The Ontario Curriculum

Expectations for Grade 7

Parents' Guide

Durham District School Board

GRADE 7

Dear Parents and Guardians:

At the Durham District School Board we believe that parents and guardians are partners in learning and we value involvement in your children's education. To support you, and in turn our students, we have prepared this clear and concise version of the curriculum expectations. This publication offers you a complete guide to the new Ontario Curriculum's learning expectations for Grade One.

The curriculum implemented in Durham District School Board schools includes general and specific expectations of knowledge and skills required of students in Grade One through to Grade Eight. There are eight separate publications, covering the expectations for each grade. By being familiar with the curriculum expectations, you can see what your child is learning in each grade and work with teachers to improve your child's academic success.

We also welcome you in our schools and encourage you to participate in parent-teacher conferences and school events, and to be active on school councils. Most of all, we urge you to provide your children with encouragement and support to be successful in school.

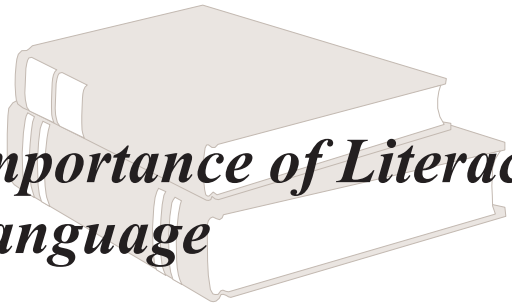
It is our hope that you will find the grade-by-grade curriculum guides helpful. Parents can also find further information on the Board's Website, www.durham.edu.on.ca in the "Parents" menu.

If you have questions or if you would like to discuss the curriculum expectations, we encourage you to contact your child's teacher or the school principal. Together, we can work in cooperation to ensure student success.

Sincerely,

Martyn Beckett
Director of Education

- These curriculum expectations have been taken directly from the **Ontario Curriculum, Grades 1-8;** as of **June 2010**, published by the Ministry of Education. The expectations are separated by grade to offer parents easy access to this information.
- The achievement charts identify four categories of knowledge and skills. The achievement chart is a standard province-wide guide to be used by teachers to guide the development of assessment tasks and tools, help teachers to plan instruction and assist in providing meaningful feedback to students. Level 3 is the provincial standard.

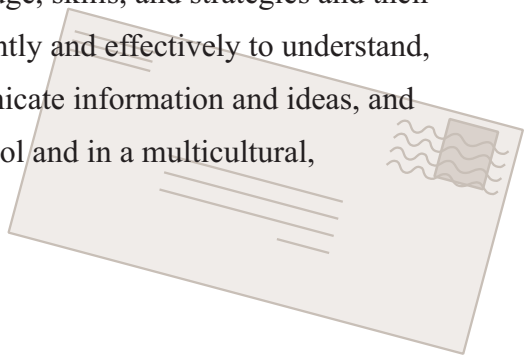


The Importance of Literacy and Language

Language development is central to students' intellectual, social, and emotional growth, and must be seen as a key element of the curriculum. When students learn to use language in the elementary grades, they do more than master the basic skills. They learn to value the power of language and to use it responsibly. They learn to express feelings and opinions and, as they mature, to support their opinions with sound arguments and research. They become aware of the many purposes for which language is used and the diverse forms it can take to appropriately serve particular purposes and audiences.

They develop an awareness of how language is used in different formal and informal situations. In sum, they come to appreciate language both as an important medium for communicating ideas and information and as a source of enjoyment.

The expectations for Grades 7 and 8 focus on the consolidation of students' language knowledge, skills, and strategies and their ability to use them independently and effectively to understand, reflect on, apply, and communicate information and ideas, and for continued learning in school and in a multicultural, multimedia world.



Getting Involved

- ✓ Do word puzzles, crosswords, and word searches together.
- ✓ Listen carefully and clarify each other's ideas by paraphrasing.

Oral Communication: Grade 7

Overall Expectations

By the end of Grade 7, students will:

- ▸ listen in order to understand and respond appropriately in a variety of situations for a variety of purposes

Specific Expectations

By the end of Grade 7, students will:

Listen to Understand

Purpose

- → identify a range of purposes for listening in a variety of situations, formal and informal, and set goals appropriate for specific listening tasks

Active Listening Strategies

- → demonstrate an understanding of appropriate listening behaviour by adapting active listening strategies to suit a wide variety of situations, including work in groups

Comprehension Strategies

- → identify a variety of listening comprehension strategies and use them appropriately before, during, and after listening in order to understand and clarify the meaning of increasingly complex or challenging oral texts

Demonstrating Understanding

- → demonstrate an understanding of the information and ideas in increasingly complex oral texts in a variety of ways

Making Inferences/Interpreting Texts

- → develop and explain interpretations of oral texts using stated and implied ideas from the texts to support their interpretation

Extending Understanding

- → extend understanding of oral texts, including increasingly complex texts, by connecting, comparing, and contrasting the ideas and information in them to their own knowledge, experience, and insights; to other texts, including print and visual texts; and to the world around them

Analysing Texts

- → analyse oral texts in order to evaluate how effectively they communicate ideas, opinions, themes, or experiences, and suggest possible improvements

Point of View

- → explain the connection between a speaker's tone and the point of view or perspective presented in oral texts

Presentation Strategies

- → identify a wide variety of presentation strategies used in oral texts and evaluate their effectiveness

Overall Expectations
By the end of Grade 7, students will:

- use speaking skills and strategies appropriately to communicate with different audiences for a variety of purposes

Specific Expectations
By the end of Grade 7, students will:

Speak to Communicate

Purpose
- identify a range of purposes for speaking and explain how the purpose and intended audience might influence the choice of speaking strategies

Interactive Strategies
- demonstrate an understanding of appropriate speaking behaviour in most situations, adapting contributions and responses to suit the purpose and audience

Clarity and Coherence
- communicate orally in a clear, coherent manner, using a structure and style appropriate to both the topic and the intended audience

Appropriate Language
- use appropriate words, phrases, and terminology from the full range of their vocabulary, including inclusive and non- discriminatory language, and a range of stylistic devices, to communicate their meaning accurately and engage the interest of their intended audience

Vocal Skills and Strategies
- identify a range of vocal effects, including tone, pace, pitch, volume, and a variety of sound effects, and use them appropriately and with sensitivity towards cultural differences to communicate their meaning

Non-Verbal Cues
- identify a variety of non-verbal cues, including facial expression, gestures, and eye contact, and use them in oral communications, appropriately and with sensitivity towards cultural differences, to help convey their meaning

Visual Aids
- use a variety of appropriate visual aids ***(e.g., charts, videos, props, multimedia)*** to support and enhance oral presentations

Overall Expectations
By the end of Grade 7, students will:

- reflect on and identify their strengths as listeners and speakers, areas for improvement, and the strategies they found most helpful in oral communication situations

Specific Expectations
By the end of Grade 7, students will:

Reflect on Oral Communication Skills and Strategies

Metacognition
- identify what strategies they found most helpful before, during, and after listening and speaking and what steps they can take to improve their oral communication skills

Interconnected Skills
- identify how their skills as viewers, representers, readers, and writers help them improve their oral communication skills

Reading: Grade 7

Overall Expectations
By the end of Grade 7, students will:

- read and demonstrate an understanding of a variety of literary, graphic, and informational texts, using a range of strategies to construct meaning

Specific Expectations
By the end of Grade 7, students will:

Read for Meaning

Variety of Texts
- read a wide variety of increasingly complex or difficult texts from diverse cultures, including literary texts, graphic texts, and informational texts

Purpose
- identify a variety of purposes for reading and choose reading materials appropriate for those purposes

