

## Specific Curriculum Outcomes Framework

**Grade 5** 

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## Introduction

This learning outcomes framework comprises a series of specific curriculum outcome 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. The connections among learning outcomes reflect natural affinities among subject areas and facilitate the design of a balanced, integrated program.

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, located on the Department of Education and Early Childhood Development website <a href="http://www.edu.pe.ca/journeyon/">http://www.edu.pe.ca/journeyon/</a>

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.

## **Elementary Program Components**

Elementary schools must include, for all children in each year's program for kindergarten through Grades 1-6, health, language arts, mathematics, music, physical education, social studies, science, and visual arts. The elementary program does not include technology education as a subject area; however, the general and key-stage curriculum outcomes for technology education included in this booklet provide a framework for teachers of kindergarten through Grades 1-6 to use in integrating technology education within learning experiences across the curriculum.

## **Communication and Information Technology**

# General Technology Outcomes

technological solutions

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

# 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

### GTO 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**

## Computer System

Students will be expected to

- A1.1 (G) make use of help features to independently find solutions to problems
- B1.1 (I) login, open, and close a program, open, save and manage technological solutions close a file with a mouse
- B1.2 (G) demonstrate proper use of login numbers and names, set-up and change passwords, and be aware of the implications of multiple logins
- B1.3 (I) begin to work with more than one file open at once (multi-task)
- B1.4 (I) differentiate between "Save" and "Save as"
- B1.5 (G) be able to identify the common Windows components of a given software screen (menu bar, button bar, cursor, insertion point)
- B1.6 (G) have an understanding of file management (drives and folders, rename, select, move, copy, paste, delete, display format, backup, etc.)
- B1.7 (A) understand how to display file properties
- B1.8 (G) understand the difference between software and hardware
- B1.10 (I) understand how and when to re-boot (warm boot vs. cold boot)
- B1.12 (G) demonstrate proper use of network printing, choosing printer, recognizing process and purpose of print queues
- B1.13 (A) identify computer viruses, how they are transmitted, and how anti-virus software is used to protect or clean a computer
- B1.14 (A) identify SPAM, pop-up ads, spyware, and other invasive software coding
- B1.15 (G) modify and utilize pages/templates
- C1.1 (I) identify technologies that are found in everyday life

### 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 (i.e., home row, quick key strokes, proper reaches)
- D2.1 (A) determine the technological requirements for specific career goals
- E2.1 (I) respect equipment and other students' work
- E2.2 (I) work cooperatively at work station
- E2.3 (I) adhere to Acceptable Use Agreement for work stations/network/
- E2.4 (G) use electronic communication etiquette
- E2.5 (A) adhere to rules of freeware, shareware, and commercial ware
- E2.6 (A) adhere to copyright and privacy laws, give credit to sources of information (MLA, APA)
- E2.7 (G) identify ethical issues involved with Internet content, awareness of inappropriate use of technology
- E2.8 (G) demonstrate caution before sending personal information over the Internet
- E2.9 (A) 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

## General Technology Outcomes

## **Specific Curriculum Outcomes**

#### Internet

Students will be expected to

- A3.1 (G) demonstrate awareness of the Internet as a source of information
- 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
- B3.1 (G) use the various browser navigation tools (back, forward, history)
- B3.2 (G) manage bookmarks/favourites
- B3.3 (G) distinguish among various file formats (file extensions), required plugins, file compression/decompression utilities
- C3.1 (A) discuss ways in which the Internet is evolving
- E3.1 (G) critically evaluate information and its source based on predetermined criteria

## Concept Maps

Students will be expected to

- A4.1 (G) use brainstorming techniques to generate ideas
- A4.2 (G) create a web (i.e., literary, concept, character, word, Venn Diagrams, and timelines)
- A4.3 (I) categorize ideas graphically
- A4.4 (I) create links between ideas, re-link or delete links between ideas
- B4.1 (G) add fonts, graphics, sound, and colours to enhance ideas
- A4.5 (I) elaborate on ideas (i.e., adding notes, annotations, etc.)
- B4.2 (A) create hyperlinks to files, web sites, or multimedia content

## Graphics

Students will be expected to

- A5.1 (G) create illustrations or graphics by using the various drawing tools
- A5.2 (A) apply principles of design
- B5.1 (G) demonstrate various object editing features (i.e., select, unselect, resize, crop, area fill, add colour and pattern, size adjustment using the mouse or scale, various erasing techniques, object orientation, change font and text size, colour or appearance, create text blocks, change text wrap selection, and other text manipulation functions)
- B5.2 (A) carry out various object manipulations (i.e., object alignment, creation of graphics in layers, grouping/ungrouping components of an image)

#### Spreadsheets

- A6.1 (A) plan/design a spreadsheet to organize and tabulate data from various sources to make a schedule, tally/score sheet, solve a mathematical word problem
- A6.2 (A) correct errors, modify, or delete data in a cell
- A6.4 (G) use different types of graphs/charts (line, pie, bar) to visually represent data; label graph components (legend, title, *x-y* axis, colour, fill pattern)

# General Technology Outcomes

## **Specific Curriculum Outcomes**

Students will be expected to

- B6.1 (A) identify spreadsheet components and terminology (rows and columns, cell addresses, data entry bar)
- B6.3 (G) enter data into simple pre-existing spreadsheets, auto fill data, data entry bar, sort data
- B6.4 (A) edit spreadsheet layout (insert and delete rows or columns, select a range of cells, alter column widths and row heights, lock row and column headings, lock and unlock cell(s), create fixed titles)
- B6.6 (A) format numbers (decimal places, currency, etc.), format text (font, colour, size)

