7.1 Portray an understanding of the extent of empowerment of individuals, groups, and the nation up to 1920

Visual Arts

General Curriculum Outcomes

Creating, Making, and Presenting

GCO 1: Students will be expected to explore, challenge, develop, and express ideas, using the skills, language, techniques, and processes of the arts.

GCO 2: Students will be expected to create and/or present, collaboratively and independently, expressive products in the arts for a range of audiences and purposes.

Understanding and Connecting Contexts of Time, Place, and Community

GCO 3: Students will be expected to demonstrate critical awareness of and value for the role of the arts in creating and reflecting culture.

GCO 4: Students will be expected to respect the contributions to the arts of individuals and cultural groups in local and global contexts, and value the arts as a record of human experience and expression.

GCO 5: Students will be expected to examine the relationship among the arts, sciences, and environments.

Perceiving, Reflecting, and Responding

GCO 6: Students will be expected to apply critical thinking and problemsolving strategies to reflect on and respond to their own and others' expressive work.

GCO 7: Students will be expected to understand the role of technologies in creating and responding to expressive works

GCO 8: Students will be expected to analyse the relationship between artistic intent and the expressive work.

Specific Curriculum Outcomes

Students will be expected to

Safety

L1,2.S.1 demonstrate proper care of themselves, tools, materials, equipment, materials, products and workspace

Level 1

Overall Outcomes for all Units

- L1AU.1 describe and demonstrate the elements of art and design in prehistoric/ancient art and in their own artwork
- L1AU.2 analyse the elements of art and design in prehistoric/ancient art and in their own artwork
- L1AU.3 describe and demonstrate the principles of art and design in prehistoric/ancient art and in their own
- L1AU.4 analyse the principles of art and design in prehistoric/ancient art and in their own artwork
- L1AU.5 compile and organize a workbook and portfolio
- L1AU.6 demonstrate growth in their own style when creating visual images

Drawing Unit:

- L1.D.1 create simple contour drawings
- L1D.2 describe and demonstrate the vanishing point above, below, and at the horizon line
- L1D.3 describe and demonstrate simple shading of 2-D forms
- L1D.4 describe prehistoric drawings
- L1D.5 interpret prehistoric art in various cultures as an expression of human experiences
- L1D.6 describe and demonstrate how the various surfaces of paper interact with the different media and tools used in drawing to create a variety of visual effects
- L1D.7 identify careers that use drawing skills and knowledge for the job

Specific Curriculum Outcomes

Students will be expected to

Painting Unit

- L1P.1 describe and demonstrate colour theory
- L1P.2 apply colour schemes in their paintings
- L1P.3 describe and demonstrate an understanding of prehistoric paintings
- L1P.4 interpret and demonstrate prehistoric aboriginal paintings
- L1P.6 describe and demonstrate how the various surfaces of paper interact with different media and tools used in painting to create a variety of visual effects
- L1P.7 identify careers that use painting skills and knowledge for the job

3-D Form Unit

- L1F.1 describe what a 3-D form is in comparison to a 2-D shape
- L1P.2 describe the effect that positive and negative space has on 3-D forms
- L1P.3 create a low-relief form using paper
- L1P.4 create a high-relief form using clay and/or plasticine
- L1F.5 describe and replicate a prehistoric 3-D form
- L1P.6 describe and demonstrate how different tools interact with materials that are used in 3-D forms to create a variety of visual effects
- L1P.7 identify careers that use sculpturing/crafting skills and knowledge for the job

Printmaking Unit

- L1PM.1 demonstrate the three procedures for creating a monoprint
- L1PM.2 demonstrate an understanding of the expressive qualities of lines and shapes when creating a monoprint
- L1PM.3 demonstrate colour theory in a monoprint
- L1PM.4 identify and demonstrate stencils prints from the prehistoric art period
- L1PM.5 describe and demonstrate how the various surfaces of paper interact with materials and tools that are used in print making to create a variety of visual effects
- L1PM.6 identify careers that use print making skills and knowledge for the job

Creating, Making, and Presenting

GCO 1: Students will be expected to explore, challenge, develop, and express ideas, using the skills, language, techniques, and processes of the arts.

GCO 2: Students will be expected to create and/or present, collaboratively and independently, expressive products in the arts for a range of audiences and purposes.

Understanding and Connecting Contexts of Time, Place, and Community

GCO 3: Students will be expected to demonstrate critical awareness of and value for the role of the arts in creating and reflecting culture.

GCO 4: Students will be expected to respect the contributions to the arts of individuals and cultural groups in local and global contexts, and value the arts as a record of human experience and expression.

GCO 5: Students will be expected to examine the relationship among the arts, sciences, and environments.

Perceiving, Reflecting, and Responding

GCO 6: Students will be expected to apply critical thinking and problemsolving strategies to reflect on and respond to their own and others' expressive work.

GCO 7: Students will be expected to understand the role of technologies in creating and responding to expressive works

GCO 8: Students will be expected to analyse the relationship between artistic intent and the expressive work.

Specific Curriculum Outcomes

Students will be expected to

Level II

Overall Outcomes for all Units

- L2AU.1 describe and demonstrate the elements of art and design in their viewing of Renaissance art and in their own artwork
- L2AU.2 analyse the elements of art and design in Renaissance art and in their own artwork
- L2AU.3 describe and demonstrate the principles of art and design in Renaissance art and in their own artwork
- L2AU.4 analyse the principles of art and design in Renaissance art and in their own artwork
- L2AU.5 analyse information compiled and organized in their workbook and portfolio

Drawing Unit

- L2D.1 demonstrate spatial techniques in 2-D images
- L2D.2 create a negative space "still life" contour drawing
- L2D.3 demonstrate facial expressions through drawing
- L2D.4 describe and demonstrate an understanding of drawings from the Renaissance period
- L2D.5 analyse drawings from the Renaissance period
- L2D.6 interpret and demonstrate an understanding of drawings from the Renaissance period
- L2D.7 describe and demonstrate how various surfaces of paper interact with the different media and tools used in drawing
- L2D.8 explain how artists can be considered inventors and/or explorers

Painting Unit

- L2P.1 describe and demonstrate how the unique qualities of paints create different visual effects which in turn convey a variety of messages
- L2P.2 demonstrate the illusion of depth through aerial (atmospheric) perspective
- L2P.3 create realistic and abstract images using paints
- L2P.4 demonstrate the expressive quality of colour through paints

Specific Curriculum Outcomes

Students will be expected to

L2P.5	describe and demonstrate an understanding of paintings from the Renaissance period
L2P.6	analyse paintings from the Renaissance period
L2P.7	interpret and demonstrate an understanding of drawings from the Renaissance period
L2P.8	describe and demonstrate how various surfaces of paper interact with the different media and tools used in painting
L2P.9	explain how artists can be considered interpreters and/or storytellers

3-D Form Unit

L2F.1	describe the different methods of sculpturing
L2F.2	construct a balanced free-standing sculpture
L2F.3	demonstrate an understanding of a functional object
L2F.4	demonstrate an understanding of realistic and abstract 3-D forms
L2F.5	describe and demonstrate how different materials, adhesive, tools, and equipment interact in 3-D forms

Printmaking Unit:

	8
L2PM.1	distinguish among the four major methods of printmaking
L2PM.2	demonstrate an understanding of printmaking by choosing one of the methods to create an image
L2PM.3	describe and demonstrate an understanding of prints from the Renaissance period
L2PM.4	analyse prints from the Renaissance period
L2PM.5	interpret and demonstrate an understanding of prints from the Renaissance period
L2PM.6	describe and demonstrate how different materials, surfaces, tools, and equipment interact in printmaking

Communication and Information Technology

General Curriculum Outcomes

General Technology Outcomes

(as per APEF Technology Foundation Document)

GTO A - Technology Problem Solving Students will be expected to design, develop, evaluate and articulate technological solutions.

GTO B - Technology Systems Students will be expected to operate and manage technological systems.

GTO C - History and Evolution of Technology

Students will be expected to demonstrate an understanding of the history and evolution of technology and of its social and cultural implications.

GTO D - Technology and Careers Students will be expected to demonstrate an understanding of current and evolving careers and of the influence of technology on the nature of work.

GEO E - Technological Responsibility Students will be expected to demonstrate an understanding of the consequences of their technological choices.

Codes used in continuum

(A)- Awareness Level
The student is exposed to the technology as
it is being used by others

(G)= Guided Level
The student begins to use the technology
with the help of others

(I)= Independent Level The student uses technology without assistance

Specific Curriculum Outcomes

Students will be expected to

Computer System

- A1.1(G) make use of help features to independently find solutions to problems
- B1.7(G) understand how to display file properties
- B1.9(G) identify system specifications and be aware of compatibility issues between the hardware and the software (processor speed and type, RAM, hard drive size, optical drive, connection types, video card, sound card, monitor, and network cards)
- B1.16(G) import and export files to other formats (.html, .pdf)

Social, Ethical, and Health

- A2.1(G) identify aspects of an ergonomic workstation (lighting, monitor angle, work placement, keyboard height, seat height, posture, etc.)
- B2.1(G) demonstrate proper touch keyboarding techniques (ie. home row, quick key strokes, proper reaches)
- C2.1(G) examine current Canadian law governing the use of technology
- D2.1(G) determine the technological requirements for specific career goals
- E2.5(G) adhere to rules of freeware, shareware, and commercial ware
- E2.6(G) adhere to copyright and privacy laws, give credit to sources of information (MLA, APA)
- E2.9(G) follow publishing etiquette (suitable language, no discrimination, etc.). Adhere to the guidelines for school web pages as outlined by PEI Department of Education and Early Childhood Development

Internet

- A3.2(G) use various tools (search engines and directories) and strategies necessary to carry out research
- A3.3(G) obtain/download material (test, graphics, files) from Internet
- B3.3(G) distinguish among various file formats (file extensions), required plugins, file compression/decompression utilities
- C3.1(G) discuss ways in which the Internet is evolving
- E3.1(G) critically evaluate information and its source based on pre-determined criteria

Specific Curriculum Outcomes

Students will be expected to

Graphics

- A5.2(G) apply principles of design
- B5.2(G) carry out various object manipulations (ie. object alignment, creation of graphics in layers, grouping/ungrouping components of an image)
- B5.3(G) use other graphic creation tools (ie. clone brush, colour replacements, effects and filters, hexidecimal (RGB and CMYK colour values)

Spreadsheets

- A6.2(G) correct errors, modify or delete data in a cell
- B6.2(G) identify different types of cell data (text, numeric, function, date)
- B6.4(G) edit spreadsheet layout (insert and delete rows or columns, select a range of cells, alter column widths and row heights, locking row and column headings, lock and unlock cell(s), fixed titles)
- B6.5(G) enter formulas to perform calculations across columns, rows, cells, move/copy data or formulas from one area to another

Word Processing

- B7.8(G) insert and format tables and text boxes (i.e. lines, fill, columns, rows, borders, alignment)
- B7.10(G) insert automated features (i.e. date and file stamp)

Multimedia

- A8.1(G) apply planning strategies (storyboards, scripts, graphic organizing, brainstorming)
- A8.3(G) describe situations where streaming video and audio is appropriate
- A8.5(G) select appropriate medium to convey message (be conscious of file size, formats and storage location)
- B8.2(G) use multimedia creation and editing tools (screen captures, scanner, sound recording, digital image editing software: still and video)
- B8.3(G) convert file formats for a particular application (.jpg, gif, bmp, mp3, wav, avi, mpeg, mov, etc.)

Specific Curriculum Outcomes

Students will be expected to

Database

- A9.2(G) perform searches on a database file using logical and Boolean operators (understands commands, scope, filters, and conditions)
- A9.3(G) design/plan a database to use as a method of organizing information
- A9.4(G) create and modify a form (add graphics, and error checking routines)
- A9.5(G) use databases to analyze data and look for trends
- B9.2(G) create fields and with variable field types (numeric, text, date) and properties (color, width, font, etc.)
- B9.3(G) restructure database (add/delete fields, change field width)
- B9.4(G) sort records alphabetically, numerically, and by multiple fields
- B9.5(G) create a report from the entire database or selected records
- E9.1(G) examine functions and implications of database driven websites (ie. online purchasing, searching and password secure items)

Telecommunications

Email

- B10.3(G) manage mail/folders
- B10.4(G) manage address books
- B10.5(G) use distribution lists
- B10.6(G) send and open attachments
- B10.7(G) create signatures
- B10.8(G) apply filters and rules

E-Learning collaborative tools

A10.1(G) collaborate using software: (ie. whiteboard, slideshow, application sharing, chat, messaging, send and receive files, photos, group file sharing, resource sharing (links), online content creation and sharing, assignment drop box, video and audio, discussion forums, journal)

Specific Curriculum Outcomes

Students will be expected to

Web Authoring

- A11.2(G) create appropriate text and image file formats
- B11.2(G) create a basic web page (may include backgrounds, images, hyperlinks, tables)
- B11.13(G) indicate where a file or page is hosted (server, web server, hosting service)
- B11.6(G) embed objects (audio, video, pdfs, animation, Flash, Java Script Applet)

Department of Education and Early Childhood Development

English Programs

Specific Curriculum Outcomes Framework

Grade 8

2012

English Language Arts

General Curriculum Outcomes

GCO 1: Students will be expected to speak and listen to explore, extend, clarify, and reflect on their thoughts, ideas, feelings, and experiences.

GCO 2: Students will be expected to communicate information and ideas effectively and clearly, and to respond personally and critically.

GCO 3: Students will be expected to interact with sensitivity and respect, considering the situation, audience, and purpose.