Comprehension Strategies
- identify a variety of reading comprehension strategies and use them appropriately before, during, and after reading to understand increasingly complex texts

Demonstrating Understanding
- demonstrate understanding of increasingly complex texts by summarizing important ideas and citing a variety of details that support the main idea

Making Inferences/Interpreting Texts
- develop and explain interpretations of increasingly complex or difficult texts using stated and implied ideas from the texts to support their interpretations

Extending Understanding
- extend understanding of texts, including increasingly complex or difficult texts, by connecting the ideas in them to their own knowledge, experience, and insights, to other familiar texts, and to the world around them

Analysing Texts
- analyse a variety of texts, both simple and complex, and explain how the different elements in them contribute to meaning and influence the reader's reaction

Responding to and Evaluating Texts
- evaluate the effectiveness of both simple and complex texts based on evidence from the texts

Point of View
- identify the point of view presented in texts, including increasingly complex or difficult texts; give evidence of any biases they may contain; and suggest other possible perspectives

Overall Expectations
By the end of Grade 7, students will:

- recognize a variety of text forms, text features, and stylistic elements and demonstrate understanding of how they help communicate meaning

Specific Expectations
By the end of Grade 7, students will:

Understand Form and Style

Text Forms
- analyse a variety of text forms and explain how their particular characteristics help communicate meaning, with a focus on literary texts such as a novel, graphic texts such as a photo essay, and informational texts such as a manual

Text Patterns
- analyse increasingly complex texts to identify organizational patterns used in them and explain how the patterns help communicate meaning

Text Features
- identify a variety of text features and explain how they help communicate meaning

Elements of Style
- identify various elements of style – including foreshadowing, metaphor, and symbolism – and explain how they help communicate meaning and enhance the effectiveness of texts

Overall Expectations
By the end of Grade 7, students will:

- use knowledge of words and cueing systems to read fluently

Specific Expectations

By the end of Grade 7, students will:

Read with Fluency

Reading Familiar Words

- automatically read and understand most words in a wide range of reading contexts

Reading Unfamiliar Words

- predict the meaning of and rapidly solve unfamiliar words using different types of cues, including:
  - semantic (meaning) cues
  - syntactic (language structure) cues
  - graphophonic (phonological and graphic) cues

Reading Fluently

- read appropriate texts with expression and confidence, adjusting reading strategies and reading rate to match the form and purpose

Overall Expectations

By the end of Grade 7, students will:

- reflect on and identify their strengths as readers, areas for improvement, and the strategies they found most helpful before, during, and after reading

Specific Expectations

By the end of Grade 7, students will:

Reflect on Reading Skills and Strategies

Metacognition

- identify a range of strategies they found helpful before, during, and after reading and explain, in conversation with the teacher and/or peers or in a reader's notebook, how they can use these and other strategies to improve as readers

Interconnected Skills

- explain, in conversation with the teacher and/or peers or in a reader's notebook, how their skills in listening, speaking, writing, viewing, and representing help them make sense of what they read

Writing: Grade 7

Overall Expectations

By the end of Grade 7, students will:

- generate, gather, and organize ideas and information to write for an intended purpose and audience

Specific Expectations

By the end of Grade 7, students will:

Develop and Organize Content

Purpose and Audience

- identify the topic, purpose, and audience for more complex writing forms

Developing Ideas

- generate ideas about more challenging topics and identify those most appropriate for the purpose

Research

- gather information to support ideas for writing, using a variety of strategies and a wide range of print and electronic resources

Classifying Ideas

- sort and classify ideas and information for their writing in a variety of ways that allow them to manipulate information and see different combinations and relationships in their data

Organizing Ideas

- identify and order main ideas and supporting details and group them into units that could be used to develop a multi-paragraph piece of writing, using a variety of strategies

Review

- determine whether the ideas and information they have gathered are relevant, appropriate, and sufficiently specific for the purpose, and do more research if necessary

Overall Expectations

By the end of Grade 7, students will:

- draft and revise their writing, using a variety of informational, literary, and graphic forms and stylistic elements appropriate for the purpose and audience

Specific Expectations

By the end of Grade 7, students will:

Use Knowledge of Form and Style in Writing

Form

- write complex texts of different lengths using a wide range of forms

Voice

- establish a distinctive voice in their writing appropriate to the subject and audience

Word Choice

- regularly use vivid and/or figurative language and innovative expressions in their writing

Sentence Fluency

- vary sentence structures to give their writing rhythm and pacing by using a variety of connecting and/or introductory words and phrases to help combine short, simple sentences into longer, more complex sentences

Point of View

- identify their point of view and other possible points of view, evaluate other points of view, and find ways to acknowledge other points of view, if appropriate

Preparing for Revision

- identify elements in their writing that need improvement, selectively using feedback from the teacher and peers, with a focus on voice, diction, and an effective beginning and ending

Revision

- make revisions to improve the content, clarity, and interest of their written work, using a variety of strategies

Producing Drafts

- produce revised draft pieces of writing to meet identified criteria based on the expectations

Overall Expectations

By the end of Grade 7, students will:

- use editing, proofreading, and publishing skills and strategies, and knowledge of language conventions, to correct errors, refine expression, and present their work effectively

Specific Expectations

By the end of Grade 7, students will:

Apply Knowledge of Language Conventions and Present Written Work Effectively

Spelling Familiar Words

- spell familiar words correctly

Spelling Unfamiliar Words

- spell unfamiliar words using a variety of strategies that involve understanding sound-symbol relationships, word structures, word meanings, and generalizations about spelling

Vocabulary

- confirm spellings and word meanings or word choice using a variety of resources appropriate for the purpose

Punctuation

- use punctuation appropriately to communicate their intended meaning in more complex writing forms, including forms specific to different subject areas, with a focus on the use of: periods after initials, in abbreviations, and in decimal numbers; parentheses; punctuation to indicate intonation, pauses, or gestures

Grammar

- use parts of speech correctly to communicate their meaning clearly, with a focus on the use of: relative pronouns ***(e.g., who, whose, which, that)***; prepositions, including prepositional phrases; adjectives; conjunctions; adverbs; present, past, and future verb tenses; present and past participles

Proofreading

- proofread and correct their writing using guidelines developed with peers and the teacher

Publishing

- use a wide range of appropriate elements of effective presentation in the finished product, including print, script, different fonts, graphics, and layout

Producing Finished Works

- produce pieces of published work to meet identified criteria based on the expectations

Overall Expectations

By the end of Grade 7, students will:

- reflect on and identify their strengths as writers, areas for improvement, and the strategies they found most helpful at different stages in the writing process

Specific Expectations

By the end of Grade 7, students will:

Reflect on Writing Skills and Strategies

Metacognition

- identify a variety of strategies they used before, during, and after writing, explain which ones were most helpful, and suggest future steps they can take to improve as writers

Interconnected Skills

- describe how their skills in listening, speaking, reading, viewing, and representing help in their development as writers

Portfolio

- select pieces of writing that they think reflect their growth and competence as writers and explain the reasons for their choices

Media Literacy: Grade 7

Overall Expectations

By the end of Grade 7, students will:

- demonstrate an understanding of a variety of media texts

Specific Expectations

By the end of Grade 7, students will:

Understand Media Texts

Purpose and Audience

- explain how various media texts address their intended purpose and audience

Making Inferences/Interpreting Messages

- interpret increasingly complex or difficult media texts, using overt and implied messages as evidence for their interpretations

Responding to and Evaluating Texts

- evaluate the effectiveness of the presentation and treatment of ideas, information, themes, opinions, issues, and/or experiences in media texts

Audience Responses

- explain why different audiences might have different responses to a variety of media texts