### Word Processing

Students will be expected to

- A7.2 (I) identify examples of desktop publishing (i.e., newspaper, catalogue, ads, brochure)
- B7.1 (I) use a grade level appropriate word processor to create and edit written work
- B7.2 (I) locate characters on a keyboard and identify functions of word processing (i.e., cursor, insertion point, enter key, space bar, uppercase, backspace, shortcut key)
- B7.3 (I) use editing tools to revise work (i.e., spell check, thesaurus, find and replace)
- B7.4 (I) change font, size, colour, style (i.e., bold italics, underline, insert special characters, drop capitals)
- B7.5 (G) format text (i.e., justification, line spacing, outlines and bullets, text wrap)
- B7.6 (G) format documents (i.e., using margins, tab rulers, indents, page centre, border, watermark)
- B7.7 (G) insert a graphic and manipulate, (i.e., resize, add borders and fill, create text art)
- B7.8 (A) insert and format tables and text boxes (i.e., lines, fill, columns, rows, borders, alignment)
- B7.10 (A) insert automated features (i.e., date and file stamp)

### Multimedia

- A8.1 (A) apply planning strategies, (storyboards, scripts, graphic organizing, brainstorming)
- A8.2 (A) create an age/grade appropriate slide show presentation that may contain one or more of the following objects (text, graphics, images, animations, audio, and video)
- A8.5 (A) select an appropriate medium to convey message (be conscious of file size, formats, and storage location)
- B8.1 (I) navigate multimedia resources such as slide shows, on-line resources or CD-ROM interactive educational activities
- B8.2 (A) use multimedia creating and editing tools (screen captures, scanner, sound recording, digital image editing software: still and video)
- B8.3 (A) convert file formats for a particular application (.jpg, .gif, .bmp, .mp3, .wav, .avi, .mpeg, .mov, etc.)

# General Technology Outcomes

## **Specific Curriculum Outcomes**

#### Database

Students will be expected to

- A9.1 (I) use an existing database (CD ROM, MicroCat, Dynex, Internet search engine) to find information (sign up for Provincial Library Card Abbycat)
- A9.2 (G) perform searches on a database file using logical and Boolean operators (understands commands, scope, filters, and conditions)
- A9.3 (A) design/plan a database to use as a method of organizing information
- A9.4 (A) create and modify a form (add graphics and error checking routines)
- A9.5 (A) use databases to analyse data and look for trends
- B9.1 (I) enter data into a pre-existing database, edit data, and use automated text
- B9.2 (A) create fields with variable field types (numeric, text, date) and properties (colour, width, font, etc.)
- B9.3 (A) restructure database (add/delete fields, change field width)
- B9.4 (A) sort records alphabetically, numerically, and by multiple fields
- B9.5 (A) create a report from the entire database or selected records
- E9.1 (A) examine functions and implications of database driven web sites (i.e., on-line purchasing, searching, and password secure items)

#### **Telecommunications**

#### Email:

Students will be expected to

- B10.1 (I) send messages
- B10.2 (I) open messages
- 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

### **E-Learning Collaborative Tools:**

Students will be expected to

A10.1 (A) collaborate using software (i.e., whiteboard, slideshow, application sharing, chat, messaging, send and receive files, photos, group file sharing, resource sharing [links], on-line content creation and sharing, assignment drop box, video and audio, discussion forums, journal)

### Web Authoring

- A11.1 (G) identify web page creation possibilities
- B11.2 (A) create a basic web page (may include backgrounds, images, hyperlinks, tables)
- B11.3 (A) indicate where file or page is hosted (server, web server, hosting service)
- B11.6 (A) embed objects (audio, video, .pdgs, animation, Flash, Java Script Applet)

## **Core French**

## General Curriculum Outcomes

# Key-Stage Curriculum Outcomes and Sample Specific Curriculum

(For a complete list of the specific curriculum outcomes, please refer to the Elementary Core French Curriculum Guide.)

#### Students should be able to

### Communication

GCO 1: On the basis of their experience in the core French curriculum, students should be able to communicate effectively in French, both orally and in writing, and to interact appropriately in a variety of situations that relate to their needs and interests.

- 1.1 cope in a classroom where French is the language spoken (e.g., ask for clarification)
- share personal information by using partial sentences and/or by answering questions (e.g., personality traits)
- 1.3 identify and describe objects, animals, people, events, and places that are part of their environment (e.g., passtimes, sports, provinces)
- share their tastes, preferences, interests, and feelings (e.g., favourite restaurant, collection)
- 1.5 participate in a variety of interactive activities (e.g., fashion show, charades)
- 1.6 ask simple questions (e.g., take food orders)
- 1.7 demonstrate an understanding of the main idea in a simple text (e.g., ask specific questions)
- 1.8 select relevant details in a simple text (e.g., participate in a treasure hunt)
- 1.9 respond personally to simple texts, often by following a model (e.g., role play, dramatize a song)
- 1.10 produce a variety of simple texts, often by following a model (e.g., slogan, banner, ad)

#### General Language Education

GCO 2: On the basis of their experience in the core French curriculum, students should be able to choose and implement strategies to facilitate their communication in French and improve their learning.