Specific Curriculum Outcomes

Students will be expected to

- 1.1 consider and reflect upon the contribution of others' ideas during discussions
- 1.2 ask questions that probe for accuracy, relevancy, and validity; respond thoughtfully and appropriately to such questions
- 1.3 state a point of view in a convincing manner, offering relevant information to support that viewpoint
- 1.4 listen carefully to identify key points in oral presentations, and evaluate the relevancy of supporting details
- 2.1 contribute to small-group conversation and whole-group discussion, choosing appropriate strategies that contribute to effective talk
- 2.2 understand the importance of adapting communication choices such as vocabulary, sentence structure, rate of speech, and tone to meet the needs of different purposes and audiences; select suitable communication choices in various speaking contexts
- 2.3 give instructions and respond appropriately to instructions, directions, and questions
- 2.4 evaluate the effectiveness of their own and others' talk in a variety of contexts; employ and consider the effects of verbal and nonverbal language (e.g., summaries, examples, and body gestures)
- 3.1 demonstrate active speaking and listening skills such as making eye contact, rephrasing when appropriate, clarifying comments, extending, refining, and/or summarizing points already made
- 3.2 demonstrate a respect for others by developing effective ways to express personal opinions such that they reflect sensitivity to others including differences in culture and language
- 3.3 recognize that spoken language reveals values and attitudes such as bias, beliefs, and prejudice; understand how language is used to influence and manipulate
- 3.4 recognize that different situations (interviews, speeches, debates, conversation) require different speaking and listening conventions (questioning techniques, persuasive talk, formal language) appropriate to the situation

GCO 4: Students will be expected to select, read, and view with understanding a range of literature, information, media, and visual texts.

Specific Curriculum Outcomes

Students will be expected to

- 4.1 select texts that address their learning needs and range of special interests
- 4.2 read widely and experience a variety of young adult fiction and literature from different provinces and countries
- 4.3 explain with some regularity how authors use pictorial, typographical, and other organizational devices such as tables and graphs to achieve certain purposes in their writing, and rely on those devices to construct meaning and enhance understanding
- 4.4 read with greater fluency, confidence, and comprehension by furthering personal understanding, recognition, and use cueing systems and strategies to read and view increasingly complex texts
- 4.5 regularly identify the processes and strategies readers and viewers apply when constructing meaning; develop an understanding of the personal processes and strategies applied when reading and viewing; reflect on personal growth as readers and viewers of texts and use this awareness of personal developments to push reading and viewing ability even further

GCO 5: Students will be expected to interpret, select, and combine information using a variety of strategies, resources, and technologies.

- 5.1 access appropriate print and non-print sources with increasing independence and select information to meet specific needs with increasing speed, accuracy, and confidence
- 5.2 experiment with and rely upon a range of print and nonprint sources for accessing and selecting information
- 5.3 employ various relevant research strategies like generating questions, drafting an outline, or interviewing peers to determine what questions they would like answered by their research

GCO 6: Students will be expected to respond personally to a range of texts.

- 6.1 elaborate personal reactions to what is read and viewed by providing some extended explanations, examples, and supporting arguments
- 6.2 state personal points of view about what is read and viewed and justify views with increasing regularity
- 6.3 with increasing confidence and flexibility, find evidence in texts to support personal claims and viewpoints about issues, themes, and situations

GCO 7: Students will be expected to respond critically to a range of texts, applying their understanding of language, form, and genre.

GCO 8: Students will be expected to use writing and other forms of representing to explore, clarify, and reflect on their thoughts, feelings, experiences, and learnings; and to use their imagination.

Specific Curriculum Outcomes

Students will be expected to

- 7.1 recognize that texts need to be assessed for bias and broaden their understanding and awareness of the ways in which print and media texts can be biased; begin to question and think critically about the relevance and reliability of information when answering questions and inquiries
- 7.2 identify the various features and elements writers use when writing for specific readers for specific purposes; describe how texts are organized to accommodate particular readers' needs and to contribute to meaning and effect
- 7.3 expand on earlier abilities to respond critically to a range of texts in various ways
 - understand how personal knowledge, ideas, values, perceptions, and points of view influence how writers create texts
 - recognize how and when personal background influences meaning construction, understanding, and textual response
 - describe how cultures and reality are portrayed in media texts
- 8.1 demonstrate competence in the frequent use of writing and representing strategies to extend learning; to explore their own thoughts and consider others' ideas, to reflect on their feelings, values, and attitudes; and to identify problems and describe logical solutions
- 8.2 identify and reflect upon strategies that are effective in helping them to learn; describe their personal growth as language learners and language users
- 8.3 begin to use various forms of note-making appropriate to various purposes and situations
- 8.4 demonstrate an awareness of how and when to integrate interesting effects in imaginative writing and other ways of representing; include thoughts and feelings in addition to external descriptions and activities; integrate detail that adds richness and density; identify and correct inconsistencies and avoid extraneous detail; make effective language choices relevant to style and purpose, and when appropriate, select more elaborate and sophisticated vocabulary and phrasing; identify and correct inconsistencies and avoid extraneous detail.

GCO 9: Students will be expected to create texts collaboratively and independently, using a wide variety of forms for a range of audiences and purposes.

GCO 10: Students will be expected to use a range of strategies to develop effective writing and other ways of representing and to enhance their clarity, precision, and effectiveness.

Specific Curriculum Outcomes

Students will be expected to

- 9.2 consider and choose writing forms that match both the writing purpose (to define, report, persuade, compare) and the reader for whom the text is intended (understand why language choice, organization, and voice used in an essay differs from that used in a media advertisement)
- 9.1 continue to develop writing forms previously introduced and expand this range to produce, for example, autobiographies, drama, surveys, graphs, literary responses, biographies, illustrations, and reviews
- 9.3 understand that ideas can be represented in more than one way and used with other forms of representing (speeches, demonstrations, plays)
- 9.4 keep the reader and purpose for writing in mind when choosing content, writing style, tone of voice, language choice, and text organization
- 9.5 know how and when to ask for reader feedback while writing and incorporate appropriate suggestions when revising subsequent drafts from the point of view of a reader, viewer or listener.
- 10.1 build and rely upon a broad knowledge base of how words are spelled and formed; use such knowledge to spell unfamiliar words and expand vocabulary; regularly use resource texts to verify spelling; use punctuation and grammatical structures capably and accurately; use a variety of sentence patterns, vocabulary choices, and paragraphing with flexibility and creativity to engage readers
- 10.2 choose, with increasing regularity, the prewriting, drafting, revising, editing, proofreading, and presentation strategies to aid in producing various texts
- 10.3 attempt to use various technologies for communicating to a variety of audiences for a range of purposes
- 10.4 demonstrate a commitment to crafting pieces of writing and representations
- 10.5 gather information from a variety of sources (interviews, film, CD-ROMs, texts) and integrate ideas in communication

Health

General Curriculum Outcomes

Wellness Choices

Students will make responsible and informed choices to maintain health and to promote safety for self and others.

Specific Curriculum Outcomes

Students will be expected to

Personal Health

W-8.1 examine the relationship between choices and resulting consequences W-8.2 demonstrate an understanding of the need for and benefits of adequate sleep W-8.3 develop personal strategies to deal with pressures to have a certain look/lifestyle W-8.4 use nutrition information on food labels to make informed food choices W-8.5 evaluate personal food choices, and identify strategies to maintain optimal nutrition when eating away from home W-8.6 identify possible negative consequences of substance use and abuse W-8.7 demonstrate an understanding of the effect of harmful

involvement with alcohol, cannabis, and other drugs

Safety and Responsibility

on a family

W-8.8 identify potentially unsafe situations, and begin to develop strategies to reduce risk
 W-8.9 describe rights and responsibilities of employers and employees in relation to workplace safety
 W-8.10 develop strategies to effectively access health information and health services in the community
 W-8.11 identify and develop personal resiliency skills

Sexual Health

- W-8.12 demonstrate an understanding that individuals experience different rates of physical, emotional, sexual, and social development
 W-8.13 determine the signs, methods, and consequences of various types of abuse
 W-8.14 demonstrate an understanding of sexual orientation
- W-8.15 demonstrate an understanding of responsibilities and consequences associated with being sexually active
- W-8.16 describe symptoms, effects, treatments, and prevention for a common sexually transmitted infection
- W-8.17 describe basic types of contraceptives

Relationship Choices

Students will develop effective interpersonal skills that demonstrate responsibility, respect, and caring in order to establish and maintain healthy interactions.

Life Learning Choices

Students will use resources effectively to manage and explore life roles and career opportunities and challenges.

Specific Curriculum Outcomes

Students will be expected to

Understanding and Expressing Feelings

- R-8.1 describe characteristics of persistent negative feeling states
- R-8.2 describe signs associated with suicidal behavior, and identify interventional strategies
- R-8.3 evaluate the relationship between risk management and stress management
- R-8.4 analyse the effects of self-concept on personal communication

Interactions

- R-8.5 describe strategies for maintaining healthy relationships
- R-8.6 describe and provide examples of ethical behavior in relationships
- R-8.7 develop and demonstrate strategies for promoting peaceful relationships

Group Roles and Processes

- R-8.8 describe and explain the positive and negative aspects of conformity and dissent as they relate to individuals in a group or on a team
- R-8.9 describe the characteristics of an effective leader or group member

Learning Strategies

- L-8.1 determine and develop time management strategies/skills to establish personal balance
- L-8.2 examine learning priorities, and develop a personal learning plan
- L-8.3 identify components of ethical decision making
- L-8.4 begin to develop goals and priorities related to learning and future career paths, based on personal interests, aptitudes, and skills

Life Goals and Career Development

- L-8.5 collect data for a personal portfolio to show evidence of a range of interests, assets, and skills
- L-8.6 investigate, interpret, and evaluate career information and opportunities using a variety of sources

Volunteerism

- L-8.7 investigate the characteristics of a mentor, and practise mentorship in a group setting
- L-8.8 relate personal knowledge and skills to potential opportunities for volunteering and providing service to others in the community

Home Economics

General Curriculum Outcomes

GCO 1: Students will be expected to evaluate and manage food technology.

Specific Curriculum Outcomes

Students will be expected to

Foods

- 1.1 identify food preparation equipment
- 1.2 explain the function of food preparation equipment
- 1.3 demonstrate safe use of food preparation equipment
- 1.4 discuss how technology has changed the equipment available for food preparation
- 1.5 identify the information given in a recipe
- 1.6 describe the meaning of basic food preparation terms
- 1.7 correctly and accurately measure various ingredients

GCO 2: Students will be expected to demonstrate an understanding of their personal responsibility in food preparation.

- 2.1 investigate current problems with improper food handling
- 2.2 apply understanding of safe practices
- 2.3 efficiently clean up work area upon completion of food preparation
- 2.4 evaluate prepared food product
- 2.5 develop a basic recipe or variation of a basic recipe for a simple food product
- 2.6 create a food product using a recipe
- 2.7 create plans for preparing simple meals making effective use of resources
- 2.8 identify the sources, selection, cooking methods, and storage of foods from each food group

GCO 3: Students will be expected to demonstrate an understanding of their personal responsibility in making healthy food choices.

- 3.1 identify the four basic food groups and the "other" category
- 3.2 have a basic understanding of the processes of digestion and absorption
- 3.3 identify the six main nutrient groups and their functions, and sources
- 3.4 explore and explain the relationship of food and life style choices to health
- 3.5 identify specific nutrient and related deficiencies

GCO 4: Students will be expected to demonstrate an understanding of the history and evolution of food technology and of its social and cultural implications.

GCO 5: Students will be expected to demonstrate an understanding of current and evolving careers and of the influence of food technology on the nature of work.

GCO 6: Students will be expected to understand, evaluate, and manage technology for the purpose of constructing a sewing project.

GCO 7: Students will be expected to demonstrate an understanding of the history and evolution of fabric technology and of its social and cultural implications.

Specific Curriculum Outcomes

Students will be expected to

- 4.1 examine the historical evolution of food technologies and predict future developments
- 4.2 investigate the range of table arrangements for various types of food service (buffet, family service, plate style, etc.)
- 4.3 explain the need for and the development of convenience foods and fast food meals
- 4.4 examine the impact of a multicultural society on our food choices
- 4.5 examine and discuss guidelines for table behavior
- 5.1 examine the food technologies of specific food production careers and workplaces

Sewing

- 6.1 locate and identify small equipment in the clothing lab
- 6.2 demonstrate care and safety precautions in the use of the sewing equipment
- 6.3 identify the parts of the sewing machine
- 6.4 know the function of each part of the machine
- 6.5 demonstrate the safe use of the sewing machine
- 6.6 become familiar with a pattern
- 6.7 select fabric and prepare it for sewing
- 6.8 practice sewing skills
- 7.1 become familiar with fabric/garment labeling
- 7.2 become familiar with laundry procedures
- 7.3 recognize the principles of good buymanship

Industrial Technology

General Curriculum Outcomes

GCO 1: Students will be expected to demonstrate an understanding of safety in technology.

Specific Curriculum Outcomes

Students will be expected to

- 1.1 identify and use the proper personal safety equipment for student activities
- 1.2 practice good housekeeping and identify/avoid obvious hazards
- 1.3 understand how to select and operate fire safety equipment
- 1.4 identify and use hand tools responsibly
- 1.5 identify and use materials responsibly
- 1.6 identify and use machines responsibly
- 1.7 identify WHMIS symbols
- 1.8 understand the relationship between training and experience to safety
- 1.9 demonstrate an understanding of the safety principal that accidents are preventable and avoidable

GCO 2: Students will be expected to innovatively use tools, machines, and materials.

- 2.1 demonstrate the innovative use of tools
- 2.2 describe safety precautions for each tool
- 2.3 use tools in a safe, productive manner
- 2.4 name common tools and describe their function
- 2.5 choose and use hand tools appropriately for the intended operations
- 2.6 demonstrate the innovative use of machines and materials
- 2.7 describe safety precautions for each machine and material
- 2.8 use machines and materials in a safe productive manner
- 2.9 name common machines and materials and describe their function
- 2.10 choose and use machines and materials appropriately for the intended use and operations
- 3.1 develop a problem solving approach to technological situations
- 3.2 demonstrate an understanding of the design process
 - examine problem situations
 - once a need is established, clearly state the design brief

Specific Curriculum Outcomes

Students will be expected to

- gather information
- investigate related solutions
- develop alternative solutions
- select and develop the best solution (Design Brief)

GCO 3: Students will be expected to design, develop, evaluate, and articulate technological solutions.

- 3.3 evaluate the effectiveness of both their own and other's technological solutions
- 3.4 communicate ideas and information about technological solutions

Mathematics

General Curriculum Outcomes

Number (N)

GCO: Develop number sense.

Specific Curriculum Outcomes

Students will be expected to

- N1 Demonstrate an understanding of perfect square and square root, concretely, pictorially and symbolically (limited to whole numbers).
- N2 Determine the approximate square root of numbers that are not perfect squares (limited to whole numbers).
- N3 Demonstrate an understanding of percents greater than or equal to 0%.
- N4 Demonstrate an understanding of ratio and rate.
- N5 Solve problems that involve rates, ratios and proportional reasoning.
- N6 Demonstrate an understanding of multiplying and dividing positive fractions and mixed numbers, concretely, pictorially and symbolically.
- N7 Demonstrate an understanding of multiplication and division of integers, concretely, pictorially and symbolically.