Point of View

- demonstrate understanding that different media texts reflect different points of view

Production Perspectives

- identify who produces various media texts and determine the commercial, ideological, political, cultural, and/or artistic interests or perspectives that the texts may involve

Overall Expectations

By the end of Grade 7, students will:

- identify some media forms and explain how the conventions and techniques associated with them are used to create meaning

Specific Expectations

By the end of Grade 7, students will:

Understand Media Forms, Conventions and Techniques

Form

- explain how individual elements of various media forms combine to create, reinforce, and/or enhance meaning

Conventions and Techniques

- identify the conventions and techniques used in a variety of media forms and explain how they help convey meaning and influence or engage the audience

Overall Expectations

By the end of Grade 7, students will:

- create a variety of media texts for different purposes and audiences, using appropriate forms, conventions, and techniques

Specific Expectations

By the end of Grade 7, students will:

Creating Media Texts

Purpose and Audience

- explain why they have chosen the topic for a media text they plan to create and identify challenges they may face in engaging and/or influencing their audience

Form

- identify an appropriate form to suit the specific purpose and audience for a media text they plan to create, and explain why it is an appropriate choice

Conventions and Techniques

- identify conventions and techniques appropriate to the form chosen for a media text they plan to create, and explain how they will use the conventions and techniques to help communicate their message

Producing Media Texts

- produce a variety of media texts of some technical complexity for specific purposes and audiences, using appropriate forms, conventions, and techniques

Overall Expectations

By the end of Grade 7, students will:

- reflect on and identify their strengths as media interpreters and creators, areas for improvement, and the strategies they found most helpful in understanding and creating media texts

Specific Expectations

By the end of Grade 7, students will:

Reflect on Media Literacy Skills and Strategies

Metacognition

- identify what strategies they found most helpful in making sense of and creating media texts, and explain how these and other strategies can help them improve as media viewers/listeners/producers

Interconnected Skills

- explain how their skills in listening, speaking, reading, and writing help them to make sense of and produce media texts

Achievement Chart - Language, Grades 1-8

Categories	Level 1	Level 2	Level 3	Level 4
Knowledge and Understanding *Subject-specific content acquired in each grade (knowledge), and the comprehension of its meaning and significance (understanding)*	**The student:**			
Knowledge of content *(e.g., forms of text; strategies associated with reading, writing, speaking, and listening; elements of style; terminology; conventions)*	→ demonstrates limited knowledge of content	→ demonstrates some knowledge of content	→ demonstrates considerable knowledge of content	→ demonstrates thorough knowledge of content
Understanding of content *(e.g., concepts, ideas, opinions; relationships among facts, ideas, concepts, themes)*	→ demonstrates limited understanding of content	→ demonstrates some understanding of content	→ demonstrates considerable understanding of content	→ demonstrates thorough understanding of content
Thinking *The use of critical and creative thinking skills and/or processes*	**The student:**			
Use of planning skills *(e.g., generating ideas gathering information, focusing research, organizing information)*	→ uses planning skills with limited effectiveness	→ uses planning skills with some effectiveness	→ uses planning skills with considerable effectiveness	→ uses planning skills with a high degree of effectiveness
Use of processing skills *(e.g., making inferences, interpreting, analysing, detecting bias, synthesizing, evaluating, forming conclusions)*	→ uses processing skills with limited effectiveness	→ uses processing skills with some effectiveness	→ uses processing skills with considerable effectiveness	→ uses processing skills with a high degree of effectiveness
Use of critical/creative thinking processes *(e.g., reading process, writing process, oral discourse, research, critical/creative analysis, critical literacy, metacognition, invention)*	→ uses critical/creative thinking processes with limited effectiveness	→ uses critical/creative thinking processes with some effectiveness	→ uses critical/creative thinking processes with considerable effectiveness	→ uses critical/creative thinking processes with a high degree of effectiveness

Categories	Level 1	Level 2	Level 3	Level 4
Communication *The conveying of meaning through various forms*				
	The student:			
Expressing and organization of ideas and information *(e.g., clear expression, logical organization)* **in oral, visual, and written forms including media forms**	→ expresses and organizes ideas and information with limited effectiveness	→ expresses and organizes ideas and information with some effectiveness	→ expresses and organizes ideas and information with considerable effectiveness	→ expresses and organizes ideas and information with a high degree of effectiveness
Communication for different audiences and purposes *(e.g., use of appropriate style, voice, point of view, tone)* **in oral, visual, and written forms including media forms**	→ communicates for different audiences and purposes with limited effectiveness	→ communicates for different audiences and purposes with some effectiveness	→ communicates for different audiences and purposes with considerable effectiveness	→ communicates for different audiences and purposes with a high degree of effectiveness
Use of conventions *(e.g., grammar, spelling, punctuation, usage)* **vocabulary, and terminology of the discipline in oral, visual, and written forms including media forms**	→ uses conventions, vocabulary, and terminology of the discipline with limited effectiveness	→ uses conventions, vocabulary, and terminology of the discipline with some effectiveness	→ uses conventions, vocabulary, and terminology of the discipline with considerable effectiveness	→ uses conventions, vocabulary, and terminology of the discipline with a high degree of effectiveness
Application *The use of knowledge and skills to make connections within and between various contexts*				
	The student:			
Application of knowledge and skills *(e.g., concepts, strategies, processes)* **in familiar contexts**	→ applies knowledge and skills in familiar contexts with limited effectiveness	→ applies knowledge and skills in familiar contexts with some effectiveness	→ applies knowledge and skills in familiar contexts with considerable effectiveness	→ applies knowledge and skills in familiar contexts with a high degree of effectiveness
Transfer of knowledge and skills *(e.g., concepts, strategies, processes)* **to new contexts**	→ transfers knowledge and skills to new contexts with limited effectiveness	→ transfers knowledge and skills to new contexts with some effectiveness	→ transfers knowledge and skills to new contexts with considerable effectiveness	→ transfers knowledge and skills to new contexts with a high degree of effectiveness
Making connections within and between various contexts *(e.g., between the text and personal knowledge or experience, other texts, and the world outside the school; between disciplines)*	→ makes connections within and between various contexts with limited effectiveness	→ makes connections within and between various contexts with some effectiveness	→ makes connections within and between various contexts with considerable effectiveness	→ makes connections within and between various contexts with a high degree of effectiveness

The Importance of Mathematics

"Since mathematics is a key element of the curriculum, parents, students, and teachers need to understand why mathematics is important. When students learn mathematics, they do more than master basic skills; they acquire a concise and powerful means of analysis, problem solving, and communication.

Competence using mathematical language, structures, and operations within the mathematical processes will help students to reason, justify their conclusions, and express ideas clearly. Students need to be able to use mathematics in connection with technology, their daily lives and eventually, in the workplaces.

Mathematics is an essential learning tool. As students identify relationships between mathematical concepts and everyday situations, and make connections between mathematics and other subjects, they gain the ability to use mathematics to extend and apply their knowledge in other curriculum areas such as science, music and language.

Grade 7: Mathematical Process Expectations
The mathematical process expectations are to be integrated into student learning associated with all the strands.