- 2.1 use various clues to recognize and identify words, for example, words in the same family, prefixes, suffixes, cognates, and loanwords (e.g., recognize linguistic borrowing among languages)
- 2.2 use textual clues to anticipate and understand a text, for example, pictures, graphic representations, page layout, listening to key words, and context
- 2.3 create connections between their prior knowledge and the text being studied (e.g., make predictions)
- 2.4 recognize the importance of their role in the learning process, their responsibilities toward learning process and their responsibilities toward others, for example, by cooperation, interaction, reflecting on what is being taught, risk taking, etc. (e.g., take risks, participate actively)
- 2.5 use a variety of tools, for example, dictionaries and technology, to create texts (e.g., lexicon)
- 2.6 produce an oral or written text by following a production model, for example, the writing process

#### Culture

GCO 3: On the basis of their experience in the core French curriculum, students should be able to demonstrate an appreciation and understanding of Francophone cultures, while comparing them with their own culture, as well as an appreciation and understanding of Canada's multicultural reality.

### Language

GCO 4: On the basis on their experience in the core French curriculum, students should be able to recognize and use in context elements of the linguistic code, orally and in writing, to facilitate their communication in French.

### Fields of Experience

GCO 5: On the basis of their experience in the core French curriculum, students should be able to participate in a variety of language experiences appropriate to their needs and interests.

## **Specific Curriculum Outcomes**

Students will be expected to

- 3.1 identify and locate certain Francophone communities locally, provincially, nationally, and internationally (e.g., Evangéline, Montréal, Paris)
- 3.2 identify and describe certain realities of Francophone cultures (e.g., French family names)
- name several similarities and differences between their culture and Francophone cultures (e.g., 24 hour time, money \_\_\_,\_\_\$)
- 3.4 identify several contemporary Francophone personalities (e.g., Roch Voisine, famous athletes)
- demonstrate an awareness of Canada's cultural mosaic (e.g., ethnic artists and artisans)
- 3.6 demonstrate knowledge of authentic texts (e.g., sing songs in French)
- 3.7 identify signs of bilingualism in our society (e.g., French TV channels)
- 4.1 recognize the linguistic elements relating to areas of experience and to their communication needs (e.g., interrogative words)
- 4.2 use the linguistic elements relating to areas of experience and to their communication needs (e.g., Je suis, tu es)

5.1 engage in language experiences in a variety of areas (e.g., sports, food, province, and country)

## **English Language Arts**

## **General Curriculum Outcomes**

## **Specific Curriculum Outcomes**

Students will be expected to

## Speaking and Listening

GCO 1: Students will be expected to clarify, and reflect on their thoughts,

- speak and listen to explore, extend, ideas, feelings, and experiences.
- GCO 2: Students will be expected to communicate information and ideas personally and critically.
- effectively and clearly, and to respond
- GCO 3: Students will be expected to interact with sensitivity and respect, considering the situation, audience, and purpose.

## Reading and Viewing

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

- contribute thoughts, ideas, and experiences to discussions, and ask 1.1 questions to clarify their ideas and those of their peers
- 1.2 ask and respond to questions to seek clarification or explanation of ideas and concepts
- explain and support personal ideas and opinions 1.3
- 1.4 listen critically to others' ideas or opinions and pionts of view
- contribute to and respond constructively in conversation, small-2.1 group and whole-group discussion, recognizing their roles and responsibilities as speakers and listeners
- 2.2 use word choice and expression appropriate to the speaking occasion
- 2.3 give and follow precise instructions and respond to questions and directions
- engage in, respond to, and evaluate oral presentations 2.4
- 3.1 demonstrate an awareness of the needs, rights, and feelings of others by listening attentively and speaking in a manner appropriate to the situation
- identify examples of prejudice, stereotyping, or bias in oral language; 3.2 recognize their negative effect on individuals and cultures; and attempt to use language that shows respect for all people
- consider purpose and the needs and expectations of their audience 3.3

#### 4.1 select, independently, texts appropriate to their interests and learning needs

- read widely and experience a variety of children's literature with an 4.2 emphasis in genre and authors
- 4.3 use pictures and illustrations, word structures, and text features (e.g., table of contents, headings and subheadings, glossaries, indices, structures of narrative and different types of expository texts, key ideas, and margin notes) to locate topics and obtain or verify their understanding of information
- 4.4 use and integrate the pragmatic, semantic, syntactic, and graphophonic cueing systems (including context clues; word order; and structural analysis to identify roots, prefixes, and suffixes) and a variety of strategies to construct meaning; use a dictionary to determine word meaning in context
- 4.5 describe and discuss their own processes and strategies in reading and viewing

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

# respond personally to a range of texts.

GCO 6: Students will be expected to

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 representation to explore, clarify, and reflect on their thoughts, feelings, experiences, and learnings; and to use their imaginations.