Patterns and Relations (PR)

GCO: Use patterns to describe the world and solve problems.

GCO: Represent algebraic expressions in multiple ways.

PR1 Graph and analyse two-variable linear relations.

PR2 Model and solve problems using linear equations of the form:

•
$$ax = b$$
;

•
$$\frac{x}{a}$$
 = b; a = 0;

•
$$ax + b = c$$
;

•
$$\frac{x}{a}$$
 + b = c, a = \emptyset ;

$$\bullet \ \ a(x+b)=c$$

concretely, pictorially and symbolically, where a, b and c are integers.

Shape and Space (SS)

GCO: Use direct and indirect measure to solve problems.

GCO: Describe the characteristics of 3-D objects and 2-D shapes, and analyse the relationships among them.

- SS1 Develop and apply the Pythagorean theorm to solve problems.
- SS2 Draw and construct nets for 3-D objects.
- SS3 Determine the surface area of:
 - right rectangular prisms;
 - right triangular prisms;
 - right cylinders

to solve problems.

GCO: Describe and analyse position and motion of objects and shapes.

Students will be expected to

SS4 Develop and apply formulas for determining the volume of right prisms and right cylinders.

Specific Curriculum Outcomes

- Draw and interpret top, front and side views of 3-D objects composed of right rectangular prisms.
- SS6 Demonstrate an understanding of tessellation by:
 - explaining the properties of shapes that make tessellaing possible;
 - creating tessellations;
 - identifying tessellations in the environment.

Statistics and Probability (SP)

GCO: Collect, display, and analyse data to solve problems.

GCO: Use experimental or theoretical probabilities to represent and solve problems involving uncertainty.

Critique ways in which data is presented. SP1

Solve problems involving the probability of independent events.

Music

Please refer to the Instrumental Music Curriculum.

Physical Education

Please note: The three goals, Active Living, Skillful Movements, and Relationships will be referred to throughout this section as GCO 1, GCO 2, and GCO 3.

GCO 1: Active Living	GCO 2: Skillful Movement	GCO 3: Relationships
Enjoy and engage in healthy levels of participation in movement activities to support lifelong active living in the context of self, family, and community.	Enhance quality of movement by understanding, developing, and transferring movement concepts, skills, tactics, and strategies to a wide variety of movement activities.	Balance self through safe and respectful personal, social, cultural, and environmental interactions in a wide variety of movement activities.

General Curriculum Outcomes

GCO₁

Specific Curriculum Outcomes

Active Living

8.1 Health-Related Fitness

Create and implement a personal health-related fitness plan targeting the **health-related** fitness components of **cardiovascular endurance, muscular endurance, and flexibility** that involves setting a goal for improvement, applies the **F.I.T.T. principle** (Frequency, Intensity, Type of activity, and Time), and incorporates daily moderate to vigorous movement activity.

8.2 Muscular System

Apply an understanding of how to positively affect the major muscle groups (e.g., biceps, triceps, pectorals, abdominals, quadriceps, hamstrings) while clarifying an understanding of the effects of exercise and inactivity on the muscular system (e.g., increased/decreased strength, increased/decreased lean muscle, increased/decreased elasticity, increased/decreased muscle tone).

8.3 Skill-related Fitness

Implement personal plans for improvement of **skill-related components of fitness** (power, agility, speed, reaction time, balance, and coordination) to improve the weaker components and to support enjoyment in personal, social, and competitive movement activities.

Specific Curriculum Outcomes

8.8 Alternative Environment Activities

Apply and adapt selected activity-related skills (e.g., carrying, paddling, gripping, hanging, wheeling, digging, fire building, snow ploughing, compass reading) and strategies required for participation in **alternate environment activities** (e.g., backpacking, hiking, cycling, overnight camping, canoeing, snowshoeing, wall climbing, in-line skating, skate boarding, cross-country skiing, tracking, roping, dog sledding, skating, orienteering, downhill skating, tobogganing, Quincy building.

8.9 Movement Sequences

Perform, both as a leader and a follower, self-created, collaboratively created, and established sequences of movements with smooth transitions, incorporating skills and combinations of skills from a variety of **games** (i.e., target games, net/wall games, striking/fielding games, invasion/territorial games, low-organizational and inventive games) and **body management activities** (e.g., dance, aquatics, educational gymnastics, track and field, pilates, yoga, wrestling, martial arts, aerobics), alone and with others.

8.10 Volunteerism & Leadership

Create and implement an individual or small group plan to engage and support at least one other person in repeated participation in movement activity at school, at home, or in the community.

8.11 Technological Influences

Demonstrate an understanding of the impact of current and emerging technologies (e.g., computer and video games, fitness equipment such as treadmills, heavy wooden racquets compared to lightweight fibreglass racquets, sports shoes) on fitness, fitness-related career options, and well-being.

8.12 Basic First Aid

Demonstrate the skills required to administer basic first aid (e.g., scene management, seeking help, treating minor injuries, applying precautions for body fluids) required as a result of injury caused by participation in movement activities.

Specific Curriculum Outcomes

8.13 Social Behaviour

Analyse environmental influences (e.g., family beliefs/values, culture, gender, role models, workplace, peers, advertising, television) to assess their impact on responsible social behaviour in movement activity settings.

GCO₂

Skillful Movement

8.2 Muscular System

Apply an understanding of how to positively affect the major muscle groups (e.g., biceps, triceps, pectorals, abdominals, quadriceps, hamstrings) while clarifying an understanding of the effects of exercise and inactivity on the muscular system (e.g., increased/decreased strength, increased/decreased lean muscle, increased/decreased elasticity, increased/decreased muscle tone).

8.3 Skill-related Fitness

Implement personal plans for improvement of **skill-related components of fitness** (power, agility, speed, reaction time, balance, and coordination) to improve the weaker components and to support enjoyment in personal, social, and competitive movement activities.

8.4 Complex Skills

Utilize, including smooth transitions, complex movement skills that combine **locomotor** (traveling) skills, **non-locomotor** (non-traveling) skills, and **manipulative** (moving objects) skills (e.g., lay-up in basketball, spike in volleyball, hoop dancing, dribbling to a shot in soccer, rhythmical gymnastics movement, gathering to a grounder and throwing to a base in softball, stick handling to a shot in floor hockey, ball control while moving in double ball) to enhance personal performance and enjoyment in a variety of movement activities.

8.5 Biomechanics

Explore, apply and communicate biomechanical concepts and principles related to levers and projectiles as well as Newton's Laws of Motion as a means to enhance independence in learning motor skills.

Specific Curriculum Outcomes

8.6 Concepts, Tactics, & Strategies

Design and implement, collaboratively, plans to develop the performance concepts and application of tactics and strategies to enhance individual and team performance, involved in each of:

- **target games** (e.g., bowling, curling, archery, golf, bocce ball)
- striking/fielding games (e.g., long ball, softball, slo-pitch, cricket)
- **net/wall games** (e.g., badminton, tennis, table tennis, volleyball, pickleball)
- invasion/territorial games (e.g., double ball, basket-ball, soccer, soft lacrosse, ultimate frisbee, rugby, team handball)
- **low-organizational and inventive games** (e.g., walleyball, capture the flag, prisoner's base, speedball, kick the can, snowsnakes).

8.7 Decision Making

Analyse the situational decisions, of self and others, while under the pressure of game play in target games, new/wall games, striking/fielding games, invasion/territorial games, and low-organizational, inventive, and cooperative games to determine the effectiveness of the decisions and to propose options for improvement.

8.8 Alternate Environment Activities

Apply and adapt selected activity-related skills (e.g., carrying, paddling, gripping, hanging, wheeling, digging, fire building, snow ploughing, compass reading) and strategies required for participation in alternate environment activities (e.g., backpacking, hiking, cycling, overnight camping, canoeing, snowshoeing, wall climbing, in-line skating, skate boarding, cross-country skiing, tracking, roping, dog sledding, skating, orienteering, Quincy-building).

8.9 Movement Sequences

Perform, both as a leader and a follower, self-created, collaboratively created, and established sequences of movements with smooth transitions, incorporating skills and combinations of skills from a variety of games (i.e., target games, net/wall games, striking/fielding games, invasion/territorial games, low-organizational and inventive games) and body management activities (e.g., dance, aquatics, educational gymnastics, track and field, pilates, yoga, wrestling, martial arts, aerobics), alone and with others.

GCO₃

Specific Curriculum Outcomes

Relationships

8.7 Decision Making

Analyse the situational decisions, of self and others, while under the pressure of game play in target games, new/wall games, striking/fielding games, invasion/territorial games, and low-organizational, inventive, and cooperative games to determine the effectiveness of the decisions and to propose options for improvement.

8.8 Alternate Environment

Apply and adapt selected activity-related skills (e.g., carrying, paddling, gripping, hanging, wheeling, digging, fire building, snow ploughing, compass reading) and strategies required for participation in **alternate environment activities** (e.g., backpacking, hiking, cycling, overnight camping, canoeing, snowshoeing, wall climbing, in-line skating, skate boarding, cross-country skiing, tracking, roping, dog sledding, skating, orienteering, Quincy-building).

8.9 Movement Sequences

Perform, both as a leader and a follower, self-created, collaboratively created, and established sequences of movements with smooth transitions, incorporating skills and combinations of skills from a variety of **games** (i.e., target games, net/wall games, striking/fielding games, invasion/territorial games, low-organizational and inventive games) and body management activities (e.g., dance, aquatics, educational gymnastics, track and field, pilates, yoga, wrestling, martial arts, aerobics), alone and with others.

8.10 Volunteerism & Leadership

Create and implement an individual or small group plan to engage and support at least one other person in repeated participation in movement activity at school, at home, or in the community.

Specific Curriculum Outcomes

8.11 Technological Influences

Demonstrate an understanding of the impact of current and emerging technologies (e.g., computer and video games, fitness equipment such as treadmills, heavy wooden racquets compared to lightweight fibreglass racquets, sports shoes) on fitness, fitness-related career options, and well-being.

8.12 Basic First Aid

Demonstrate the skills required to administer basic first aid (e.g., scene management, seeking help, treating minor injuries, applying precautions for body fluids) required as a result of injury caused by participation in movement activities.

8.13 Social Behaviour

Analyse environmental influences (e.g., family beliefs/values, culture, gender, role models, workplace, peers, advertising, television) to assess their impact on responsible social behaviour in movement activity settings.

8.14 History & Culture

Analyse the influences of past and present social, cultural, and environmental perspectives on the need for recent physical movement initiatives (e.g., ParticipAction, Indigenous Games, walking paths) that support personal, family, and community active living and well-being.

Science

General Curriculum Outcomes

STSE

GCO 1: Students will develop an understanding of the nature of science and technology, of the relationships between science and technology, and of the social and environmental contexts of science and technology.

Skills

GCO 2: Students will develop the skills required for scientific and technological inquiry, for solving problems, for communicating scientific ideas and results, for working collaboratively, and for making informed decisions.

Knowledge

GCO 3: Students will construct knowledge and understandings of concepts in life science, physical science, and Earth and space science, and apply these understandings to interpret, integrate, and extend their knowledge.

Attitudes

GCO 4: Students will be encouraged to develop attitudes that support the responsible acquisition and application of scientific and technological knowledge to the mutual benefit of self, society, and the environment.

Specific Curriculum Outcomes

Students will be expected to

Earth and Space Science: Water Systems on Earth

Waves, Tides, and Water Currents

- carry out procedures in order to investigate how temperature differences in water cause currents (209-1)
- state a conclusion based on experimental data about the formation of water currents (209-4, 210-11)
- explain how waves and tides are generated (311-10)
- formulate operational definitions on the basis of investigations of waves for
 - wave length
 - wave height
 - crest
 - trough (208-7)

Shorelines

- select and integrate information from various print and electronic sources related to processes of erosion and
- deposition that result from wave action and water flow (209-5, 311-11)
- explain how waves and tides interact with shorelines (311-10)
- provide examples of various technologies designed to contain damage due to waves and tides (112-3)
- prepare a presentation or report on the effect of tides and waves on a shoreline and evaluate individual and group processes used in planning and completing the task (211-2, 211-4)

Oceans Basins and Continental Drainage Systems

- describe processes that lead to the development of ocean basins and continental drainage systems
 - glaciation
 - continental drift
 - erosion
 - volcanic action (311-7)

Specific Curriculum Outcomes

Students will be expected to

- select and integrate information from various print and electronic sources to provide examples of technologies that have enabled scientific research involving ocean basins (111-3, 209-5)
- provide examples of how technologies used to investigate the ocean floor have improved over time (110-8)
- identify some strengths and weaknesses of technologies used to investigate the ocean floor (210-3)
- provide examples of public and private Canadian institutions that support scientific and technological research involving oceans (112-5)

Oceans and Species Distribution

- apply the concept of systems to show how changes in one component of a body of water causes change in other components in that system (111-6)
- describe the interactions of the ocean currents, winds, and regional climates (311-9)
- · analyse factors that affect productivity and species
- distribution in marine and fresh water environments (311-8)
- predict and interpret trends in populations of a marine species from graphical data by interpolating and
- extrapolating data (210-4, 210-6)
- describe some positive and negative effects of marine technologies in the ocean (113-2)
- provide examples of problems related to the oceans that cannot be resolved using scientific and technological knowledge (113-10)

Glaciers and Polar Icecaps

- describe factors that affect glaciers and polar icecaps and describe their consequent effects on the environment (311-12)
- identify new questions that arise from the study of glaciers and polar icecaps (210-16)

Specific Curriculum Outcomes

Students will be expected to

Physical Science Optics

Properties of Visible Light

- identify and describe the following properties of visible light: (308-08)
 - travels in a straight line (rectilinear propagation)
 - speed of light in air is 300,000 km/s
 - reflection
 - refraction and dispersion
 - travels in a vacuum and in some types of media

Reflection

- describe the laws of reflection of visible light and their applications in everyday life:
 - regular versus diffuse reflection
 - angle of incidence = angle of reflection (308-09)
- formulate operational definitions for incidence, reflection, and the normal (208-7)
- estimate angles of incidence and reflection (209-2)
- work co-operatively and collaboratively with others to plan and safely construct an optical device using mirrors (209-6, 211-1)
- identify and correct practical problems in the way a
- constructed optical device functions (210-14)