Throughout Grade 7, students will:

Problem Solving	➤ develop, select, apply, and compare a variety of problem-solving strategies as they pose and solve problems and conduct investigations, to help deepen their mathematical understanding;
Reasoning and Proving	➤ develop and apply reasoning skills (e.g., recognition of relationships, generalization through inductive reasoning, use of counter-examples) to make mathematical conjectures, assess conjectures and justify conclusions, and plan and construct organized mathematical arguments;
Reflecting	➤ demonstrate that they are reflecting on and monitoring their thinking to help clarify their understanding as they complete an investigation or solve a problem (e.g., by assessing the effectiveness of strategies and processes used, by proposing alternative approaches, by judging the reasonableness of results, by verifying solutions);
Selecting Tools and Computational Strategies	➤ select and use a variety of concrete, visual, and electronic learning tools and appropriate computational strategies to investigate mathematical ideas and to solve problems;
Connecting	➤ make connections among mathematical concepts and procedures, and relate mathematical ideas to situations or phenomena drawn from other contexts (e.g., other curriculum areas, daily life, current events, art and culture, sports);
Representing	➤ create a variety of representations of mathematical ideas (e.g., numeric, geometric, algebraic, graphical, pictorial; onscreen dynamic representations), connect and compare them, and select and apply the appropriate representations to solve problems;
Communicating	➤ communicate mathematical thinking orally, visually, and in writing, using mathematical vocabulary and a variety of appropriate representations, and observing mathematical conventions.

Getting Involved

✓ Ask your child to solve the problem below. Encouraging the use of diagrams to explain their reasoning. "If I have a string that is 36 cm long, what is one greatest rectangular area I can create?"

Number Sense and Numeration: Grade 7

Overall Expectations

By the end of Grade 7, students will:

- represent, compare, and order numbers, including integers;
- demonstrate an understanding of addition and subtraction of fractions and integers, and apply a variety of computational strategies to solve problems involving whole numbers and decimal numbers;
- demonstrate an understanding of proportional relationships using percent, ratio, and rate.

Specific Expectations

By the end of Grade 7, students will:

Quantity Relationships

- represent, compare, and order decimals to hundredths and fractions, using a variety of tools (e.g., number lines, Cuisenaire rods, base ten materials, calculators);
- generate multiples and factors, using a variety of tools and strategies (e.g., identify multiples on a hundreds chart; create rectangles on a geoboard) (***Sample problem:*** List all the rectangles that have an area of 36 cm^2 and have whole-number dimensions.);
- identify and compare integers found in real-life contexts (e.g., –10°C is much colder than +5°C);
- represent and order integers, using a variety of tools (e.g., two-colour counters, virtual manipulatives, number lines);
- select and justify the most appropriate representation of a quantity (i.e., fraction, decimal, percent) for a given context (e.g., "I would use a decimal for recording the length or mass of an object, and a fraction for part of an hour.");
- represent perfect squares and square roots, using a variety of tools (e.g., geoboards, connecting cubes, grid paper);
- explain the relationship between exponential notation and the measurement of area and volume (***Sample problem:*** Explain why area is expressed in square units [$units^2$] and volume is expressed in cubic units [$units^3$].).

Operational Sense

- divide whole divide whole numbers by simple fractions and by decimal numbers to hundredths, using concrete materials (e.g., divide 3 by $\frac{1}{2}$ using fraction strip; divide 4 by 0.8 using base ten materials and estimation);
- use a variety of mental strategies to solve problems involving the addition and subtraction of fractions and decimals (e.g., use the commutative property: $3 \times \frac{2}{5} \times \frac{1}{3} = 3 \times \frac{1}{3} \times \frac{2}{5}$, which gives $1 \times \frac{2}{5} = \frac{2}{5}$; use the distributive property: $16.8 \div 0.2$ can be thought of as $(16 + 0.8) \div 0.2 = 16 \div 0.2 + 0.8 \div 0.2$, which gives $80 + 4 = 84$);
- solve problems involving the multiplication and division of decimal numbers to thousandths by one-digit whole numbers, using a variety of tools (e.g., concrete materials, drawings, calculators) and strategies (e.g., estimation, algorithms);
- solve multi-step problems arising from real-life contexts and involving whole numbers and decimals, using a variety of tools (e.g., concrete materials, drawings, calculators) and strategies (e.g., estimation, algorithms);
- use estimation when solving problems involving operations with whole numbers, decimals, and percents, to help judge the reasonableness of a solution (***Sample problem:*** A book costs $18.49. The salesperson tells you that the total price, including taxes, is $22.37. How can you tell if the total price is reasonable without using a calculator?);
- evaluate expressions that involve whole numbers and decimals, including expressions that contain brackets, using order of operations;
- add and subtract fractions with simple like and unlike denominators, using a variety of tools (e.g., fraction circles, Cuisenaire rods, drawings, calculators) and algorithms;
- demonstrate, using concrete materials, the relationship between the repeated addition of fractions and the multiplication of that fraction by a whole number (e.g., $\frac{1}{2} + \frac{1}{2} + \frac{1}{2} = 3 \times \frac{1}{2}$);
- add and subtract integers, using a variety of tools (e.g., two-colour counters, virtual manipulatives, number lines);

Proportional Relationships

- determine, through investigation, the relationships among fractions, decimals, percents, and ratios;
- solve problems that involve determining whole number percents, using a variety of tools (e.g., base ten materials, paper and pencil, calculators) (***Sample problem:*** If there are 5 blue marbles in a bag of 20 marbles, what percent of the marbles are not blue?);
- demonstrate an understanding of rate as a comparison, or ratio, of two measurements with different units (e.g., speed is a rate that compares distance to time and that can be expressed as kilometres per hour);
- solve problems involving the calculation of unit rates (***Sample problem:*** You go shopping and notice that 25 kg of Ryan's Famous Potatoes cost $12.95, and 10 kg of Gillian's Potatoes cost $5.78. Which is the better deal? Justify your answer.).

Measurement: Grade 7

Overall Expectations

By the end of Grade 7, students will:

- report on research into real-life applications of area measurements;
- determine the relationships among units and measurable attributes, including the area of a trapezoid and the volume of a right prism.

Specific Expectations

By the end of Grade 7, students will:

Attributes, Units, and Measurement Sense

- research and report on real-life applications of area measurements (e.g., building a skateboard; painting a room).

Measurement Relationships

- sketch different polygonal prisms that share the same volume (***Sample problem:*** The Neuman Company is designing a new container for its marbles. The container must have a volume of 200 cm^3. Sketch three possible containers, and explain which one you would recommend.);
- solve problems that require conversion between metric units of measure (e.g., millimetres and centimetres, grams and kilograms, millilitres and litres) (***Sample problem:*** At Andrew's Deli, Cheese is on sale for $11.50 for one kilogram. How much would it cost to purchase 150 g of cheese?);
- solve problems that require conversion between metric units of area (i.e., square centimetres, square metres) (***Sample problem:*** What is the ratio of the number of square metres to the number of square centimetres for a given area? Use this ratio to convert 6.25 m^2 to square centimetres.);

- determine, through investigation using a variety of tools (e.g., concrete materials, dynamic geometry software) and strategies, the relationship for calculating the area of a trapezoid, and generalize to develop the formula [i.e., *Area* = (*sum of lengths of parallel sides* x *height*) ÷ 2] (***Sample problem:*** Determine the relationship between the area of a parallelogram and the area of a trapezoid by composing a parallelogram from congruent trapezoids.);
- solve problems involving the estimation and calculation of the area of a trapezoid;
- estimate and calculate the area of composite two-dimensional shapes by decomposing into shapes with known area relationships (e.g., rectangle, parallelogram, triangle) (***Sample problem:*** Decompose a pentagon into shapes with known area relationships to find the area of the pentagon.);
- determine, through investigation using a variety of tools and strategies (e.g., decomposing right prisms; stacking congruent layers of concrete materials to form a right prism), the relationship between the height, the area of the base, and the volume of right prisms with simple polygonal bases (e.g., parallelograms, trapezoids), and generalize to develop the formula (i.e., *Volume* = *area of base* x *height*) (***Sample problem:*** Decompose right prisms with simple polygonal bases into triangular prisms and rectangular prisms. For each prism, record the area of the base, the height, and the volume on a chart. Identify relationships.);
- determine, through investigation using a variety of tools (e.g., nets, concrete materials, dynamic geometry software, Polydrons), the surface area of right prisms;
- solve problems that involve the surface area and volume of right prisms and that require conversion between metric measures of capacity and volume (i.e., millilitres and cubic centimetres) (***Sample problem:*** An aquarium has a base in the shape of a trapezoid. The aquarium is 75 cm high. The base is 50 cm long at the front, 75 cm long at the back, and 25 cm wide. Find the capacity of the aquarium.).