## **Specific Curriculum Outcomes**

- answer, with increasing independence, their own questions and those of others by selecting relevant information from a variety
  - respond to personal, group, and instructional needs for information through accessing a variety of texts
  - demonstrate understanding of how classification systems and basic reference materials are used to facilitate research
  - use a range of reference texts and a database or an electronic search to aid in the selection of texts
  - increase their abilities to access information in response to their own and others' questions
- 6.1 describe, share, and discuss their personal reactions to a range of texts across genres, topics, and subjects
- support their opinions about texts and features of types of texts 6.2
- 7.1 use their background knowledge to question and analyse information presented in print and visual texts
- 7.2 recognize how conventions and characteristics of different types of print and media texts help them understand what they read and view
- respond critically to texts by 7.3
  - applying strategies to analyse a text
  - demonstrating growing awareness that all texts reflect a purpose and a point of view
  - identifying instances where language is being used to manipulate, persuade, or control them
  - identifying instances of opinion, prejudice, bias, and stereotyping
- 8.1 use a range of strategies in writing and other ways of representing to
  - frame questions and answers to those questions
  - generate topics of personal interest and importance
  - record, develop, and reflect on ideas, attitudes, and opinions
  - compare their own thoughts and beliefs to those of others
  - describe feelings, reactions, values, and attitudes
  - record and reflect on experiences and their responses to them
  - formulate and monitor goals for learning
  - practise and extend strategies for monitoring learning
- expand appropriate note-making strategies from a growing 8.2 repertoire (e.g., outlines, charts, diagrams)
- 8.3 make deliberate language choices, appropriate to purpose, audience, and form, to enhance meaning and achieve interesting effects in imaginative writing and other ways of 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.

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 create written and media texts, collaboratively and independently, in different modes (expressive, transactional, and poetic), and in an increasing variety of forms
  - use specific features, structures, and patterns of various text forms to create written and media texts
- 9.2 address the demands of a variety of purposes and audiences
  - make choices of form, style, and content for specific audiences and purposes
- 9.3 invite responses to early drafts of their writing/media productions
  - use audience reaction to help shape subsequent drafts
  - reflect on their final drafts from a reader's/viewer's/listener's point of view
- 10.1 use a range of prewriting, drafting, revising, editing, proofreading, and presentation strategies
- 10.2 demonstrate an increasing understanding of the conventions of written language in final products
  - use basic spelling rules and show an understanding of irregularities
  - use appropriate syntax in final products
  - use references while editing (e.g., dictionaries, classroom charts, electronic spell checkers, checklists, thesauri, other writers)
- 10.3 use technology with increasing proficiency to create, revise, edit, and publish texts
- 10.4 demonstrate a commitment to shaping and reshaping pieces of writing and other representations through stages of development and refinement
- 10.5 select, organize, and combine relevant information, from three or more sources to construct and communicate meaning

## Health

# General Curriculum Outcomes

#### Wellness

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

## **Specific Curriculum Outcomes**

#### Personal Health

Students will be expected to

- W-5.1 examine the impact of physical activity, nutrition, rest and immunization on the immune system
- W-5.2 assess the importance of regular hygiene practices during adolescence
- W-5.3 examine the impact that changes in interests, abilities, and activities may have on body image
- W-5.4 examine ways in which healthy eating can accomodate a broad range of eating behaviours
- W-5.5 examine and evaluate the impact of caffeine, alcohol, and drugs on personal health/wellness

### Safety and Responsibility

Students will be expected to

- W-5.6 identify personal boundaries, and recognize that boundaries vary depending on the nature of relationship, situation, and culture
- W-5.7 promote safety practices in the school and community
- W-5.8 determine appropriate safety behaviours for community recreational situations
- W-5.9 describe and demonstrate ways to assist with injuries of others

## Relationship Choices

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

#### **Understanding and Expressing Feelings**

Students will be expected to

- R-5.1 recognize that certain behaviours may mask underlying feelings
- R-5.2 identify and use long-term strategies for managing feelings
- R-5.3 recognize that stressors affect individuals differently, and outline ways individuals respond to stress
- R-5.4 practise effective communication skills

#### **Interactions**

- R-5.5 identify possible changes in family relationships, and explore strategies for dealing with change
- R-5.6 investigate the benefits of fostering a variety of relationships throughout the life cycle
- R-5.7 apply mediation skills when resolving conflicts

## **Specific Curriculum Outcomes**

### Group Roles and Processes

Students will be expected to

- R-5.8 develop strategies to address personal roles and responsibilities in groups
- R-5.9 identify respectful communication strategies that foster group/team development

## Life Learning Choices

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

## **Learning Strategies**

Students will be expected to

- L-5.1 identify and implement an effective time management plan
- L-5.2 affirm personal skill development
- L-5.3 investigate the effectiveness of various decision-making strategies
- L-5.4 analyse factors that affect the planning and attaining of goals

### Life Goals and Career Development

Students will be expected to

- L-5.5 relate personal skills to various occupations
- L-5.6 assess how roles, expectations, and images of others may influence career/life role interests

### Volunteerism

- L-5.7 identify, within the school, the volunteer service accomplishments of staff and students
- L-5.8 develop strategies for showing appreciation for volunteer contributions

## **Mathematics**

# General Curriculum Outcomes

Number (N)

GCO: Develop number sense.

## **Specific Curriculum Outcomes**

Students will be expected to

- N1 Represent and describe whole numbers to 1 000 000.
- N2 Use estimation strategies including:
  - front-end rounding;
  - compensation;
  - compatible numbers in problem-solving contexts.
- N3 Apply mental mathematics strategies and number properties, such as:
  - skip counting from a known fact;
  - using doubling or halving;
  - using patterns in the 9s facts;
  - using repeated doubling or halving

to determine answers for basic multiplication facts to 81 and related division facts.