Refraction and Dispersion

- rephrase questions related to refraction in a testable form (208-1)
- predict the effect of transparent media of varying densitites on the angle of refraction of light (208-5)
- estimate angles of refraction (209-2)
- describe qualitatively how visible light is refracted (210-11, 308-10)

Specific Curriculum Outcomes

Students will be expected to

- estimate focal length of a convex lens by finding its focal point (209-2)
- describe how optical technologies have developed through systematic trial-and-error processes constrained by the optical properties of the material (109-5)
- provide examples of optical technologies that enable scientific research and relate personal activities associated with such technologies (109-10, 111-3)

Electromagnetic Radiation

- describe different types of electromagnetic radiation including infrared, ultraviolet, X-rays, microwaves, and radio waves (308-11)
- compare the properties of visible light to the properties of other types of electromagnetic radiation including infrared, ultraviolet, X-rays, microwaves, and radio waves (308-12)
- explain the importance of using the words frequency and wavelength correctly (109-13)
- provide examples related to optics that illustrate that scientific and technological activities take place individually and in group settings (112-8)
- describe possible negative and positive effects of technologies associated with electromagnetic radiation (113-2)

Physical Science: Fluids

Floating and Sinking - Density

- describe the relationship among the mass, volume, and density of solids, liquids, and gases using the particle model of matter (307-8)
- analyse quantitatively the density of various substances and suggest explanations for discrepancies in data, such as the measurement of the volume of irregular objects by water displacement (210-7, 307-11)
- explain the effects of changes in temperature on the density of solids, liquids, and gases and relate the result to the particle model of matter (307-9)

Specific Curriculum Outcomes

Students will be expected to

- describe situations in life where the density of substances naturally changes or is intentionally changed (307-10)
- identify questions to investigate arising from practical problems involving floating, sinking, and density (208-2)
- work cooperatively with team members to design an experiment and identify major variables in order to investigate floating, sinking, and density (208-6, 211-3)

Forces of Fluids

- describe the movement of objects in terms of balanced and unbalanced forces (309-2)
- test and compare a student-constructed dynamometer with a commercial dynamometer (210-13)
- calibrate a student-constructed dynamometer with known masses (210-14)
- describe qualitatively the difference between mass and weight (309-1)
- provide examples of technologies that have been developed because of our understanding of density and buoyancy (111-1)
- explain quantitatively the relationship between force, area, and pressure (309-3)
- describe the science underlying hydraulic technologies (111-5)
- explain qualitatively the relationship among pressure, volume, and temperature when liquid and gaseous fluids are compressed or heated (309-4)

Viscosity of Liquids

- compare the viscosity of various liquids (307-6)
- design an experiment to test the viscosity of various common fluids and identify the major variables (208-6)
- describe factors that can modify the viscosity of a liquid (307–7)

Specific Curriculum Outcomes

Students will be expected to

- use a temperature-measuring technology effectively and accurately for collecting data in temperature-viscosity investigations (209-3)
- demonstrate a knowledge of WHMIS standards by demonstrating the correct methods of disposal of various oils, for example (209-7)
- identify and relate personal activities and potential applications to fluid dynamics (109-10, 112-7, 210-12)

Life Science: Cells, Tissues, Organs, and Systems

Cells

- illustrate and explain that the cell is a living system that exhibits the following characteristics of life:
 - growth
 - locomotion
 - stimulus/response
 - reproduction (304-4)
- explain that growth and reproduction depend on cell division (304-6)
- distinguish between plant and animal cells (304-5)
- use a light microscope or microviewer correctly to produce a clear image of cells (209-3)
- work co-operatively with team members to develop and construct models of cells (211-3)
- explain that it is important to use proper terms when comparing plant and animal cells (109-13)

Interdependence Among Cells, Tissues, Organs, and Systems

- relate the needs and functions of various cells and organs to the needs and functions of the human organism as a whole (304-8)
- explain structural and functional relationships between and among cells, tissues, organs, and systems in the human body (304-7)

Specific Curriculum Outcomes

Students will be expected to

- compare the early idea that living organisms were made of air, fire, and water with the modern cell theory (110-2)
- evaluate individual and group processes used in researching the roles of the main organ systems (211-4)

Healthy/Unhealthy Systems

- describe the basic factors that affect the functions and efficiency of the human respiratory, circulatory, digestive, excretory, and nervous systems (304-9)
- illustrate examples of conflicting evidence related to how we should maintain and/or treat body systems (110-5)
- describe the science underlying various technologies used to assist or replace unhealthy organs or systems (111-5)

Interdependence of Body Systems

- rephrase questions into testable form about the factors that affect physical fitness and health (208-1)
- design and carry out an experiment to compare and contrast heart rate and breathing rate in an individual during various levels of activity and identify and control major variables (208-6, 209-1)
- suggest explanations for variations in the heart rate and the breathing rate of an individual during various levels of activity when the experiment is repeated (210-7)
- describe three examples of the interdependence of various systems of the human body (304-10)
- provide examples of careers that are associated with the health of body systems (112-10)
- make informed decisions about applications of science and technology that are associated with human body systems, taking into account personal and social advantages and disadvantages (113-8)

Social Studies

General Curriculum Outcomes

Citizenship, Power, and Governance

GCO: Students will be expected to demonstrate an understanding of the rights and responsibilities of citizenship and the origins, functions, and sources of power, authority, and governance.

Culture and Diversity

GCO: Students will be expected to demonstrate an understanding of culture, diversity, and world view, recognizing the similarities and differences reflected in various personal, cultural, racial, and ethnic perspectives.

Individuals, Societies, and Economic Decisions

GCO: Students will expected to demonstrate the ability to make responsible economic decisions as individuals and as members of society.

Interdependence

GCO: Students will be expected to demonstrate an understanding of the interdependent relationship among individuals, societies, and the environment—locally, nationally, and globally—and the implications for a sustainable future.

People, Place, and Environment

GCO: Students will be expected to demonstrate an understanding of the interactions among people, places, and the environment.

Time, Continuity, and Change

GCO: Students will be expected to demonstrate an understanding of the past and how it affects the present and the future.

Canadian Identity

Specific Curriculum Outcomes

Students will be expected to

Exploring Canadian Identity

8.1.1 Investigate how artistic and literary expression reflects the following aspects of Canadian identity: landscape, climate, history, people-citizenship, and related challenges and opportunities

Geographic Influences

- 8.2.1 Demonstrate an understanding of the basic features of Canada's landscape and climate
 - identify and locate major land forms of Canada
 - explain the creation and characteristics of mountains and plains
 - describe and account for the variation in physical landscape across Canada
 - identify and locate major climatic regions of Canada
 - explain the characteristics of Canada's climatic regions and account for the variation among them
- 8.2.2 Analyse the effects of selected geographic factors on Canadian identity
 - describe where Canadians live and explain why communities are established and grow in particular locations
 - account for the variations in growth of settlements due to physical and human factors
 - explain the effect of natural and human resources on regional prosperity
 - confront the issues of regional stereotypes
- 8.2.3 Demonstrate an understanding of the nature of migration and its impact on post-1920 Canada
 - explain why people migrate and provide examples of push and pull factors
 - identify and explain changing source areas for immigrants to Canada since 1920
 - identify and explain changing destinations within Canada for migrants and immigrants since 1920

Specific Curriculum Outcomes

Students will be expected to

- identify and explain the nature of emigration from Canada and its impact since 1920
- demonstrate an understanding of the debate surrounding immigration policy since 1920
- 8.2.4 Analyse the effect of geographic features on the development of Canada and of a selected country with similar geographic features
 - compare the size, landforms, climate, and natural and human resources of the two countries
 - compare how these features have created challenges and opportunities for the development of the two countries

Decades of Change

- 8.3.1 Analyse the impact of changing technology and socioeconomic conditions on differing prosperities and lifestyles in Canada in the 1920s and 1930s
 - identify the factors leading to prosperity in the 1920s
 - examine the impact of new technology on lifestyle in the 1920s
 - analyse the causes of the Great Depression
 - determine the effects of the Great Depression on economic, social, and political conditions in the 1930s
- 8.3.2 Demonstrate an understanding of Canada's participation in WWII
 - identify the factors leading to WWII
 - explain Canada's response to the outbreak of WWII
 - demonstrate an understanding of the role of Canada's army, air force, navy, and merchant marine during WWII
 - examine the extent of Canada's human and material contribution to WWII
- 8.3.3 Analyse the effect of WWII on Canada and its people
 - describe the experiences and attitudes of Canadians during WWII
 - examine how the war strained ethnic and cultural relations within our nation, including the Maritimes, and Newfoundland

Specific Curriculum Outcomes

Students will be expected to

- analyse the economic, social, and political changes as a result of WWII
- examine Canada's reaction and response to the moral and ethical issues raised by events such as the Holocaust and the use of the first atomic bombs
- 8.3.4 Evaluate Canada's role in the world since WWII
 - explain the meaning of the term Cold War
 - evaluate Canada's role in NATO and NORAD during and since the Cold War
 - evaluate Canada's role as a global citizen through its involvement in the United Nations and other international organizations
- 8.3.5 Analyse the impact of changing technology and socioeconomic conditions on Canada's prosperity and lifestyles in the 1950s and 1960s
 - examine how changing technologies affected lifestyle
 - identify attitudes and values of the 50s and 60s and examine how they affected lifestyle
- 8.3.6 Compare the social and cultural trends in Canada in the 1950s, 1960s and 1970s
 - suggest reasons for the conformity of the 1950s and its rejection in the 1960s and 1970s
 - describe the idealism that developed in the 1960s by examining movements such as the civil rights movement, the women's rights movement, the peace movement, and environmentalism
- 8.3.7 Analyse how globalization has affected Canada and Canadians since 1980
 - define "globalization"
 - examine the effects of the end of the Cold War
 - examine the extent of American influence on world
 - identify the causes of economic globalization and its effects on Canada
 - predict the impact of global environmental threats on Canada's future

Specific Curriculum Outcomes

Students will be expected to

Citizenship

- 8.4.1 Take age-appropriate actions that demonstrate the rights and responsibilities of citizenship (local, national and global)
 - examine the concept of citizenship
 - define rights and responsibilities
 - examine the criteria for becoming a Canadian citizen
 - examine the United Nations Declaration of Human Rights
 - demonstrate an understanding of the Canadian Charter of Rights and Freedoms
 - develop a definition of responsible citizenship
 - plan and carry out age-appropriate actions that demonstrate responsible citizenship
- 8.4.2 Demonstrate an understanding of how citizenship has evolved over time
 - examine factors in ancient, medieval, and early modern times that influenced our modern democratic concept of citizenship
 - describe how the history of Canada has shaped our concept of citizenship
 - examine the role and responsibility of the citizen in supporting the rule of law
 - identify current global events and the impact they may have on views of citizenship
- 8.4.3 Demonstrate an understanding of the structure and operation of government in Canada under a federal system
 - describe the operation and responsibilities of government at the municipal, provincial, and federal levels
 - demonstrate an understanding of the relationship between the provincial and federal governments and account for provincial and regional variations in this relationship
 - examine the roles and responsibilities of the executive, legislative, and judicial branches of government
 - examine the processes leading to the formation and dissolution of governments

Reflections on Canadian Identity

8.5.1 Portray personal understanding of Canadian identity

Visual Arts

General Curriculum Outcomes

Creating, Making, and Presenting

GCO 1: Students will be expected to explore, challenge, develop, and express ideas, using the skills, language, techniques, and processes of the arts.

GCO 2: Students will be expected to create and/or present, collaboratively and independently, expressive products in the arts for a range of audiences and purposes.

Understanding and Connecting Contexts of Time, Place, and Community

GCO 3: Students will be expected to demonstrate critical awareness of and value for the role of the arts in creating and reflecting culture.

GCO 4: Students will be expected to respect the contributions to the arts of individuals and cultural groups in local and global contexts, and value the arts as a record of human experience and expression.

GCO 5: Students will be expected to examine the relationship among the arts, sciences, and environments.

Perceiving, Reflecting, and Responding

GCO 6: Students will be expected to apply critical thinking and problemsolving strategies to reflect on and respond to their own and others' expressive work.

GCO 7: Students will be expected to understand the role of technologies in creating and responding to expressive works

GCO 8: Students will be expected to analyse the relationship between artistic intent and the expressive work.

Specific Curriculum Outcomes

Students will be expected to

Safety

L1,2.S.1 demonstrate proper care of themselves, tools, materials, equipment, materials, products and workspace

Level 1

Overall Outcomes for all Units

L1AU.1	describe and demonstrate the elements of art and design in prehistoric/ancient art and in their own artwork	
L1AU.2	analyse the elements of art and design in prehistoric/ancient art and in their own artwork	
L1AU.3	describe and demonstrate the principles of art and design in prehistoric/ancient art and in their own artwork	
L1AU.4	analyse the principles of art and design in prehistoric/ancient art and in their own artwork	
L1AU.5	.U.5 compile and organize a workbook and portfolio	
L1AU.6	demonstrate growth in their own style when creating visual images	

Drawing Unit

L1.D.1	create simple contour drawings	
L1D.2	describe and demonstrate the vanishing point above, below, and at the horizon line	
L1D.3	describe and demonstrate simple shading of 2-D forms	
L1D.4	describe prehistoric drawings	
L1D.5	interpret prehistoric art in various cultures as an expression of human experiences	
L1D.6	describe and demonstrate how the various surfaces of paper interact with the different media and tools used in drawing to create a variety of visual effects	
L1D.7	identify careers that use drawing skills and knowledge for the job	

Specific Curriculum Outcomes

Students will be expected to

Painting Unit

L1P.1 describe and demonstrate colour theory L1P.2 apply colour schemes in their paintings describe and demonstrate an understanding of L1P.3 prehistoric paintings L1P.4 interpret and demonstrate prehistoric aboriginal paintings L1P.6 describe and demonstrate how the various surfaces of paper interact with different media and tools used in painting to create a variety of visual effects L1P.7 identify careers that use painting skills and knowledge for

3-D Form Unit

the job

describe what a 3-D form is in comparison to a 2-D shape L1P.2 describe the effect that positive and negative space has on 3-D forms L1P.3 create a low-relief form using paper L1P.4 create a high-relief form using clay and/or plasticine L1F.5 describe and replicate a prehistoric 3-D form L1P.6 describe and demonstrate how different tools interact with materials that are used in 3-D forms to create a variety of visual effects L1P.7 identify careers that use sculpturing/crafting skills and knowledge for the job

Printmaking Unit

L1PM.1 demonstrate the three procedures for creating a monoprint
L1PM.2 demonstrate an understanding of the expressive
qualities of lines and shapes when creating a monoprint
L1PM.3 demonstrate colour theory in a monoprint
L1PM.4 identify and demonstrate stencils prints from the
prehistoric art period
L1PM.5 describe and demonstrate how the various surfaces of
paper interact with materials and tools that are used in
printmaking to create a variety of visual effects
L1PM.6 identify careers that use printmaking skills and
knowledge for the job

Creating, Making, and Presenting

GCO 1: Students will be expected to explore, challenge, develop, and express ideas, using the skills, language, techniques, and processes of the arts.