Geometry & Spatial Sense: Grade 7

Overall Expectations

By the end of Grade 7, students will:

- construct related lines, and classify triangles, quadrilaterals, and prisms;
- develop an understanding of similarity, and distinguish similarity and congruence;
- describe location in the four quadrants of a coordinate system, dilatate two-dimensional shapes, and apply transformations to create and analyse designs.

Specific Expectations

By the end of Grade 7, students will:

Geometry Properties

- construct related lines (i.e., parallel; perpendicular; intersecting at 30º, 45º, and 60º), using angle properties and a variety of tools (e.g., compass and straight edge, protractor, dynamic geometry software) and strategies (e.g., paper folding);
- sort and classify triangles and quadrilaterals by geometric properties related to symmetry, angles, and sides, through investigation using a variety of tools (e.g., geoboard, dynamic geometry software) and strategies (e.g., using charts, using Venn diagrams) (***Sample problem:*** Investigate whether dilatations change the geometric properties of triangles and quadrilaterals.);
- construct angle bisectors and perpendicular bisectors, using a variety of tools (e.g., Mira, dynamic geometry software, compass) and strategies (e.g., paper folding), and represent equal angles and equal lengths using mathematical notation;
- investigate, using concrete materials, the angles between the faces of a prism, and identify right prisms (***Sample problem:*** Identify the perpendicular faces in a set of right prisms.).

Geometric Relationships

- identify, through investigation, the minimum side and angle information (i.e., side-side-side; side-angle-side; angle- side angle) needed to describe a unique triangle (e.g.,"I can draw many triangles if I'm only told the length of one side, but there's only one triangle I can draw if you tell me the lengths of all three sides.");
- determine, through investigation using a variety of tools (e.g., dynamic geometry software, concrete materials, geoboard), relationships among area, perimeter, corresponding side lengths, and corresponding angles of congruent shapes (***Sample problem:*** Do you agree with the conjecture that triangles with the same area must be congruent? Justify your reasoning.);
- demonstrate an understanding that enlarging or reducing two-dimensional shapes creates similar shapes;
- distinguish between and compare similar shapes and congruent shapes, using a variety of tools (e.g., pattern blocks, grid paper, dynamic geometry software) and strategies (e.g., by showing that dilatations create similar shapes and that translations, rotations, and reflections generate congruent shapes) (***Sample problem:*** A larger square can be composed from four congruent square pattern blocks. Identify another pattern block you can use to compose a larger shape that is similar to the shape of the block.).

Location and Movement

- plot points using all four quadrants of the Cartesian coordinate plane;
- identify, perform, and describe dilatations (i.e., enlargements and reductions), through investigation using a variety of tools (e.g., dynamic geometry software, geoboard, pattern blocks, grid paper);
- create and analyse designs involving translations, reflections, dilatations, and/or simple rotations of two-dimensional shapes, using a variety of tools (e.g., concrete materials, Mira, drawings, dynamic geometry software) and strategies (e.g., paper folding) (***Sample problem:*** Identify transformations that may be observed in architecture or in artwork [e.g., in the art of M.C. Escher].);
- determine, through investigation using a variety of tools (e.g., pattern blocks, Polydrons, grid paper, tiling software, dynamic geometry software, concrete materials), polygons or combinations of polygons that tile a plane, and describe the transformation(s) involved.

Data Management & Probability: Grade 7

Overall Expectations

By the end of Grade 7, students will:

- collect and organize categorical, discrete, or continuous primary data and secondary data and display the data using charts and graphs, including relative frequency tables and circle graphs;
- make and evaluate convincing arguments, based on the analysis of data;
- compare experimental probabilities with the theoretical probability of an outcome involving two independent events.

Specific Expectations

By the end of Grade 7, students will:

Collection and Organization of Data

- collect data by conducting a survey or an experiment to do with themselves, their environment, issues in their school or community, or content from another subject and record observations or measurements;
- collect and organize categorical, discrete, or continuous primary data and secondary data (e.g., electronic data from websites such as E-Stat or Census At Schools) and display the data in charts, tables, and graphs (including relative frequency tables and circle graphs) that have appropriate titles, labels (e.g., appropriate units marked on the axes), and scales (e.g., with appropriate increments) that suit the range and distribution of the data, using a variety of tools (e.g., graph paper, spreadsheets, dynamic statistical software);

- select an appropriate type of graph to represent a set of data, graph the data using technology, and justify the choice of graph (i.e., from types of graphs already studied);
- distinguish between a census and a sample from a population;
- identify bias in data collection methods (***Sample problem:*** How reliable are your results if you only sample girls to determine the favourite type of book read by students in your grade?).

Data Relationships

- read, interpret, and draw conclusions from primary data (e.g., survey results, measurement, observations) and from secondary data (e.g., temperature data or community data in the newspaper, data from the Internet about populations) presented in charts, tables, and graphs (including relative frequency tables and circle graphs);
- identify, through investigation, graphs that present data in misleading ways (e.g., line graphs that exaggerate change by starting the vertical axis at a point greater than zero);
- determine, through investigation, the effect on a measure of central tendency (i.e., mean, median, and mode) of adding or removing a value or values (e.g., changing the value of an outlier may have a significant effect on the mean but no effect on the median) (***Sample problem:*** Use a set of data whose distribution across its range looks symmetrical, and change some of the values so that the distribution no longer looks symmetrical. Does the change affect the median more than the mean? Explain your thinking.);
- identify and describe trends, based on the distribution of the data presented in tables and graphs, using informal language;
- make inferences and convincing arguments that are based on the analysis of charts, tables, and graphs (***Sample problem:*** Use census information to predict whether Canada's population is likely to increase.).

Probability

- research and report on real-world applications of probabilities expressed in fraction, decimal, and percent form (e.g., lotteries, batting averages, weather forecasts, elections);
- make predictions about a population when given a probability (***Sample problem:*** The probability that a fish caught in Lake Goodfish is a bass is 29%. Predict how many bass will be caught in a fishing derby there, if 500 fish are caught.);
- represent in a variety of ways (e.g., tree diagrams, tables, models, systematic lists) all the possible outcomes of a probability experiment involving two independent events (i.e., one event does not affect the other event), and determine the theoretical probability of a specific outcome involving two independent events (***Sample problem:*** What is the probability of rolling a 4 and spinning red, when you roll a number cube and spin a spinner that is equally divided into four different colours?);
- perform a simple probability experiment involving two independent events, and compare the experimental probability with the theoretical probability of a specific outcome (***Sample problem:*** Place 1 red counter and 1 blue counter in an opaque bag. Draw a counter, replace it, shake the bag, and draw again. Compare the theoretical and experimental probabilities of drawing a red counter 2 times in a row.).

Patterning and Algebra: Grade 7

Overall Expectations

By the end of Grade 7, students will:

- represent linear growing patterns (where the terms are whole numbers) using concrete materials, graphs, and algebraic expressions;
- model real-life linear relationships graphically and algebraically, and solve simple algebraic equations using a variety of strategies, including inspection and guess and check.