- N4 Apply mental mathematics strategies for multiplication, such as:
  - annexing then adding zero;
  - halving and doubling;
  - using the distributive property.
- N5 Demonstrate an understanding of multiplication (2-digit by 2-digit) to solve problems.
- N6 Demonstrate, with and without concrete materials, an understanding of division (3-digit by 1-digit) and interpret remainders to solve problems.
- N7 Demonstrate an understanding of fractions by using concrete and pictorial representations to:
  - create sets of equivalent fractions;
  - compare fractions with like and unlike denominators.
- N8 Describe and represent decimals (tenths, hundredths, thousandths) concretely, pictorially and symbolically.
- N9 Relate decimals to fractions (to thousandths).
- N10 Compare and order decimals (to thousandths) by using:
  - benchmarks;
  - place value;
  - equivalent decimals.
- N11 Demonstrate an understanding of addition and subtraction of decimals (limited to thousandths).
- PR1 Determine the pattern rule to make predictions about subsequent elements.
- PR2 Solve problems involving single-variable, one-step equations with whole number coefficients and whole number solutions.
- SS1 Design and construct different rectangles given either perimeter or area, or both (whole numbers) and draw conclusions.
- SS2 Demonstrate an understanding of measuring length (mm) by:
  - selecting and justifying referents for the unit mm;
  - modelling and describing the relationship between mm and cm units, and between mm and m units.

## Patterns and Relations (PR)

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

### Shape and Space (SS)

GCO: Use direct and indirect measure to solve problems.

## **Specific Curriculum Outcomes**

Students will be expected to

- SS3 Demonstrate an understanding of volume by;
  - selecting and justifying referents for cm<sup>3</sup> or m<sup>3</sup> units;
    - estimating volume by using referents for cm<sup>3</sup> or m<sup>3</sup>;
  - measuring and recording volume (cm<sup>3</sup> or m<sup>3</sup>);
  - constructing rectangular prisms for a given volume.
- SS4 Demonstrate an understanding of capacity by:
  - describing the relationship between mL and L;
  - selecting and justifying referents for mL or L units;
  - estimating capacity by using referents for mL or L;
  - measuring and recording capacity (mL or L).
- SS5 Describe and provide examples of edges and faces of 3-D objects, and sides of 2-D shapes that are:
  - parallel;
  - intersecting;
  - perpendicular;
  - vertical or horizontal.
- SS6 Identify and sort quadrilaterals, including:
  - rectangles;
  - squares;
  - trapezoids;
  - parallelograms;
  - rhombi

according to their attributes.

- SS7 Perform a single transformation (translation, rotation, or reflection) of a 2-D shape (with and without technology) and draw and describe the image.
- SS8 Identify a single transformation, including a translation, a rotation, and a reflection of 2-D shapes.

#### Statistics and Probability (SP)

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

- SP1 Differentiate between first-hand and second-hand data.
- SP2 Construct and interpret double bar graphs to draw conclusions.
- SP3 Describe the likelihood of a single outcome occurring using words, such as:
  - impossible;
  - possible;
  - certain.
- SP4 Compare the likelihood of two possible outcomes occurring using words, such as:
  - less likely;
  - equally likely;
  - more likely.

## Music

# General Curriculum Outcomes

GCO 2: Students will be expected to develop an appreciation of the importance of music in daily life and to respect the role that music plays in their heritage and culture.

## **Specific Curriculum Outcomes**

- 5.2.1 examine and value how music is a source of enjoyment and personal well-being
- 5.2.2 discuss and compare the different and similar roles of music locally, nationally, and globally
- 5.2.3 compare and reflect on (changes in) their thoughts and feelings with those of others about the role and influence of music in their daily lives including ways in which it is used in mass media and popular culture
- 5.2.4 demonstrate a respect and an appreciation for historical and social factors that influence music of diverse cultures
- 5.2.5 discuss and compare the work of musicians and their artistic contributions, past and present
- 5.2.6 discuss comtemporary career choices for musicians as well as explain and present how music is utilized in other artistic and other work environments

## **Physical Education**

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

## GCO 1: Active Living

Enjoy and engage in healthy levels of participation in movement activities to support lifelong active living in the context of self, family, and community.

## General Curriculum Outcomes

GCO<sub>1</sub>

## GCO 1, GCO 2

Note: Rolling is a safety skill that supports future participation in various movement activites. Grade 2 students need to be taught how to roll forward safely (see indicator 't'). For this Grade 2 outcome, teachers should ask students to show how they can roll backward and not challenge them to go beyond backward rolls of their own creation. Descriptors of how to roll backwards safely are provided here as they appear in the Grade 3 curriculum.

## GCO<sub>2</sub>

### GCO 2: Skilful Movement

Enhance quality of movement by understanding, developing, and transferring movement concepts, skills, tactics, and strategies to a wide variety of movement activities.

#### GCO 3: Relationships

Balance self through safe and respectful personal, social, cultural, and environmental interactions in a wide variety of movement activites.