GCO 2: Students will be expected to create and/or present, collaboratively and independently, expressive products in the arts for a range of audiences and purposes.

Understanding and Connecting Contexts of Time, Place, and Community

GCO 3: Students will be expected to demonstrate critical awareness of and value for the role of the arts in creating and reflecting culture.

GCO 4: Students will be expected to respect the contributions to the arts of individuals and cultural groups in local and global contexts, and value the arts as a record of human experience and expression.

GCO 5: Students will be expected to examine the relationship among the arts, sciences, and environments.

Perceiving, Reflecting, and Responding

GCO 6: Students will be expected to apply critical thinking and problem-solving strategies to reflect on and respond to their own and others' expressive work.

GCO 7: Students will be expected to understand the role of technologies in creating and responding to expressive works

GCO 8: Students will be expected to analyse the relationship between artistic intent and the expressive work.

Specific Curriculum Outcomes

Students will be expected to

Level II

Overall Outcomes for all Units

- L2AU.1 describe and demonstrate the elements of art and design in their viewing of Renaissance art and in their own artwork
- L2AU.2 analyse the elements of art and design in Renaissance art and in their own artwork
- L2AU.3 describe and demonstrate the principles of art and design in Renaissance art and in their own artwork
- L2AU.4 analyse the principles of art and design in Renaissance art and in their own artwork
- L2AU.5 analyse information compiled and organized in their workbook and portfolio

Drawing Unit

- L2D.1 demonstrate spatial techniques in 2-D images
- L2D.2 create a negative space "still life" contour drawing
- L2D.3 demonstrate facial expressions through drawing
- L2D.4 describe and demonstrate an understanding of drawings from the Renaissance period
- L2D.5 analyse drawings from the Renaissance period
- L2D.6 interpret and demonstrate an understanding of drawings from the Renaissance period
- L2D.7 describe and demonstrate how various surfaces of paper interact with the different media and tools used in drawing
- L2D.8 explain how artists can be considered inventors and/or explorers

Painting Unit

- L2P.1 describe and demonstrate how the unique qualities of paints create different visual effects which in turn convey a variety of messages
- L2P.2 demonstrate the illusion of depth through aerial (atmospheric) perspective
- L2P.3 create realistic and abstract images using paints
- L2P.4 demonstrate the expressive quality of colour through paints

Specific Curriculum Outcomes

Students will be expected to

L2P.5	describe and demonstrate an understanding of paintings from the Renaissance period
L2P.6	analyse paintings from the Renaissance period
L2P.7	interpret and demonstrate an understanding of drawings from the Renaissance period
L2P.8	describe and demonstrate how various surfaces of paper interact with the different media and tools used in painting
L2P.9	explain how artists can be considered interpreters and/or storytellers

3-D Form Unit

L2F.1	describe the different methods of sculpturing
L2F.2	construct a balanced free-standing sculpture
L2F.3	demonstrate an understanding of a functional object
L2F.4	demonstrate an understanding of realistic and abstract 3-D forms
L2F.5	describe and demonstrate how different materials, adhesive, tools, and equipment interact in 3-D forms

Printmaking Unit

L2PM.1	distinguish among the four major methods of printmaking	
L2PM.2	demonstrate an understanding of printmaking by choosing one of the methods to create an image	
L2PM.3	describe and demonstrate an understanding of prints from the Renaissance period	
L2PM.4	analyse prints from the Renaissance period	
L2PM.5	.5 interpret and demonstrate an understanding of prints from the Renaissance period	
L2PM.6	describe and demonstrate how different materials, surfaces, tools, and equipment interact in printmaking	

Communication and Information Technology

General Curriculum Outcomes

(as per APEF Technology Foundation Document)

GTO A - Technology Problem Solving Students will be expected to design, develop, evaluate and articulate technological solutions.

GTO B - Technology Systems Students will be expected to operate and manage technological systems.

GTO C - History and Evolution of Technology

Students will be expected to demonstrate an understanding of the history and evolution of technology and of its social and cultural implications.

GTO D - Technology and Careers Students will be expected to demonstrate an understanding of current and evolving careers and of the influence of technology on the nature of work.

GEO E - Technological Responsibility Students will be expected to demonstrate an understanding of the consequences of their technological choices.

Codes used in continuum
(A)- Awareness Level
The student is exposed to the technology as
it is being used by others

(G)= Guided Level The student begins to use the technology with the help of others

(I)= Independent Level The student uses technology without assistance

Specific Curriculum Outcomes

Students will be expected to

Computer System

- B1.7(G) understand how to display file properties
- B1.9(G) identify system specifications and be aware of compatibility issues between the hardware and the software (processor speed and type, RAM, hard drive size, optical drive, connection types, video card, sound card, monitor, network cards)
- B1.11(G) describe networks, file servers, connections (wireless, line types, and speeds)
- B1.13(G) identify computer viruses, how they are transmitted, and how anti-virus software is used to protect or clean a computer
- B1.14(G) identify SPAM, pop-up ads, spyware, and other invasive software coding

Social, Ethical and Health

- A2.1(G) identify aspects of an ergonomic workstation (lighting, monitor angle, work placement, keyboard height, seat height, posture, etc.)
- B2.1(G) demonstrate proper touch keyboarding techniques (ie. home row, quick key strokes, proper reaches)
- C2.1(G) examine current Canadian law governing the use of technology
- D2.1(G) determine the technological requirements for specific career goals
- E2.6(G) adhere to copyright and privacy laws, give credit to sources of information (MLA, APA)
- E2.9(G) follow publishing etiquette (suitable language, no discrimination, etc.) Adhere to the guidelines for school web pages as outlined by PEI Department of Education

Internet

- A3.2(G) use various tools (search engines and directories) and strategies necessary to carry out research
- A3.3(G) obtain/download material (test, graphics, files) from Internet

Specific Curriculum Outcomes

Students will be expected to

- B3.3(G) distinguish among various file formats (file extensions), required plugins, file compression/decompression utilities
- E3.1(G) critically evaluate information and its source based on pre-determined criteria

Graphics

- A5.2(G) apply principles of design
- B5.3(G) use other graphic creation tools (ie. clone brush, colour replacements, effects and filters, hexidecimal (RGB and CMYK colour values)

Spreadsheets

- B6.2(G) identify different types of cell data (text, numeric, function, date)
- B6.5(G) enter formulas to perform calculations across columns, rows, cells, move/copy data or formulas from one area to another

Word Processing

B7.9(G) format multi-page documents with headers, footers, page numbers, page breaks and keep text together function, change page orientation/size (ie. text presentation features)

Multimedia

- A8.3 (G) describe situations where streaming video and audio is appropriate
- A8.5 (G) select appropriate medium to convey message (be conscious of file size, formats, and storage location)
- B8.2 (G) use multimedia creation and editing tools (screen captures, scanner, sound recording, digital image editing software: still and video)
- B8.3 (G) convert file formats for a particular application (.jpg, gif, bmp, mp3, wav, avi, mpeg, mov, etc.)

Specific Curriculum Outcomes

Students will be expected to

Database

- A9.2(G) perform searches on a database file using logical and Boolean operators (understands commands, scope, filters, and conditions)
- A9.3(G) design/plan a database to use as a method of organizing information
- A9.4(G) create and modify a form (add graphics and error checking routines)
- A9.5(G) use databases to analyze data and look for trends
- B9.2(G) create fields and with variable field types (numeric, text, date) and properties (color, width, font, etc.)
- B9.3(G) restructure database (add/delete fields, change field width)
- B9.4(G) sort records alphabetically, numerically, and by multiple fields
- B9.5(G) create a report from the entire database or selected records

Telecommunications

Email

B10.9(G) use calendar features such as appointments, tasks, reminder/notes/memos

E-Learning collaborative tools

A10.1(G) collaborate using software: (ie. whiteboard, slideshow, application sharing, chat, messaging, send and receive files, photos, group file sharing, resource sharing (links), online content creation and sharing, assignment drop box, video and audio, discussion forums, journal.)

Web Authoring

- A11.2(G) create appropriate text and image file formats
- B11.2(G) create a basic web page (may include backgrounds, images, hyperlinks, tables)
- B11.3(G) indicate where file or page is hosted (server, web server, hosting service)
- B11.4(G) apply website file management and transfer files to and from web serves (ftp), edit pages online
- B11.6(G) embed objects (audio, video, pdgs, animation, Flash, Java Script Applet)

Department of Education and Early Childhood Development

English Programs

Specific Curriculum Outcomes Framework

Grade 9

2012

English Language Arts

General Curriculum Outcomes

GCO 1: Students will be expected to speak and listen to explore, extend, clarify, and reflect on their thoughts, ideas, feelings, and experiences.

Specific Curriculum Outcomes

Students will be expected to

- 1.1 examine other's ideas in discussion to extend their own understanding
- 1.2 ask relevant questions calling for elaboration, clarification, or qualification and respond thoughtfully to such questions
- 1.3 articulate, advocate, and support points of view, presenting viewpoints in a convincing manner
- 1.4 listen critically to assess the adequacy of the evidence speakers give to evaluate the integrity of information presented

GCO 2: Students will be expected to communicate information and ideas effectively and clearly, and to respond personally and critically.

- 2.1 participate constructively in conversation, small-group and whole-group discussions, and debate, using a range of strategies that contribute to effective talk
- 2.2 adapt vocabulary, sentence structure, and rate of speech to the speaking occasion
- 2.3 give and follow instructions and respond to questions and directions of increasing complexity
- 2.4 evaluate their own and others' uses of spoken language in a range of contexts, recognizing the effects of significant verbal and non-verbal language features

GCO 3: Students will be expected to interact with sensitivity and respect, considering the situation, audience, and purpose.

- 3.1 demonstrate active listening and respect for the needs, rights, and feelings of others
- 3.2 demonstrate a respect for others by developing effective ways to express personal opinions such that they reflect sensitivity to others including differences in culture and language
- 3.3 demonstrate an awareness of the power of spoken language to influence and manipulate, and to reveal ideas, values, and attitudes
- 3.4 demonstrate an awareness that spoken language has different conventions in different situations and cultures and use language appropriate to the situation

GCO 4: Students will be expected to select, read, and view with understanding a range of literature, information, media, and visual texts.

- 4.1 select texts that address their learning needs and range of special interests
- 4.2 read widely and experience a variety of young adult fiction and literature from different provinces and countries
- 4.3 demonstrate an understanding that information texts are constructed for particular purposes

Specific Curriculum Outcomes

Students will be expected to

- 4.4 use cueing systems and a variety of strategies to construct meaning in reading and viewing increasingly complex print and media texts
- 4.5 articulate their own processes and strategies for reading and viewing texts of increasing complexity

GCO 5: Students will be expected to interpret, select, and combine information using a variety of strategies, resources, and technologies.

- 5.1 independently access and select specific information to meet personal and learning needs
 - select, from a wide range, sources appropriate to their purposes
 - use the electronic network
 - employ strategies to conduct their research
- 5.2 experiment with and rely upon a range of print and nonprint sources for accessing and selecting informatin
- 5.3 employ various relevant research strategies like generating questions, drafting an outline, or interviewing peers to determine what questions they would like answered by their research

GCO 6: Students will be expected to respond personally to a range of texts.

- 6.1 respond to some of the material they read or view by questioning, connecting, evaluating, and extending
 - move beyond initial understanding to more thoughtful interpretations
- 6.2 express and support points of view about texts and about issues, themes, and situations within texts, citing appropriate evidence
- 6.3 with increasing confidence and flexibility, find evidence in texts to support personal claims and viewpoints about issues, themes and situations

GCO 7: Students will be expected to respond critically to a range of texts, applying their understanding of language, form, and genre.

- 7.1 critically evaluate information presented in print and media texts
 - assess relevance and reliability of available information to answer their questions
- 7.2 demonstrate that print and media texts are constructed for particular purposes and particular audiences
 - describe how specific text and genre characteristics contribute to meaning and effect
- 7.3 respond critically to texts of increasing complexity
 - analyse and evaluate a text in terms of its form, structure, and content
 - recognize how their own ideas and perceptions are framed by what they read and view

Specific Curriculum Outcomes

Students will be expected to

- demonstrate an awareness that personal values and points of view influence both the creation of text and the reader's/viewer's interpretation and response
- explore and reflect on culture and reality as portrayed in media texts
- identify the values inherent in a text

GCO 8: Students will be expected to use writing and other forms of representing to explore, clarify, and reflect on their thoughts, feelings, experiences, and learnings; and to use their imagination.

- 8.1 use a range of strategies in writing and other ways of representing
 - to extend ideas and experiences
 - explore and reflect on their feelings, values, and attitudes
 - consider others' perspectives
 - reflect on problems and responses to problems
 - describe and evaluate their learning processes and strategies
 - reflect on their growth as language learners and language users
- 8.2 identify and reflect upon strategies that are effective in helping them to learn; describe their personal growth as language learners and language users
- 8.3 use note making to reconstruct knowledge and select effective strategies approximate to the task
- 8.4 make informed choices of language to create a range of interesting effects in imaginative writing and representing

GCO 9: Students will be expected to create texts collaboratively and independently, using a wide variety of forms for a range of audiences and purposes.