Specific Expectations

By the end of Grade 7, students will:

Patterns and Relationships

- represent linear growing patterns, using a variety of tools (e.g., concrete materials, paper and pencil, calculators, spreadsheets) and strategies (e.g., make a table of values using the term number and the term; plot the coordinates on a graph; write a pattern rule using words);
- make predictions about linear growing patterns, through investigation with concrete materials (***Sample problem:*** Investigate the surface area of towers made from a single column of connecting cubes, and predict the surface area of a tower that is 50 cubes high. Explain your reasoning.);
- develop and represent the general term of a linear growing pattern, using algebraic expressions involving one operation (e.g., the general term for the sequence 4, 5, 6, 7, … can be written algebraically as $n + 3$, where n represents the term number; the general term for the sequence 5, 10, 15, 20, … can be written algebraically as $5n$, where n represents the term number);
- compare pattern rules that generate a pattern by adding or subtracting a constant, or multiplying or dividing by a constant, to get the next term (e.g., for 1, 3, 5, 7, 9, …, the pattern rule is "start at 1 and add 2 to each term to get the next term") with pattern rules that use the term number to describe the general term (e.g., for 1, 3, 5, 7, 9, …, the pattern rule is "double the term number and subtract 1", which can be written algebraically as $2 \times n - 1$) (***Sample problem:*** For the pattern 1, 3, 5, 7, 9,…, investigate and compare different ways of finding the 50th term.).

Variables, Expressions, and Equations

- model real-life relationships involving constant rates where the initial condition starts at 0 (e.g., speed, heart rate, billing rate), through investigation using tables of values and graphs (***Sample problem:*** Create a table of values and graph the relationship between distance and time for a car travelling at a constant speed of 40 km/h. At that speed, how far would the car travel in 3.5 h? How many hours would it take to travel 220 km?);
- model real-life relationships involving constant rates (e.g., speed, heart rate, billing rate), using algebraic equations with variables to represent the changing quantities in the relationship (e.g., the equation $p = 4t$ represents the relationship between the total number of people that can be seated (p) and the number of tables (t), given that each table can seat 4 people [4 people per table is the constant rate]);
- translate phrases describing simple mathematical relationships into algebraic expressions (e.g., one more than three times a number can be written algebraically as $1 + 3x$ or $3x + 1$), using concrete materials (e.g., algebra tiles, pattern blocks, counters);
- evaluate algebraic expressions by substituting natural numbers for the variables;
- make connections between evaluating algebraic expressions and determining the term in a pattern using the general term (e.g., for 3, 5, 7, 9, …, the general term is the algebraic expression $2n + 1$; evaluating this expression when $n = 12$ tells you that the 12th term is $2(12) + 1$, which equals 25);
- solve linear equations of the form $ax = c$ or $c = ax$ and $ax + b = c$ or variations such as $b + ax = c$ and $c = bx + a$ (where a, b, and c are natural numbers) by modelling with concrete materials, by inspection, or by guess and check, with and without the aid of a calculator (e.g.,"I solved $x + 7 = 15$ by using guess and check. First I tried 6 for x. Since I knew that 6 plus 7 equals 13 and 13, is less than 15, then I knew that x must be greater than 6.").

Achievement Chart - Mathematics, Grades 1-8

Categories	Level 1	Level 2	Level 3	Level 4
Knowledge and Understanding *Subject-specific content acquired in each grade (knowledge), and the comprehension of its meaning and significance (understanding)*	**The student:**			
Knowledge of content (e.g., facts, terms, procedural skills, use of tools)	→ demonstrates limited knowledge of content	→ demonstrates some knowledge of content	→ demonstrates considerable knowledge of content	→ demonstrates thorough knowledge of content
Understanding of mathematical concepts	→ demonstrates limited understanding of concepts	→ demonstrates some understanding of concepts	→ demonstrates considerable understanding of concepts	→ demonstrates thorough understanding of concepts
Thinking *The use of critical and creative thinking skills and/or processes**	**The student:**			
Use of planning skills ➤ understanding the problem (e.g., formulating and interpreting the problem, making conjectures) ➤ making a plan for solving the problem	→ uses planning skills with limited effectiveness	→ uses planning skills with some effectiveness	→ uses planning skills with considerable effectiveness	→ uses planning skills with a high degree of effectiveness
Use of processing skills* ➤ carrying out a plan (e.g., collecting data, questioning, testing, revising, modelling, solving, inferring, forming conclusions) ➤ looking back at the solution (e.g., evaluating reasonableness, making convincing arguments, reasoning, justifying, proving, reflecting)	→ uses processing skills with limited effectiveness	→ uses processing skill with some effectiveness	→ uses processing skills with considerable effectiveness	→ uses processing skills with a high degree of effectiveness
Use of critical/creative thinking processes* (e.g., problem solving, inquiry)	→ uses of critical/creative thinking process with limited effectiveness	→ uses of critical/creative thinking process with some effectiveness	→ uses of critical/creative thinking process with considerable effectiveness	→ uses of critical/creative thinking process with a high degree of effectiveness

* The processing skills and critical/creative thinking processes in the Thinking category include some but not all aspects of the *mathematical processes* described in the Ministry document. Some aspects of the mathematical processes relate to the other categories of the achievement chart.

Categories	Level 1	Level 2	Level 3	Level 4
Communication *The conveying of meaning through various forms*				
	The student:			
Expression and organization of ideas and mathematical thinking (e.g., clarity of expression, logical organization), using oral, visual, and written forms (e.g., pictorial, graphic, dynamic, numeric, algebraic forms; concrete materials)	→ expresses and organizes mathematical thinking with limited effectiveness	→ expresses and organizes mathematical thinking with some effectiveness	→ expresses and organizes mathematical thinking with considerable effectiveness	→ expresses and organizes mathematical thinking with a high degree of effectiveness
Communication for different audiences (e.g., peers, teachers) and purposes (e.g., to present data, justify a solution, express a mathematical argument) in oral, visual, and written forms	→ communicates for different audiences and purposes with limited effectiveness	→ communicates for different audiences and purposes with some effectiveness	→ communicates for different audiences and purposes with considerable effectiveness	→ communicates for different audiences and purposes with a high degree of effectiveness
Use of conventions, vocabulary, and terminology of the discipline (e.g., terms, symbols) in oral, visual, and written forms	→ uses conventions, vocabulary, and terminology of the discipline with limited effectiveness	→ uses conventions, vocabulary, and terminology of the discipline with some effectiveness	→ uses conventions, vocabulary, and terminology of the discipline with considerable effectiveness	→ uses conventions, vocabulary, and terminology of the discipline with a high degree of effectiveness
Application *The use of knowledge and skills to make connections within and between various contexts*				
	The student:			
Application of knowledge and skills in familiar contexts	→ applies knowledge and skills in familiar contexts with limited effectiveness	→ applies knowledge and skills in familiar contexts with some effectiveness	→ applies knowledge and skills in familiar contexts with considerable effectiveness	→ applies knowledge and skills in familiar contexts with a high degree of effectiveness
Transfer of knowledge and skills to new contexts	→ transfers knowledge and skills to new contexts with limited effectiveness	→ transfers knowledge and skills to new contexts with some effectiveness	→ transfers knowledge and skills to new contexts with considerable effectiveness	→ transfers knowledge and skills to new contexts with a high degree of effectiveness
Making connections within and between various contexts (e.g., connections between concepts, representations, and forms within mathematics; connections involving use of prior knowledge and experience; connections between mathematics, other disciplines, and the real world)	→ makes connections within and between various contexts with limited effectiveness	→ makes connections within and between various contexts with some effectiveness	→ makes connections within and between various contexts with considerable effectiveness	→ makes connections within and between various contexts with a high degree of effectiveness