## **Specific Curriculum Outcomes**

Students will be expected to

## **Active Living**

5.1 Health-Related Fitness

Create and implement as a class, with guidance, a health-related fitness plan targeting the health-related fitness component of cardiovascular endurance that includes setting a personal 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

### Active Living, Skilful Movement

Students will be expected to

5.2 Muscular Fitness

Apply, with guidance, beneficial and safe strategies to improve flexibility and muscular endurance through participation in a variety of movement activities

5.3 Complex Skills

Demonstrate a progression toward control in complex movement skills that combines locomotor skills with non-locomotor skills to be used in body management activities (including dance and educational gymnastics, and others such as track and field, aquatics, aerobics, skipping, pilates and yoga oriented poses/activities), and games

#### Skilful Movement

Students will be expected to

5.4 Manipulative Skills

Express and apply, with guidance, a variety of ways to skillfully move objects while participating in movement activities, including at a:

- utilization level of skill when:
  - volleying (to send an object in the air before it comes to rest)
  - striking with long-handled implements (bats, golf clubs, hockey sticks)
- control level of skill when:
  - punting

## **Specific Curriculum Outcomes**

Students will be expected to

5.5 Complex Manipulative Skills

Refine manipulative (sending, receiving, and accompanying objects) skills use in increasingly complex movement activities such as lead-up games, including

- throwing
- catching (collecting, gathering)
- kicking
- hand dribbling
- foot dribbling
- striking with hands and short handled implements (shorthandled racquets and paddles)

GCO 2, GCO 3

## Skilful Movements, Relationships

Students will be expected to

5.6 Performance Refinement

Apply performance cues, movement variables, tactics (e.g., body fakes, speed use, change of direction, keeping the body low while moving), and principles of practice (e.g., form, consistency, repetition) in complex movement activities to improve the performance of self and others

GCO 1, GCO 2, GCO 3

## Active Living, Skilful Movements, Relationships

Students will be expected to

5.7 Skilful Play

Refine, alone and with others, selected movement skills, tactics, and strategies while participating in

- small-sided and lead-up net/wall games (e.g., badminton, tennis, table tennis, one bounce three-on-three volleyball, pickleball, paddle ball) and critically reflect on chosen movement skills, tactics, and strategies used
- small-sided and lead-up target games (e.g., bowling, curling, golf, bocce ball, archery)
- small-sided and lead-up striking/fielding games (e.g., long ball, softball, kickball, cricket)
- small-sided and lead-up invasion/territorial games
   (e.g., two-on-two, three-on-three games using skills from games
   such as soccer, basketball, and soft lacrosse)
- small-sided and lead-up alternate environment activities and games (e.g., hiking, aquatics, orienteering, skating, roping, tobogganing, cross-country skiing, downhill skiing, tracking, cycling, wall climbing, paddling)

GCO<sub>3</sub>

#### Relationships

Students will be expected to

5.8 Rules

Demonstrate an understanding of and willingness to accept the rules of teacher-selected games, including lead-up games, and invented games by officiating and participating in classmate officiated competitions

## **Specific Curriculum Outcomes**

Students will be expected to

5.9 Safety and First Aid

Make decisions about how to prevent and care for common movement activity-related discomforts and injuries (e.g., stiffness, nose bleeds, sprains)

(Prince Edward Island Physical Education Safety Guidelines document)

Cross-curricular link Health: Wellness Choices - W-5.9

#### 5.10 Social Skills

Examine and critically assess personal positioning within the five levels of a social skills continuum for participation in movement activities (i.e., irresponsible behaviour, self-control, involvement, self-responsibility, and caring for others)

5.11 Culture and History

Discuss and communicate the influence of Canadians, both historically and currently, on the development of the numerous options for participation in movement activities in this country

(Teaching Personal and Social Responsibility Through Physical Activity - 3rd ed.) - Authorized Resource p.VII

## **Science**

## General Curriculum Outcomes

### STSE/Knowledge

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. (STSE)

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. (Knowledge)

#### 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.

## 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**

## Life Science: Meeting Basic Needs and Maintaining a Healthy Body

## The Digestive and Excretory Systems

Students will be expected to

- propose questions to investigate about how our body works and what its components are (204-1)
- describe the structure and function of the major organs of the digestive system (302-5a)
- carry out procedures to investigate how simulated saliva can start the digestion process, by breaking down substances like starch into simple sugars, and record observations using sentences or charts (205-1, 206-2)
- describe the structure and function of the major organs of the excretory system (302-5b)
- describe examples of the products/technologies that have been developed in response to a need for the disposal, control, and containment of excrement (107-8)

### The Respiratory and Circulatory Systems

Students will be expected to

- describe the structure and function of the major organs of the respiratory system (302-5c)
- describe the structure and function of the major organs of the circulatory system (302-5d)
- propose questions about the factors that affect breathing and heart rate and rephrase these questions in a testable form (204-1, 204-2)
- carry out procedures, making sure to control variables, to investigate
  the factors affecting breathing and heart rate, and compile and display
  data from these investigations in a graph (205-1, 206-2)
- demonstrate and describe the scientific processes used to investigate the factors that affect breathing and heart rate (104-2)

#### The Skeletal, Muscular, and Nervous Systems

- describe the structure and function of the major organs of the nervous system (302-5e)
- demonstrate how the skeletal, muscular, and nervous systems work together to produce movement (302-6)
- carry out procedures to explore response time, and identify and suggest explanations for patterns and discrepancies in the data collected (205-1, 206-3)
- describe various medical technologies, such as exercise machines and artificial limbs, that have arisen from the study of how our body moves (106-4)

## **Specific Curriculum Outcomes**

Students will be expected to

 provide examples of Canadians who have contributed to science and technology related to body organs, systems, and health issues (107-12)

## Physical Science: Properties and Changes in materials

### Properties of Materials

Students will be expected to

- identify properties that allow materials to be distinguished from one another (104-7, 300-10)
- classify materials as solids, liquids, or gases, and illustrate this classification in a chart showing the properties of each material (206-1, 300-9)