- 9.1 demonstrate facility in using a variety of forms of writing to create texts for specific purposes and audiences, and represent their ideas in other forms (including visual arts, music, drama) to achieve their purposes
- 9.2 consider and choose writing forms that match both the writing purpose (to define, report, persuade, compare) and the reader for whom the text is intended (understand why language choice, organization, and voice used in an essay differs from that used in a media advertisement)
- 9.3 understand that ideas can be represented in more than one way and used with other forms of representing (speeches, demonstrations, plays)
- 9.4 demonstrate an awareness of the effect of context on writing and other forms of representing

Specific Curriculum Outcomes

Students will be expected to

- make appropriate choices of form, style, and content for specific audiences and purposes
- 9.5 analyse and assess responses to their writing and media productions

GCO 10: Students will be expected to use a range of strategies to develop effective writing and other ways of representing and to enhance their clarity, precision, and effectiveness.

- 10.1 demonstrate an awareness of which prewriting, drafting, revising, editing, proofreading, and presentation strategies are successful with various writing and representations
- 10.2 consistently use the conventions of written language in final products
- 10.3 experiment with the use of technology in communicating for a range of purposes with a variety of audiences
- 10.4 demonstrate a commitment to crafting pieces of writing and representations
- 10.5 integrate information from several sources to construct and communicate meaning

Health

General Curriculum Outcomes

Wellness Choices

Students will make responsible and informed choices to maintain health and to promote safety for self and others.

Specific Curriculum Outcomes

Students will be expected to

Personal Health

- W-9.1 identify several risks associated with use of alcohol, cannabis, and other drugs
- W-9.2 identify several signs and stages of dependence on a substance
- W-9.3 identify several strategies for helping a friend who is having problems with alcohol or other drugs
- W-9.4 identify ways that laws and community-based services support the treatment of addictions

Safety and Responsibility

- W-9.5 give examples of the consequences of unsafe work practices
- W-9.6 identify and describe the four categories for hazard recognition
- W-9.7 identify the responsibilities of an employee within a workplace
- W-9.8 identify the rights of an employee within a workplace
- W-9.9 identify the responsibilities of the employer within the Occupational Health and Safety Act

Sexual Health

- W-9.10 describe coping strategies when experiencing different rates of physical, emotional, sexual and social development
- W-9.11 identify the four basic types of sexual assault
- W-9.12 describe the consequences of sexual assault on a victim and those people associated with that victim
- W-9.13 determine "safer" sex practices
- W-9.14 describe responsibilities associated with pregnancy and parenting
- W-9.15 develop strategies that address factors to prevent or reduce the risk of STIs and HIV

Relationship Choices

Students will develop effective interpersonal skills that demonstrate responsibility, respect, and caring in order to establish and maintain healthy interactions.

Life Learning Choices

Students will use resources effectively to manage and explore life roles and career opportunities and challenges.

Specific Curriculum Outcomes

Students will be expected to

Interactions

- R-9.1 identify and categorize various types of abuse
- R-9.2 develop an awareness of the warning signs of abusive relationships and available community support
- R-9.3 distinguish between abusive relationships and healthy relationships
- R-9.4 gain an understanding of the complex societal and individual factors that perpetuate abuse
- R-9.5 identify safe and effective alternatives to abusive behaviour
- R-9.6 determine effective support for a friend who may be involved in an abusive relationship, as a victim or as an abuser

Learning Strategies

- L-9.1 apply personal time management skills to a variety of learning opportunities
- L-9.2 relate the value of lifelong learning to personal success and satisfaction
- L-9.3 use decision-making skills to select appropriate risk-taking activities for personal growth and empowerment
- L-9.4 refine personal goals and priorities relevant to learning and career paths

Life Goals and Career Development

- L-9.5 create a LifeWork Portfolio
- L-9.6 create a learning plan for transition to senior high school

Volunteerism

L-9.7 analyse the potential impact of volunteerism on career opportunities

Home Economics

General Curriculum Outcomes

Specific Curriculum Outcomes

Students will be expected to

Foods

- GCO 1: Students will be expected to evaluate and manage food technology.
- 1.1 identify food preparation equipment
- 1.2 explain the function of food preparation equipment
- 1.3 demonstrate safe use of food preparation equipment
- 1.4 discuss how technology has changed the equipment available for food preparation
- 1.5 identify the information given in a recipe
- 1.6 describe the meaning of basic food preparation terms
- 1.7 correctly and accurately measure various ingredients

GCO 2: Students will be expected to demonstrate an understanding of their personal responsibility in food preparation.

- 2.1 investigate current problems with improper food handling
- 2.2 apply understanding of safe practices
- 2.3 efficiently clean up work area upon completion of food preparation
- 2.4 evaluate prepared food product
- 2.5 develop a basic recipe or variation of a basic recipe for a simple food product
- 2.6 create a food product using a recipe
- 2.7 create plans for preparing simple meals making effective use of resources
- 2.8 identify the sources, selection, cooking methods, and storage of foods from each food group

GCO 3: Students will be expected to demonstrate an understanding of their personal responsibility in making healthy food choices.

- 3.1 identify the four basic food groups and the "other" category
- 3.2 have a basic understanding of the processes of digestion and absorption
- 3.3 identify the six main nutrient groups and their functions, and sources
- 3.4 explore and explain the relationship of food and life style choices to health
- 3.5 identify specific nutrient and related deficiencies

GCO 4: Students will be expected to demonstrate an understanding of the history and evolution of food technology and of its social and cultural implications.

GCO 5: Students will be expected to demonstrate an understanding of current and evolving careers and of the influence of food technology on the nature of work.

GCO 6: Students will be expected to understand, evaluate, and manage technology for the purpose of constructing a sewing project.

GCO 7: Students will be expected to demonstrate an understanding of the history and evolution of fabric technology and of its social and cultural implications.

Specific Curriculum Outcomes

Students will be expected to

- 4.1 examine the historical evolution of food technologies and predict future developments
- 4.2 investigate the range of table arrangements for various types of food service (buffet, family service, plate style, etc.)
- 4.3 explain the need for and the development of convenience foods and fast food meals
- 4.4 examine the impact of a multicultural society on our food choices
- 4.5 examine and discuss guidelines for table behavior

5.1 examine the food technologies of specific food production careers and workplaces

Sewing

- 6.1 locate and identify small equipment in the clothing lab
- 6.2 demonstrate care and safety precautions in the use of the sewing equipment
- 6.3 identify the parts of the sewing machine
- 6.4 know the function of each part of the machine
- 6.5 demonstrate the safe use of the sewing machine
- 6.6 become familiar with a pattern
- 6.7 select fabric and prepare it for sewing
- 6.8 practice sewing skills
- 7.1 become familiar with fabric/garment labeling
- 7.2 become familiar with laundry procedures
- 7.3 recognize the principles of good buymanship

Industrial Technology

General Curriculum Outcomes

GCO 1: Students will be expected to demonstrate an understanding of safety in technology.

GCO 2: Students will be expected to innovatively use tools, machines, and materials.

GCO 3: Students will be expected to design, develop, evaluate, and articulate technological solutions.

Specific Curriculum Outcomes

Students will be expected to

- 1.1 identify and use the proper personal safety equipment for student activities
- 1.2 practice good housekeeping and identify/avoid obvious hazards
- 1.3 understand how to select and operate fire safety equipment
- 1.4 identify and use hand tools responsibly
- 1.5 identify and use materials responsibly
- 1.6 identify and use machines responsibly
- 1.7 identify WHMIS symbols
- 1.8 understand the relationship between training and experience to safety
- 1.9 demonstrate an understanding of the safety principal that accidents are preventable and avoidable
- 2.1 demonstrate the innovative use of tools
- 2.2 describe safety precautions for each tool
- 2.3 use tools in a safe, productive manner
- 2.4 name common tools and describe their function
- 2.5 choose and use hand tools appropriately for the intended operations
- 2.6 demonstrate the innovative use of machines and materials
- 2.7 describe safety precautions for each machine and material
- 2.8 use machines and materials in a safe productive manner
- 2.9 name common machines and materials and describe their function
- 2.10 choose and use machines and materials appropriately for the intended use and operations
- 3.1 develop a problem solving approach to technological situations
- 3.2 demonstrate an understanding of the design process
 - examine problem situations
 - once a need is established, clearly state the design brief
 - gather information
 - investigate related solutions
 - develop alternative solutions
 - select and develop the best solution (Design Brief)
- 3.3 evaluate the effectiveness of both their own and other's technological solutions
- 3.4 communicate ideas and information about technological solutions

Mathematics

General Curriculum Outcomes

Number (N)

GCO: Develop number sense.

Specific Curriculum Outcomes

Students will be expected to

- N1 Demonstrate an understanding of powers with integral bases (excluding base 0) and whole number exponents by:
 - representing repeated multiplication using powers;
 - using patterns to show that a power with an exponent of zero is equal to one;
 - solving problems involving powers.
- N2 Demonstrate an undertanding of operations on powers with integral bases (excluding base 0) and whole number exponents.
- N3 Demonstrate an understanding of rational numbers by:
 - comparing and ordering rational numbers;
 - solving problems that involve arithmetic operations on rational numbers.
- N4 Explain and apply the order of operations, including exponents, with and without technology.
- N5 Determine the square root of positive rational numbers that are non-perfect squares.

Patterns and Relations (PR)

GCO: Use patterns to describe the world and solve problems.

GCO: Represent algebraic expressions in multiple ways.

- PR1 Generalize a pattern arising from a problem-solving context using linear equations and verify by substitution.
- PR2 Graph linear relations, analyse the graph and interpolate or extrapolate to solve problems.
- PR3 Model and solve problems using linear equations of the form:
 - ax = b;
 - $\underline{x} = b$; $a = \emptyset$;
 - ax + b = c;
 - $\frac{a}{x}$ + b = c, a = \emptyset ;
 - ax = b + cx;
 - a(x + b) = c;
 - ax + b = cx + d;
 - a(bx + c) = d(ex + f);
 - $\frac{x}{a} = b$, $x = \emptyset$

where a, b, c, d, e, and f are rational numbers.

Specific Curriculum Outcomes

Students will be expected to

- PR4 Explain and illustrate strategies to solve single variable linear inequalities with rational coefficients within a problem-solving context.
- PR5 Demonstrate an understanding of polynomials (limited to polynomials of degree less than or equal to 2.)
- PR6 Model, record and explain the operations of addition and subtraction of polynomial expressions, concretely, pictorially and symbolically (limited to polynomials of degree less or equal to 2.)
- PR7 Model, record and explain the operations of multiplication and division of polynomial expressions (limited to polynomials of degree less than or equal to 2) by monomials, concretely, pictorially and symbolically.

Shape and Space (SS)

GCO: Use direct and indirect measure to solve problems.

- SS1 Solve problems and justify the solution strategy using circle properties including:
 - the perpendicular from the centre of a circle to a chord bisects the chord;
 - the measure of the central angle is equal to twice the measure of the inscribed angle subtended by the same arc;
 - the inscribed angles subtended by the same arc are congruent;
 - a tangent to a circle is perpendicular to the radius at the point of tangency.
- GCO: Describe the characteristics of 3-D objects and 2-D shapes, and analyse the relationships among them.
- GCO: Describe and analyse position and motion of objects and shapes.
- SS2 Determine the surface area of composite 3-D objects to solve problems.
- SS3 Demonstrate an understanding of similarity of polygons.
- SS4 Draw and interpret scale diagrams of 2-D shapes.
- SS5 Demonstrate an understanding of line and rotation symmetry.

Statistics and Probability (SP)

GCO: Collect, display, and analyse data to solve problems.

- **SP1** Describe the effect of:
 - bias;
 - use of language;
 - ethics;
 - cost;
 - time and timing;
 - privacy;
 - cultural sensitivity

on the collection of data.

Specific Curriculum Outcomes

Students will be expected to

- SP2 Select and defend the choice of using either a population or a sample of a population to answer a question.
- SP3 Develop and implement a project plan for the collection, display and analysis of data by:
 - formulating a question for investigation;
 - choosing a data collection method that includes social considerations;
 - selecting a population or a sample;
 - collecting the data;
 - displaying the collected data in an appropriate manner;
 - drawing conclusions to answer the question.
- GCO: Use experimental or theoretical probabilities to represent and solve problems involving uncertainty.
- SP4 Demonstrate an understanding of the role of probability in society.

Music

Please refer to the Instrumental Music Curriculum.

Physical Education

Please note: The three goals, Active Living, Skillful Movements, and Relationships will be referred to throughout this section as GCO 1, GCO 2, and GCO 3.

GCO 1: Active Living	GCO 2: Skillful Movement	GCO 3: Relationships
Enjoy and engage in healthy levels of participation in movement activities to support lifelong active living in the context of self, family, and community.	Enhance quality of movement by understanding, developing, and transferring movement concepts, skills, tactics, and strategies to a wide variety of movement activities.	Balance self through safe and respectful personal, social, cultural, and environmental interactions in a wide variety of movement activities.

General Curriculum Outcomes

Active Living

GCO₁

9.1 Health-Related Fitness

Specific Curriculum Outcomes

Examine and apply the principles of training (i.e., overload, progression, specificity, adaptation, use/disuse) to personal action plans that incorporate and/or maintenance of self-selected components of **health-related fitness** (cardiovascular endurance, muscular endurance, muscular strength, flexibility)

9.7 Alternate Environment

Collaboratively with teacher or peer, design and implement plans to use effective tactics and strategies to enhance performance and enjoyment of self and others, while showing respect for the environment, when participating in a variety of **alternate environment activities** (e.g., orienteering, skating, cross-country skiing, canoeing, roping, downhill skiing, wall climbing, in-line skating, skate boarding, cycling, completing a challenge course, Quincy building).

9.8 Body Management

Express insights on the experience of participating in **body management activities**, including dance and gymnastics, as well as others (e.g., pilates, yoga, aquatics, karate, cross country running, aerobics, weight training, tai chi) as a means to support participation in recreational and leisure time activities for physical, emotional, mental, and spiritual well-being.

Specific Curriculum Outcomes

9.9 Volunteerism & Leadership

Plan, Participate in, and lead, with others, a movement activity event (e.g., a tournament, a fitness-athon, an outdoor orienteering challenge, a winter carnival, Arctic Games, a team scavenger hunt) to engage others (e.g., peers, classmates, younger students, community members) in movement activities.

9.11 Prevention & Care

Apply an understanding of how to prevent (e.g., using proper technique) and care for a variety of movement activity-related injuries (e.g., sprains, breaks, contusions, skin irritations, concussions).