The Importance of French As a Second Language

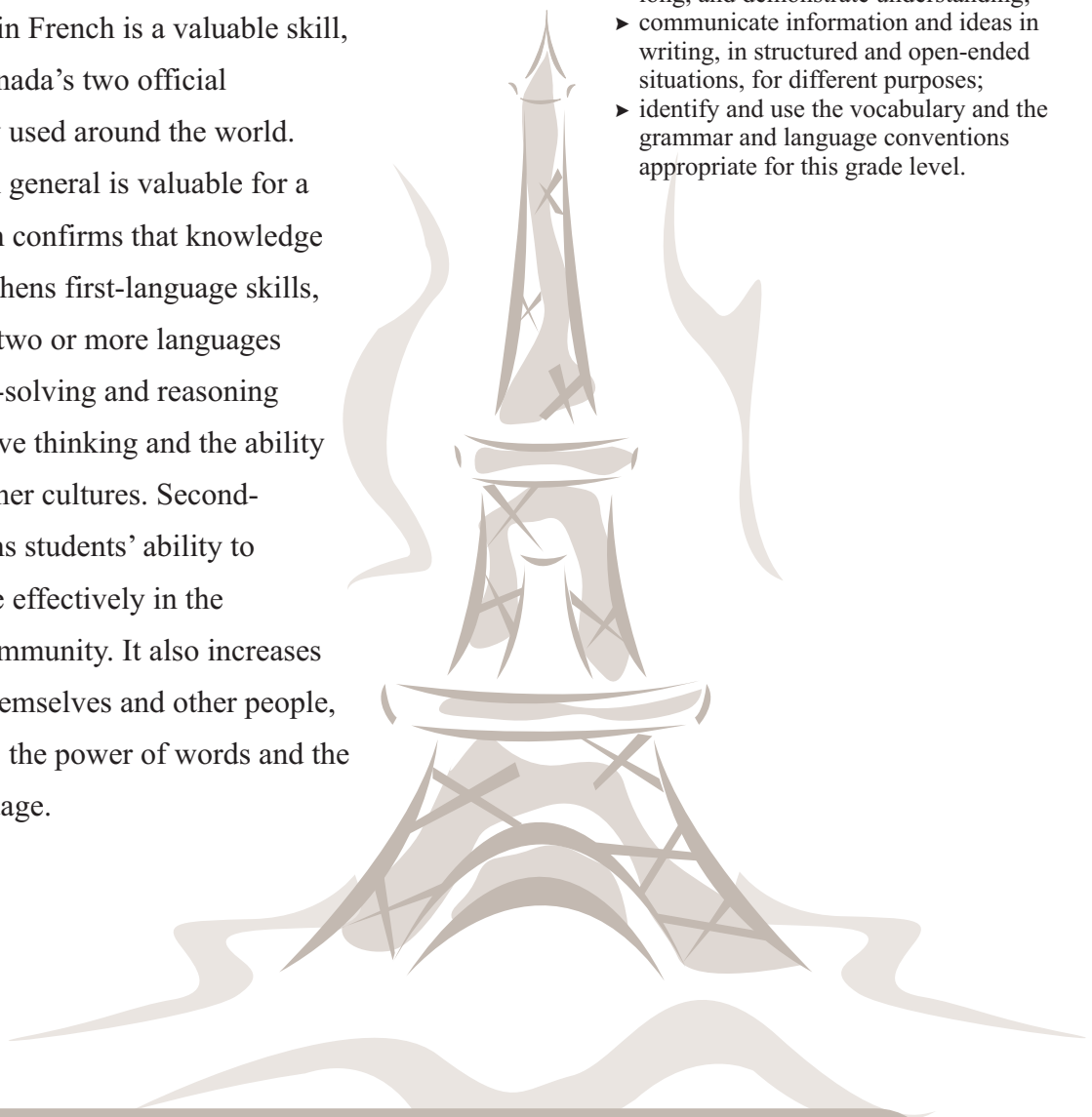
The ability to communicate in French is a valuable skill, because French is one of Canada's two official languages and is also widely used around the world. Second-language learning in general is valuable for a number of reasons. Research confirms that knowledge of a second language strengthens first-language skills, and that the ability to speak two or more languages generally enhances problem-solving and reasoning skills, the capacity for creative thinking and the ability to respect and understand other cultures. Second-language learning strengthens students' ability to communicate and participate effectively in the workplace and the global community. It also increases their ability to understand themselves and other people, and helps them to appreciate the power of words and the many different uses of language.

French As A Second Language: Grade 7

Overall Expectations

By the end of Grade 7, students will:

- listen to and talk about short, oral texts in structured and open-ended situations;
- read a variety of classroom and simple authentic materials, 200 to 400 words long, and demonstrate understanding;
- communicate information and ideas in writing, in structured and open-ended situations, for different purposes;
- identify and use the vocabulary and the grammar and language conventions appropriate for this grade level.



Getting Involved

- ✓ Encourage your child to read to you in French.
- ✓ Practice new vocabulary by asking your child for the French equivalent.
- ✓ Encourage your child to watch a cartoon on television in French.
- ✓ Listen to music on a French radio station with your child.

The Goals of the Science and Technology Program

A scientifically and technologically literate person is one who can read and understand common media reports about science and technology, critically evaluate the information presented, and confidently engage in discussions and decision-making activities that involve science and technology.

Science Co-ordinators' and Consultants' Association of Ontario (SCCAO) and Science Teachers' Association of Ontario (STAO/APSO), "Position Paper: The Nature of Science" (2006), p. 1

During the twentieth century, science and technology played an increasingly important role in the lives of all Canadians. Science and technology underpin much of what we take for granted, including clean water, the places in which we live and work, and the ways in which we communicate with others. The impact of science and technology on our lives will continue to grow. Consequently, scientific and technological literacy for all has become the overarching objective of science and technology education throughout the world.

Achievement of both excellence and equity underlies the three major goals of the science and technology program at the elementary level. Accordingly, The Ontario Curriculum, Grades 1–8: Science and Technology, 2007outlines the skills and knowledge that students will develop, as well as the attitudes that they need to develop in order to use their knowledge and skills responsibly. The three goals are the following:

1. to relate science and technology to society and the environment
2. to develop the skills, strategies, and habits of mind required for scientific inquiry and technological problem solving
3. to understand the basic concepts of science and technology

Fundamental Concepts

Fundamental concepts are key ideas that provide a framework for the acquisition of all scientific and technological knowledge. They also help students to integrate scientific and technological knowledge with knowledge in other subject areas, such as mathematics and social studies.

These fundamental concepts are described in the following chart.

Fundamental Concepts	
Matter	Matter is anything that has mass and occupies space. Matter has particular structural and behavioural characteristics.
Energy	Energy comes in many forms, and can change forms. It is required to make things happen (to do work). Work is done when a force causes movement.
Systems and Interactions	A system is a collection of living and/or non-living things and processes that interact to perform some function. A system includes inputs, out-puts, and relationships among system components. Natural and human systems develop in response to, and are limited by, a variety of environmental factors.
Structure and Function	This concept focuses on the interrelationship between the function or use of a natural or human-made object and the form that the object takes.
Sustainability and Stewardship	Sustainability is the concept of meeting the needs of the present without compromising the ability of future generations to meet their needs. Stewardship involves understanding that we need to use and care for the natural environment in a responsible way and making the effort to pass on to future generations no less than what we have access to ourselves. Values that are central to responsible stewardship are: using non-renewable resources with care; reusing and recycling what we can; switching to renewable resources where possible.
Change and Continuity	Change is the process of becoming different over time, and can be quantified. Continuity represents consistency and connectedness within and among systems over time. Interactions within and among systems result in change and variations in consistency.