## **Physical Changes**

Students will be expected to

- observe and identify physical changes that can be made to an object that change the form or size of the material in the object without producing any new materials (301-9, 205-5)
- identify and describe some physical changes that are reversible and some that are not (301-10)

#### **Chemical Changes**

Students will be expected to

- describe chemical changes that occur when materials interact with each other to form totally new materials including those that result in the production of a gas (301-12, 301-11)
- identify and describe some chemical changes to materials that are reversible and some that are not (301-10)
- work with team members to develop and carry out a plan to systematically distinguish a material based on its chemical properties (204-7, 207-3, 204-5)
- compile and display data that represents the results of chemical tests used to distinguish one material from another (206-2)

#### Sources/Masses of Materials in Objects

- follow a given set of procedures to relate the mass of a whole object to the sum of the mass of its parts, and suggest possible explanations for variations in the results (104-5, 205-3, 300-11)
- describe examples of manufactured materials that have been developed to improve living conditions (107-8)
- identify the source of the materials found in an object, and use
  a variety of methods and technologies to gather information to
  describe the changes required of the natural materials to create the
  object (205-8, 300-12)

## **Specific Curriculum Outcomes**

## **Physical Science: Forces and Simple Machines**

#### Forces and their Effects

Students will be expected to

- observe, investigate, and describe how forces can act directly or from a distance to cause objects to move or remain in place (303-12, 303-13)
- describe forces as contact or non-contact (104-7)
- demonstrate and describe the effect of increasing and decreasing the amount of force applied to an object (303-14)
- make observations in order to describe force qualitatively and quantitatively (205-4, 205-5)
- estimate the force needed to lift or pull a given load in standard or nonstandard units (205-6)

#### Friction

Students will be expected to

- propose questions to investigate, identify variables to control, and plan steps to identify factors that affect friction (204-1, 204-5, 204-7)
- investigate and compare the effect of friction on the movement of objects over a variety of surfaces (303-15)
- demonstrate the use of rollers, wheels, and axles in moving objects (303-16)
- describe how the understanding of the concept of friction has led to the development of products that reduce and enhance friction (106-4, 107-1)

## Simple Machines: An Introduction

Students will be expected to

- use simple machines to reduce effort or increase the distance an object moves (205-2)
- compare the force needed to lift or move a load manually with the effort required to lift it using a simple machine (303-17)
- identify problems that consider a large amount of effort needed to lift or move heavy objects, using the knowledge they gained through the study of forces (206-9)

## Simple Machines: Levers

Students will be expected to

- differentiate between the position of the fulcrum, the load, and the effort when using a lever to accomplish a particular task (303-18)
- design the most efficient lever to accomplish a given task (303-19)

#### Simple Machines: Pulleys, Systems of Machines

Students will be expected to

• compare the force needed to lift a load using a single pulley system with that needed to lift it using a multiple pulley system, and predict the effect of adding another pulley on load-lifting capacity (303-20, 204-3)

## **Specific Curriculum Outcomes**

Students will be expected to

- design a system of machines to solve a task (204-7)
- communicate questions, ideas, and intentions, listen to others, and suggest improvements to the systems of machines designed by students in the class (207-1, 206-6)
- describe examples of how simple machines have improved living conditions (107-8)
- identify examples of machines that have been used in the past, and have developed over time, using information sources such as books, software packages, and the Internet (205-8, 105-5)

## **Earth and Space Science: Weather**

### Measuring and Describing Weather

Students will be expected to

- identify and use weather-related folklore to predict weather (105-2)
- identify, construct, and use instruments for measuring weather information (204-8, 205-4, 205-10)
- use appropriate terminology to name weather instruments when collecting weather data (104-7)
- record observations using instruments to describe weather in terms of temperature, wind speed, wind direction, precipitation, and cloud cover (205-7, 300-13)
- classify clouds as stratus, cumulus, cirrus, or "other", compare results with others, and recognize that results may vary (104-4, 206-1)
- use a variety of sources to gather information to describe the key features of a variety of weather systems (205-8, 302-11)
- estimate weather measurements for various times of the day, week, or for weather systems (205-6)
- identify weather-related technological innovations and products that have been developed by various cultures in response to weather conditions (107-14)

#### Sun's Energy Reaching the Earth

Students will be expected to

- relate the transfer of energy from the sun to weather conditions (303-21)
- identify and use appropriate tools and materials to measure the temperature of soil and water after exposing them to light and draw conclusions about the temperature readings (204-8, 205-4, 206-5)

### Properties of Air

- describe situations which demonstrate that air takes up space, has mass, and expands when heated (300-14)
- draw a conclusion, based on evidence gathered through research and observation, about the patterns of air and/or water flow that result when two air or water masses of different temperature meet (206-5)

## **Specific Curriculum Outcomes**

#### Movement of Air and Water

Students will be expected to

- identify patterns in indoor and outdoor air movement (302-10)
- relate the constant circulation of water on Earth to the processes of evaporation, condensation, and precipitation (301-13)

## Predicting the Weather

Students will be expected to

- compile and display the weather data collected over a period of time in table and/or graph format, and identify and suggest explanations for patterns or discrepancies in the data (206-2, 206-3)
- ask different people in the community and region for advice on how to predict weather and compare their tools and techniques they use to make predictions (107-2, 107-10, 207-4)
- provide examples of the way that weather forecasts are used by various people in their community (107-5)
- describe and predict patterns of change in local weather conditions (204-3, 301-14)