9.12 Respectful Behaviour

Demonstrate an understanding of and incorporate positive social behaviours into all aspects of personal involvement in movement activities, in the context of both a participant and a spectator, after examining the positive and negative influences of organized sports, movement competitions (e.g., dance competition), and mass media on the social behaviour of self and others.

Skillful Movement

9.2 Body Composition

Determine safe and credible publicly promoted options for managing body composition and weight (i.e., decrease body fat, increase muscle content) and analyse the influence of mass media on body image.

9.3 Core Strength

Investigate and apply safe and effective strategies for developing the strength of core muscles and joint muscles.

9.4 Skill-related Fitness

Implement personal plans for improvement of a selfselected skill-related component of fitness (power, agility, speed, reaction time, balance, and coordination) as it applies to complex movement skills used in a sport or activity of interest (e.g., power in the legs to increase vertical jump for volleyball spike, agility for avoiding a pin in wrestling, balance used in ballet, coordination used in juggling or cup stacking).

GCO₂

Specific Curriculum Outcomes

9.5 Complex Skills

Build skills towards proficiency in four self-selected complex movement skills including **one from four of the following categories:**

- target games (e.g., bowling, curling, golf, archery)
- striking/fielding games (e.g., long ball, softball, slo-pitch, cricket)
- **net/wall games** (e.g., badminton, tennis, table tennis, volleyball)
- invasion/territorial games (e.g., basketball, soccer, touch football, soft lacrosse, floor hockey, rugby, ultimate frisbee, double ball, team handball)
- alternate environment activities (e.g., orienteering, skating, cross-country skiing, canoeing, roping, downhill skiing, wall climbing, in-line skating, skate boarding, cycling)
- body management activities (e.g., dance, wrestling, track and field, pilates, martial arts, yoga, gymnastics)

9.6 Games, Tactics, & Strategies

Collaboratively with teacher or peer, design and implement plans to use effective tactics and strategies (while considering rules and skills when participating in a variety of movement activity situations) to enhance performance and enjoyment of self and others in each of the following:

- **target games** (e.g., bowling, curling, golf, archery, bocce ball)
- striking/fielding games (e.g., long ball, softball, slo-pitch)
- **net/wall games** (e.g., badminton, soccer, touch football, soft lacrosse, floor hockey, rugby, ultimate frisbee, double ball, team handball)
- low-organizational, inventive, and co-operative games (e.g., capture the flag, prisoner's base, speedball, kick the can)

9.7 Alternate Environment

Collaboratively with teacher or peer, design and implement plans to use effective tactics and strategies to enhance performance and enjoyment of self and others, while showing respect for the environment, when participating in a variety of **alternate environment activities** (e.g., orienteering, skating, cross-country skiing, canoeing, roping, downhill skiing, wall climbing, in-line skating, skate boarding, cycling, completing a challenge course, Quincy building).

Specific Curriculum Outcomes

9.8 Body Management

Express insights on the experience of participating in **body management activities**, including dance and gymnastics, as well as others (e.g., pilates, yoga, aquatics, karate, cross country running, aerobics, weight training, tai chi) as a means to support participation in recreational and leisure time activities for physical, emotional, mental, and spiritual well-being.

GCO₂

Relationships

9.6 Games, Tactics, & Strategies

Collaboratively with teacher or peer, design and implement plans to use effective tactics and strategies (while considering rules and skills when participating in a variety of movement activity situations) to enhance performance and enjoyment of self and others in each of the following:

- **target games** (e.g., bowling, curling, golf, archery, bocce ball)
- striking/fielding games (e.g., long ball, softball, slo-pitch)
- net/wall games (e.g., badminton, soccer, touch football, soft lacrosse, floor hockey, rugby, ultimate frisbee, double ball, team handball)
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Specific Curriculum Outcomes

9.9 Volunteerism & Leadership

Plan, Participate in, and lead, with others, a movement activity event (e.g., a tournament, a fitness-athon, an outdoor orienteering challenge, a winter carnival, Arctic Games, a team scavenger hunt) to engage others (e.g., peers, classmates, younger students, community members) in movement activities.

9.10 Influences

Identify and discuss the influences of mas media, advertising strategies and other sources to determine their impact on promoting active living (e.g., commercials, sport and special events coverage, physical activity promotions such as fundraising walkathons/runs).

9.11 Prevention & Care

Apply an understanding of how to prevent (e.g., using proper technique) and care for a variety of movement activity-related injuries (e.g., sprains, breaks, contusions, skin irritations, concussions).

9.12 Respectful Behaviour

Demonstrate an understanding of and incorporate positive social behaviours into all aspects of personal involvement in movement activities, in the context of both a participant and a spectator, after examining the positive and negative influences of organized sports, movement competitions (e.g., dance competition), and mass media on the social behaviour of self and others.

9.13 Contemporary Culture

Identify and discuss personal perspectives on how to manage the contemporary opportunities and challenges that influence one's ability to develop as a skillful mover, to live a balanced, active lifestyle, and to develop and maintain safe and respectful relationships.

Science

General Curriculum Outcomes

STSE

GCO 1: Students will develop an understanding of the nature of science and technology, of the relationships between science and technology, and of the social and environmental contexts of science and technology.

Skills

GCO 2: Students will develop the skills required for scientific and technological inquiry, for solving problems, for communicating scientific ideas and results, for working collaboratively, and for making informed decisions.

Knowledge

GCO 3: Students will construct knowledge and understandings of concepts in life science, physical science, and Earth and space science, and apply these understandings to interpret, integrate, and extend their knowledge.

Attitudes

GCO 4: Students will be encouraged to develop attitudes that support the responsible acquisition and application of scientific and technological knowledge to the mutual benefit of self, society, and the environment.

Specific Curriculum Outcomes

Students will be expected to

Life Science: Reproduction

Cellular Processes

- recognize that the nucleus of a cell contains genetic information and determines cellular processes (305-1)
- explain the importance of using the terms gene and chromosome properly (109-14)
- identify major shifts in scientific understanding of genetics (110-3)
- illustrate and describe the basic processes of mitosis and meiosis (304-11)
- determine and graph the theoretical growth rate of a cell, and interpolate and extrapolate the cell population from the graph (210-2, 210-4, 210-9)

Asexual and Sexual Reproduction

- distinguish between sexual and asexual reproduction in representative organisms (305-2)
- compare sexual and asexual reproduction in terms of theira dvantages and disadvantages (305-3)
- identify questions to investigate about sexual reproduction in plants (208-2)
- use tools and apparatus safely to investigate the structure of flowers (209-6)
- communicate the results of an investigation into the structure of flowers (211-2)

Genetic Changes

- provide examples of genetic conditions that cannot be cured using scientific and technological knowledge at the present time (113-10)
- compare factors that may lead to changes in a cell's genetic information:
 - mutations caused by nature
 - mutations caused by human activities (305-5)
 - evaluate information and evidence gathered on the topic of genetics and genetic engineering (209-5, 210-8)
- provide examples of how the knowledge of cellular functions has resulted in the development of technologies (111-1)

Specific Curriculum Outcomes

Students will be expected to

- provide examples of Canadian contributions to science andtechnology related to heredity and genetic engineering(112-12)
- provide examples of how the knowledge of cellular functions has resulted in the development of technologies (111-1)
- provide examples of Canadian contributions to science and technology related to heredity and genetic engineering (112-12)

Physical Science: Atoms and Elements

Safety Considerations and Physical Properties

- compare earlier conceptions of the structure of matter with their conceptions (110-1)
- demonstrate a knowledge of WHMIS standards by using proper techniques for handling and disposing of lab materials (209-7)
- investigate materials and describe them in terms of their physical properties (307-12)
- compile and display data collected during an investigation of the physical properties of materials (210-2)

Chemical Changes and Reactions

- describe changes that result from common chemical reactions:
 - energy change
 - change in colour
 - precipitate formed
 - gas formed
 - new chemical substance formed (307-13)
- determine, where possible, if the change in a material or object is physical or chemical on the basis of experimental data (210-11)
- identify new questions about physical and chemical changes that arise from investigations (210-16)

Atomic Theory

- identify major changes in atomic theory up to and including the Bohr model (110-3)
- use models in describing the structure and the components of atoms and molecules, and explain the importance of choosing words that are scientifically appropriate:

Specific Curriculum Outcomes

Students will be expected to

- determine the number of protons and electrons in the atom of an element given its atomic number
- determine the number of protons, electrons, and neutrons given the mass number and atomic number
- be able to write the appropriate symbol for an isotope given the number of protons and neutrons (109-13, 307-14)
- provide examples of technologies that have enhanced, promoted, or made possible scientific research in chemistry (111-4)
- provide examples to illustrate that scientific and technological activities related to atomic structure take place in a variety of individual and group settings (112-8)
- explain the importance of using the terms law and theory in science (109-14)

Static Electricity and Electric Current

- describe the flow of charge in an electrical circuit and describe the factors affecting the amount of resistance in a wire (length, diameter, type):
 - voltage
 - electric current
 - resistance (109-14, 308-16)
- compare qualitatively static electricity and electric current (308-15)

Series and Parallel Circuits

- rephrase questions in a testable form related to series and parallel circuits (208-1)
- use an ammeter and a voltmeter to measure current and voltage in series and parallel circuits (209-3)
- identify potential sources of error in ammeter and voltmeter readings (210-10)
- identify and suggest explanations for discrepancies in data collected using an ammeter and a voltmeter (210-7)
- present graphically the data from investigation of voltage, current, and resistance in series and parallel circuits (210-5, 211-2)
- describe series and parallel (maximum two resistors) circuits involving varying resistance, voltage, and current using Ohms' Law:

Specific Curriculum Outcomes

Students will be expected to

- draw circuit diagrams, using circuit symbols for a cell, switch, battery, lamp, resistor, multirange meter (308-17)

Use of Electrical Energy

- relate electrical energy to domestic power consumption costs:
 - watt as a unit of power (1 W = 1 J/s) (308-18)
- explain that precise language is required to properly interpret EnerGuide labels and to understand a utility bill (109-14)
- compare examples of past and current technologies that used current electricity to meet similar needs (110-9)
- determine quantitatively the efficiency of an electrical appliance that converts electrical energy to heat energy (308-19)

Electricity and the Environment

- describe the transfer and conversion of energy from a generating station to the home (308-20)
- evaluate evidence and sources of information when conducting research on electrical energy production and its impact on the environment (210-8)
- select recent data while conducting research on the environmental problems associated with various types of electrical energy production (113-6, 210-8)
- propose a course of action that reduces the consumption of electrical energy (113-9, 113-13)
- give examples of the development of alternative sources of energy (such as wind generators and solar energy) that are a result of cost and the availability and properties of materials (109-6)

Earth and Space Science: Space Exploration

The Beginnings of the Solar System

- describe and explain the apparent motion of celestial bodies:
 - moon
 - sun
 - planets
 - comets
 - asteroids (312-4)
- describe theories on the formation of the solar system (312-1)

Specific Curriculum Outcomes

Students will be expected to

Composition and Characteristics of the Solar System

- describe the composition and characteristics of the following components of the solar system:
 - terrestrial and gas planets and Pluto
 - periodicity of comets
 - asteroids/meteors (312-5)
- explain the need for new evidence in order to continually test existing theories about the composition and origin of our solar system and galaxies (110-6, 210-3)
- provide examples of how the Canadian Government and/ or Canadian Space Agency is involved in research projects about space (112-6)
- defend their position regarding societal support for space exploration (211-5)

Composition and Characteristics of the Universe

- describe theories on the origin and evolution of the universe:
 - big bang theory
 - oscillating theory (312-3)
- describe and classify the major components of the universe:
 - nebulae
 - galaxies
 - giant stars
 - dwarf stars
 - quasars
 - black holes (312-2)
- calculate the travel time to a distant star at a given speed:
 - define and explain a light year (210-9)
- explain how data provided by technologies contribute to our knowledge of the universe (109-3)
- working collaboratively with group member, prepare a comparative data table on various stars, and design a model to represent some of these stars relative to our solar system (209-4, 211-1, 211-3)
- describe examples of science and technology based careers in Canada that are associated with space exploration (112-11)
- identify new questions and problems that arise from the study of space exploration (210-16)
- describe the science underlying three technologies designed to explore space (109-11, 111-5)

Social Studies

The grade 9 social studies curriculum is presently under revision. This revision is necessary due to the recent implementation of the grade 7 and grade 8 PEI/CAMET social studies curricula. A newly revised curriculum, based upon a stronger global interdependence theme, is in development. Teachers are advised to use the following specific curriculum outcomes until the new grade 9 curriculum is implemented. These outcomes have been identified by a teacher pilot committee to serve as a transition curriculum for grade 9, bridging older curriculum with anticipated new themes and concepts. More details, elaboration, and planning aids are available by contacting the Department of Education and Early Childhood Development.

General Curriculum Outcomes

Citizenship, Power, and Governance

GCO: Students will be expected to demonstrate an understanding of the rights and responsibilities of citizenship and the origins, functions, and sources of power, authority, and governance.

Culture and Diversity

GCO: Students will be expected to demonstrate an understanding of culture, diversity, and world view, recognizing the similarities and differences reflected in various personal, cultural, racial, and ethnic perspectives.

Individuals, Societies, and Economic Decisions

GCO: Students will expected to demonstrate the ability to make responsible economic decisions as individuals and as members of society.

Interdependence

GCO: Students will be expected to demonstrate an understanding of the interdependent relationship among individuals, societies, and the environment—locally, nationally, and globally—and the implications for a sustainable future.

People, Place, and Environment

GCO: Students will be expected to demonstrate an understanding of the interactions among people, places, and the environment.

Specific Curriculum Outcomes

Students will be expected to

Interdependence

- Demonstrate an understanding of the impact of interdependence on the future of Atlantic Canada
- Identify and locate the Atlantic region in the Canadian, North American, and global contexts
- Identify and demonstrate an understanding of trade and other linkages among Atlantic Canada and the national and global communities
- Explore his/her concept of world view and explain the factors that influence and are influenced by it
- Examine and analyse how Atlantic Canadians are members of the global communities through different interconnected systems
- Assess the individual qualities and attributes Atlantic
 Canadians need to become contributing members of the
 global community

Physical Environment

- Describe the area, size, and physical features of Atlantic Canada
 - rank the provinces of Atlantic Canada in order of size by visual observation, using a print/electronic map
 - define the terms "scale" and "time zone"
 - identify landforms and water forms in Atlantic Canada that contribute to the aesthetic appeal and character of the region
 - identify the boundaries in Atlantic Canada that are defined by physical features
 - compare a physical map of the Atlantic region with a political map

Time, Continuity, and Change GCO: Students will be expected to demonstrate an understanding of the past and how it affects the present and the future.