#### **Environmental Issues**

- identify examples of weather phenomena that are currently being studied (105-1)
- identify positive and negative effects of technologies that affect weather and the environment (108-1)
- describe how studies of the depletion of the ozone layer, global warming and the increase in acid rain have led to new inventions and stricter regulations on emissions from cars, factories, and other polluting technologies (106-4)

## **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 be 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.

## **Specific Curriculum Outcomes**

## **Conceptual Organizer: Societies**

### Unit One: Introduction

Students will be expected to

5.1.1 demonstrate an understanding of how we learn about the past

#### Unit Two: Environment

Students will be expected to

5.2.1 explain how environment influenced the development of an ancient society

#### Unit Three: Social Structure

Students will be expected to

5.3.1 explain the importance of social structure in a society from the Middle Ages

## Unit Four: Decision Making

Students will be expected to

- 5.4.1 demonstrate an understanding of the diverse societies of First Nations and Inuit, in what later became Canada
- 5.4.2 examine decision-making practices in First Nations and Inuit societies, in what later became Atlantic Canada

#### Unit Five: Interactions

Students will be expected to

5.5.1 examine interactions between English and French, and First Nations and Inuit in what later became Atlantic Canada

## Unit Six: My Society

Students will be expected to

5.6.1 illustrate the similarities and differences of past societies and your society

## **Visual Arts**

## General Curriculum Outcomes

### Strand One: Fundamental Concepts

Students will be expected to develop understanding of the following concepts through participation in a variety of hands-on, open-ended visual arts experiences.

## Specific Curriculum Outcomes

## Elements of Design

Students will be expected to

FC5.1 develop an understanding of the elements and principles of art and design in creating and viewing artwork

- line: linear and curved hatching and cross-hatching that add a sense of depth to shape and form
- shape and form: convex, concave, non-objective shapes
- space: atmospheric perspective; microscopic and telescopic views
- colour: complementary colours, hue, intensity (e.g., dulling, or neutralizing, colour intensity by mixing the colour will a small amount of its complementary hue)
- texture: textures created with a variety of tools, materials, and techniques; patterning
- value: gradations of value to create illusion of depth, shading

## Strand Two: Fundamental Concepts

Students will be expected to apply the creative process to produce a variety of two- and three-dimensional art works, using elements, principles, and techniques of visual arts to communicate feelings, ideas, and understandings.

## Principles of Art and Design

Students will develop understanding of all principles of design (that is, contrast, repetition and rhythm, variety, emphasis, proportion, balance, unity and harmony, and movement), but the focus in Grade 5 will be on proportion.

- proportion: the relationship of the size and shape of the parts of a figure to the whole figure

### Students will be expected to

complementary colours)

- CP5.1 create two- and three-dimensional works of art that express feelings and ideas inspired by their own and others' points of view (e.g., a painting based on a photo montage about children's rights and responsibilities)
- CP5.2 demonstrate an understanding of composition, using selected principles of design to create narrative art works or art works on a theme or topic (e.g., create an abstract painting using different proportions of
- CP5.3 use elements of art and design in art works to communicate ideas, messages, and understandings (e.g., a graffiti-style mural that addresses a community issue, using convex shapes that lead the eye with implied lines)
- CP5.4 use a variety of materials, tools, and techniques to determine solutions to design challenges
  - drawing: coloured pencils to create a caricature of a celebrity that exaggerates facial features and uses linear shading and cast shadows
  - mixed media: a composite image that uses photographs, photocopies, transfer, images, and selected opaque and transparent materials to reflect their self-identity

## **Specific Curriculum Outcomes**

Students will be expected to

- painting: tempera paint or watercolour pencils using unusual colours or perspectives to suggest a fantasy world
- printmaking: a relief print transferred from a textured surface, made with glue lines, craft foam, cardboard, paper, or string glued to board, using shapes to create a graphic design that explores pattern in a non-objective op art style
- sculpture: a human figure or an imaginary creature made from clay using basic handbuilding methods such as making the piece with coils or slabs of clay or by pinching and pulling the clay

## Strand Three: Reflecting, Responding, and Analysing

Students will be expected to apply the critical analysis process to communicate feelings, ideas, and understandings in response to a variety of art works and art experiences.

RR5.1 interpret a variety of art works and identify the feelings, issues, themes, and social concerns that they convey

(e.g., use an image round-table technique to compare interpretations of emotions suggested by abstract forms or figures in art work)

- RR5.2 explain how the elements and principles of art and design are used in their own and others' art work to communicate meaning or understanding

  (e.g., packaging designs [cereal boxes, drink packaging] that use complementary colours create an impression different from that
- created by packages that use other colour schemes)

  RR5.3 demonstrate an understanding of how to read and interpret signs, symbols, and style in art works

(e.g., Picasso's cubist portraits use stylistic features from African masks)

RR5.4 identify and explain their strengths, their interests, and areas for improvement as creators, interpreters, and viewers of art (e.g., use of appropriate terminology in talking about their own art work)

## Strand Four: Exploring Forms and Cultural Contexts

Students will be expected to demonstrate an understanding of a variety of art forms, styles and techiques from the past and present, and their social and/or community contexts.

- EC5.1 describe how forms and styles of visual and media arts represent various messages and contexts in the past and present (e.g., promotion of ideas or products on film, television, and the Internet in everyday life)
- EC5.2 demonstrate an awareness of ways in which visual arts reflect the beliefs and traditions of a variety of peoples and of people in different times and places (e.g., the relationship between public art and its location)