Specific Curriculum Outcomes

Students will be expected to

 suggest the effect Atlantic Canada's size and physical features have on the people who live in the region

People and Culture

- Demonstrate an understanding of the local and global factors that have shaped the culture(s) of Atlantic Canada
 - understand the effect of the environment (sea, climate, seasons, geography, resources) of Atlantic Canada in shaping its culture
 - identify some of the forces that are shaping the culture of the region today
- Demonstrate an understanding of and an appreciation for the link between culture and occupations/lifestyles in Atlantic Canada
 - understand the extent to which climate and seasons affect the occupations within a selected area of Atlantic Canada
 - determine the extent to which climate and seasons affect the occupations within a selected area of Atlantic Canada
 - determine how traditional occupations are linked to physical location in Atlantic Canada
 - determine the extent to which occupations affect lifestyles of people and their recreational and leisure activities
 - determine the extent to which the modern workplace affects the culture of a particular area
- Demonstrate an understanding of the global forces that cause cultures to constantly change
 - recognize that culture is constantly changing
 - understand that the rate at which culture changes is different for different cultures and depends on many local and global factors
 - determine the extent to which political and economic circumstances affect cultural change
 - determine the extent to which media and popular culture affect cultural change
 - assess the extent to which it is possible for a group to have cultural change while maintaining its cultural identity
 - assess the degree to which there is a distinct Atlantic Canadian culture compared to other regions of Canada and the global community

Specific Curriculum Outcomes

Students will be expected to

Economics and Trade

- Examine and explain the contribution of the primary, secondary, tertiary, and quaternary sectors of the economy of Atlantic Canada
 - distinguish between primary, secondary, tertiary, and quaternary sectors of the economy
 - identify the primary industries that are most significant to his/her region of Atlantic Canada
 - identify changes that have occurred to these industries in recent years
 - determine the extent to which trends such as specialization and marketing emphasis are affecting primary industries
 - determine the effect to which trends such as specialization and marketing emphasis are affecting primary industries
 - determine the effect that environmental awareness and health consciousness are having on primary industries
 - identify the secondary industries in his/her area of Atlantic Canada
 - identify the changes and trends that are affecting secondary industries in Atlantic Canada
 - assess the importance of the four sectors to the quality of life in his/her area, province, and the Atlantic region
- Demonstrate an understanding of how technology has affected employment and the standard of living in Atlantic Canada
 - understand the traditional concept of the job and analyze how it has been affected by technology and workplace trends
 - appreciate how technology impacts on the standard of living in his/her community/region and Atlantic Canada in general
 - understand how technology in the workplace has affected migration

Challenges and Opportunities

- Identify and analyse the economic challenges and opportunities that may affect Canada's future
- Analyse the political challenges and opportunities that may affect Canada's future
- Analyse the social and cultural challenges and opportunities that may affect Canada's future
- Demonstrate an understanding of the impact of interdependence on the future of Atlantic Canada

Visual Arts

General Curriculum Outcomes

Creating, Making, and Presenting GCO 1: Students will be expected to explore, challenge, develop, and express ideas, using the skills, language, techniques, and processes of the arts.

GCO 2: Students will be expected to create and/or present, collaboratively and independently, expressive products in the arts for a range of audiences and purposes.

Understanding and Connecting Contexts of Time, Place, and Community

GCO 3: Students will be expected to demonstrate critical awareness of and value for the role of the arts in creating and reflecting culture.

GCO 4: Students will be expected to respect the contributions to the arts of individuals and cultural groups in local and global contexts, and value the arts as a record of human experience and expression.

GCO 5: Students will be expected to examine the relationship among the arts, sciences, and environments.

Perceiving, Reflecting, and Responding

GCO 6: Students will be expected to apply critical thinking and problemsolving strategies to reflect on and respond to their own and others' expressive work.

GCO 7: Students will be expected to understand the role of technologies in creating and responding to expressive works

GCO 8: Students will be expected to analyse the relationship between artistic intent and the expressive work.

Specific Curriculum Outcomes

Students will be expected to

Safety

L1,2.S.1 demonstrate proper care of themselves, tools, materials, equipment, materials, products and workspace

Level 1

Overall Outcomes for all Units

- L1AU.1 describe and demonstrate the elements of art and design in prehistoric/ancient art and in their own artwork
- L1AU.2 analyse the elements of art and design in prehistoric/ancient art and in their own artwork
- L1AU.3 describe and demonstrate the principles of art and design in prehistoric/ancient art and in their own artwork
- L1AU.4 analyse the principles of art and design in prehistoric/ancient art and in their own artwork
- L1AU.5 compile and organize a workbook and portfolio
- L1AU.6 demonstrate growth in their own style when creating visual images

Drawing Unit

- L1.D.1 create simple contour drawings
- L1D.2 describe and demonstrate the vanishing point above, below, and at the horizon line
- L1D.3 describe and demonstrate simple shading of 2-D forms
- L1D.4 describe prehistoric drawings
- L1D.5 interpret prehistoric art in various cultures as an expression of human experiences
- L1D.6 describe and demonstrate how the various surfaces of paper interact with the different media and tools used in drawing to create a variety of visual effects
- L1D.7 identify careers that use drawing skills and knowledge for the job

Specific Curriculum Outcomes

Students will be expected to

Painting Unit

- L1P.1 describe and demonstrate colour theory
- L1P.2 apply colour schemes in their paintings
- L1P.3 describe and demonstrate an understanding of prehistoric paintings
- L1P.4 interpret and demonstrate prehistoric aboriginal paintings
- L1P.6 describe and demonstrate how the various surfaces of paper interact with different media and tools used in painting to create a variety of visual effects
- L1P.7 identify careers that use painting skills and knowledge for the job

3-D Form Unit

- L1F.1 describe what a 3-D form is in comparison to a 2-D shape
- L1P.2 describe the effect that positive and negative space has on 3-D forms
- L1P.3 create a low-relief form using paper
- L1P.4 create a high-relief form using clay and/or plasticine
- L1F.5 describe and replicate a prehistoric 3-D form
- L1P.6 describe and demonstrate how different tools interact with materials that are used in 3-D forms to create a variety of visual effects
- L1P.7 identify careers that use sculpturing/crafting skills and knowledge for the job

Printmaking Unit

- L1PM.1 demonstrate the three procedures for creating a monoprint
- L1PM.2 demonstrate an understanding of the expressive qualities of lines and shapes when creating a monoprint
- L1PM.3 demonstrate colour theory in a monoprint
- L1PM.4 identify and demonstrate stencils prints from the prehistoric art period
- L1PM.5 describe and demonstrate how the various surfaces of paper interact with materials and tools that are used in printmaking to create a variety of visual effects
- L1PM.6 identify careers that use printmaking skills and knowledge for the job

Creating, Making, and Presenting GCO 1: Students will be expected to explore, challenge, develop, and express ideas, using the skills, language,

techniques, and processes of the arts.

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GCO 5: Students will be expected to examine the relationship among the arts, sciences, and environments.

Perceiving, Reflecting, and Responding

GCO 6: Students will be expected to apply critical thinking and problemsolving strategies to reflect on and respond to their own and others' expressive work.

GCO 7: Students will be expected to understand the role of technologies in creating and responding to expressive works

GCO 8: Students will be expected to analyse the relationship between artistic intent and the expressive work.

Specific Curriculum Outcomes

Students will be expected to

Level II

Overall Outcomes for all Units

- L2AU.1 describe and demonstrate the elements of art and design in their viewing of Renaissance art and in their own artwork
- L2AU.2 analyse the elements of art and design in Renaissance art and in their own artwork
- L2AU.3 describe and demonstrate the principles of art and design in Renaissance art and in their own artwork
- L2AU.4 analyse the principles of art and design in Renaissance art and in their own artwork
- L2AU.5 analyse information compiled and organized in their workbook and portfolio

Drawing Unit

- L2D.1 demonstrate spatial techniques in 2-D images
- L2D.2 create a negative space "still life" contour drawing
- L2D.3 demonstrate facial expressions through drawing
- L2D.4 describe and demonstrate an understanding of drawings from the Renaissance period
- L2D.5 analyse drawings from the Renaissance period
- L2D.6 interpret and demonstrate an understanding of drawings from the Renaissance period
- L2D.7 describe and demonstrate how various surfaces of paper interact with the different media and tools used in drawing
- L2D.8 explain how artists can be considered inventors and/ or explorers

Painting Unit

- L2P.1 describe and demonstrate how the unique qualities of paints create different visual effects which in turn convey a variety of messages
- L2P.2 demonstrate the illusion of depth through aerial (atmospheric) perspective
- L2P.3 create realistic and abstract images using paints
- L2P.4 demonstrate the expressive quality of colour through
- L2P.5 describe and demonstrate an understanding of paintings from the Renaissance period

Specific Curriculum Outcomes

Students will be expected to

L2P.6	analyse paintings from the Renaissance period
L2P.7	interpret and demonstrate an understanding of drawings from the Renaissance period
L2P.8	describe and demonstrate how various surfaces of paper interact with the different media and tools used in painting
L2P.9	explain how artists can be considered interpreters and/or storytellers

3-D Form Unit

L2F.1	describe the different methods of sculpturing
L2F.2	construct a balanced free-standing sculpture
L2F.3	demonstrate an understanding of a functional object
L2F.4	demonstrate an understanding of realistic and abstract 3-D forms
L2F.5	describe and demonstrate how different materials, adhesive, tools, and equipment interact in 3-D forms

Printmaking Unit

L2PM.1	distinguish among the four major methods of printmaking
L2PM.2	demonstrate an understanding of printmaking by choosing one of the methods to create an image
L2PM.3	describe and demonstrate an understanding of prints from the Renaissance period
L2PM.4	analyse prints from the Renaissance period
L2PM.5	interpret and demonstrate an understanding of prints from the Renaissance period
L2PM.6	describe and demonstrate how different materials, surfaces, tools, and equipment interact in printmaking

Communication and Information Technology

General Curriculum Outcomes

General Technology Outcomes (as per APEF Technology Foundation Document)

GTO A - Technology Problem Solving Students will be expected to design, develop, evaluate and articulate technological solutions.

GTO B - Technology Systems Students will be expected to operate and manage technological systems.

GTO C - History and Evolution of Technology

Students will be expected to demonstrate an understanding of the history and evolution of technology and of its social and cultural implications.

GTO D - Technology and Careers Students will be expected to demonstrate an understanding of current and evolving careers and of the influence of technology on the nature of work.

GEO E - Technological Responsibility Students will be expected to demonstrate an understanding of the consequences of their technological choices.

Codes used in continuum

(A)- Awareness Level

The student is exposed to the technology as it is being used by others

(G)= Guided Level

The student begins to use the technology with the help of others

(I)= Independent Level

The student uses technology without assistance

Specific Curriculum Outcomes

Students will be expected to

Computer System

- B1.9(G) identify system specifications and be aware of compatibility issues between the hardware and the software (processor speed and type, RAM, hard drive size, optical drive, connection types, video card, sound card, monitor, network cards)
- B1.11(G) describe networks, file servers, connections (wireless, line types and speeds)
- B1.13(G) identify computer viruses, how they are transmitted and how anti-virus software is used to protect or clean a computer
- B1.14(G) identify SPAM, pop-up ads, spyware, and other invasive software coding

Social, Ethical and Health

- C2.1(G) examine current Canadian law governing the use of technology
- D2.1(G) determine the technological requirements for specific career goals
- E2.9(G) follow publishing etiquette (suitable language, no discrimination, etc.) Adhere to the guidelines for school web pages as outlined by PEI Department of Education and Early Childhood Development.

Internet

- A3.2(G) use various tools (search engines and directories) and strategies necessary to carry out research
- A3.3(G) obtain/download material (test, graphics, files) from Internet
- B3.3(G) distinguish among various file formats (file extensions), required plugins, file compression/decompression utilities
- E3.1(G) critically evaluate information and its source based on pre-determined criteria

Specific Curriculum Outcomes

Students will be expected to

Graphics

- B5.3(G) use other graphic creation tools (ie. clone brush, colour replacements, effects and filters, hexidecimal (RGB and CMYK colour values)
- B5.4(G) convert various graphic formats between vector (ie: .png, .psp, .cdr) and other bitmap images (ie: .wmf, tif, bmp, .gif, jpeg, .jpg), import a graphic file from another source

Multimedia

- A8.3(G) describe situations where streaming video and audio is appropriate
- A8.4(G) create graphics, audio and video special effects (animation, virtual reality, panorama)
- A8.5(G) select appropriate medium to convey message (be conscious of file size, formats, and storage location)
- B8.2(G) use multimedia creation and editing tools (screen captures, scanner, sound recording, digital image editing software: still and video)
- B8.4(G) use proper tools and procedure to enhance product quality (microphones, lighting, camera movement, instrumentation, teleprompters). Assign various responsibilities to a production team.

Database

B9.6(G) create a report with automated summaries and calculations (understand logic, date and summary field types)

Telecommunications

E-Learning collaborative tools

A10.1(G) collaborate using software (ie. whiteboard, slideshow, application sharing, chat, messaging, send and receive files, photos, group file sharing, resource sharing (links), online content creation and sharing, assignment drop box, video and audio, discussion forums, journal)

Specific Curriculum Outcomes

Students will be expected to

Web Authoring

- A11.2(G) create appropriate text and image file formats
- A11.3(G) create an interactive web page (on-line surveys, forms, interactive database, polls)
- B11.1(G) examine html tags
- B11.2(G) create a basic web page (may include backgrounds, images, hyperlinks, tables)
- B11.3(G) indicate where file or page is hosted (server, web server, hosting service)
- B11.4(G) apply website file management and transfer files to and from web servers (ftp), edit pages online
- B11.5(G) use special features (image maps, cascading style sheets, frames, rollovers, layers)
- B11.6(G) embed objects (audio, video, pdgs, animation, Flash, Java Script Applet)