Understanding Life Systems
Interactions in the Environment

Fundamental Concepts	Big Ideas
Systems and Interactions	Ecosystems are made up of biotic (living) and abiotic (non-living) elements, which depend on each other to survive. *(Overall expectations 2 and 3)*
Sustainability and Stewardship	Ecosystems are in a constant state of change. The changes may be caused by nature or by human intervention. *(Overall expectations 1 and 2)* Human activities have the potential to alter the environment. Humans must be aware of these impacts and try to control them. *(Overall expectation 1)*

Understanding Life Systems - Interactions in the Environment: Grade 7

Overall Expectations

By the end of Grade 7, students will:

1. assess the impacts of human activities and technologies on the environment, and evaluate ways of controlling these impacts;

2. investigate interactions within the environment, and identify factors that affect the balance between different components of an ecosystem;

3. demonstrate an understanding of interactions between and among biotic and abiotic elements in the environment.

Specific Expectations

By the end of Grade 7, students will:

Relating Science and Technology to Society and the Environment

1.1 assess the impact of selected technologies on the environment

1.2 analyse the costs and benefits of selected strategies for protecting the environment

Specific Expectations

By the end of Grade 7, students will:

Developing Investigation and Communication Skills

2.1 follow established safety procedures for investigating ecosystems (e.g., stay with a partner, wash hands after investigating an ecosystem)

2.2 design and construct a model ecosystem (e.g., a composter, a classroom terrarium, a greenhouse), and use it to investigate interactions between the biotic and abiotic components in an ecosystem

2.3 use scientific inquiry/research skills to investigate occurrences (e.g., a forest fire, a drought, an infestation of invasive species such as zebra mussels in a local lake or purple loosestrife in a wetland habitat) that affect the balance within a local ecosystem

2.4 use appropriate science and technology vocabulary, including sustainability, biotic, ecosystem, community, population, and producer, in oral and written communication

2.5 use a variety of forms (e.g., oral, written, graphic, multimedia) to communicate with different audiences and for a variety of purposes (e.g., design a multimedia presentation explaining the interrelationships between biotic and abiotic components in a specific ecosystem)

Specific Expectations

By the end of Grade 7, students will:

Understanding Basic Concepts

3.1 demonstrate an understanding of an ecosystem (e.g., a log, a pond, a forest) as a system of interactions between living organisms and their environment

3.2 identify biotic and abiotic elements in an ecosystem, and describe the interactions between them (e.g., between hours of sunlight and the growth of plants in a pond; between a termite colony and a decaying log; between the soil, plants, and animals in a forest)

3.3 describe the roles and interactions of producers, consumers, and decomposers within an ecosystem (e.g., Plants are producers in ponds. They take energy from the sun and produce food, oxygen, and shelter for the other pond life. Black bears are consumers in forests. They eat fruits, berries, and other consumers. By eating other consumers, they help to keep a balance in the forest community. Bacteria and fungi are decomposers. They help to maintain healthy soil by breaking down organic materials such as manure, bone, spider silk, and bark. Earthworms then ingest the decaying matter, take needed nutrients from it, and return those nutrients to the soil through their castings.)

3.4 describe the transfer of energy in a food chain and explain the effects of the elimination of any part of the chain

3.5 describe how matter is cycled within the environment and explain how it promotes sustainability (e.g., bears carry salmon into the forest, where the remains decompose and add nutrients to the soil, thus supporting plant growth; through crop rotation, nutrients for future crops are created from the decomposition of the waste matter of previous crops)

3.6 distinguish between primary succession (e.g., the growth of native grasses on a sand dune) and secondary succession (e.g., the growth of grasses and shrubs in a ploughed field) within an ecosystem

3.7 explain why an ecosystem is limited in the number of living things (e.g., plants and animals, including humans) that it can support

3.8 describe ways in which human activities and technologies alter balances and interactions in the environment (e.g., clear-cutting a forest, overusing motorized water vehicles, managing wolf-killings in Yukon)

3.9 describe Aboriginal perspectives on sustainability and describe ways in which they can be used in habitat and wildlife management (e.g., the partnership between the Anishinabek Nation and the Ministry of Natural Resources for managing natural resources in Ontario)

Understanding Structures and Mechanisms
Form and Function

Fundamental Concepts	Big Ideas
Structure and Function **Energy**	Structures have a purpose. *(Overall expectation 1)* The form of a structure is dependent on its function. *(Overall expectations 1, 2, and 3)* The interaction between structures and forces is predictable. *(Overall expectations 2 and 3)*

Understanding Structures and Mechanisms - Form and Function: Grade 7

Overall Expectations
By the end of Grade 7, students will:

1. analyse personal, social, economic, and environmental factors that need to be considered in designing and building structures and devices;

2. design and construct a variety of structures, and investigate the relationship between the design and function of these structures and the forces that act on them;

3. demonstrate an understanding of the relationship between structural forms and the forces that act on and within them.

Specific Expectations
By the end of Grade 7, students will:

Relating Science and Technology to Society and the Environment

1.1 evaluate the importance for individuals, society, the economy, and the environment of factors that should be considered in designing and building structures and devices to meet specific needs (e.g., function; efficiency; ease of use; user preferences; aesthetics; cost; intended lifespan; effect on the environment; safety, health, legal requirements)

1.2 evaluate the impact of ergonomic design on the safety and efficiency of workplaces, tools, and everyday objects (e.g., furniture, computer equipment, home tools and equipment), and describe changes that could be made in personal spaces and activities on the basis of this information (e.g., use computer keyboards and mice that are ergonomically designed; use kitchen tools such as knives with ergonomic handles; use equipment for household jobs that is designed to ease strain on the body, such as ergonomically designed snow shovels and garden tools)

Specific Expectations
By the end of Grade 7, students will:

Developing Investigation and Communication Skills

2.1 follow established safety procedures for using tools and handling materials (e.g., wear safety glasses when cutting or drilling)

2.2 design, construct, and use physical models to investigate the effects of various forces on structures (e.g., the struts of a roof experience compression forces from shingles; the support cables of a suspension bridge are in tension; a twisted ruler has torsion forces; the pin that holds the two parts of a pair of scissors together has shear forces acting on it)

2.3 investigate the factors that determine the ability of a structure to support a load (e.g., the weight of the structure itself; the magnitude of the external loads it will need to support; the strength of the materials used to build it)

2.4 use technological problem-solving skills to determine the most efficient way for a structure (e.g., a chair, a shelf, a bridge) to support a given load

2.5 investigate methods used by engineers to ensure structural safety (e.g., incorporating sensors in structures to detect unusual stresses and give early warning of failure; designing structures to carry much heavier loads than they will actually have to bear)

2.6 use appropriate science and technology vocabulary, including truss, beam, ergonomics, shear, and torsion), in oral and written communication

2.7 use a variety of forms (e.g., oral, written, graphic, multimedia) to communicate with different audiences and for a variety of purposes (e.g., use a graphic organizer to show the steps taken in designing and making a product)

Specific Expectations
By the end of Grade 7, students will:

Understanding Basic Concepts

3.1 classify structures as solid structures (e.g., dams), frame structures (e.g., goal posts), or shell structures (e.g., airplane wings)

3.2 describe ways in which the centre of gravity of a structure (e.g., a child's high chair, a tower) affects the structure's stability

3.3 identify the magnitude, direction, point of application, and plane of application of the forces applied to a structure

3.4 distinguish between external forces (e.g., wind, gravity, earthquakes) and internal forces (tension, compression, shear, and torsion) acting on a structure

3.5 describe the role of symmetry in structures (e.g., aesthetic appeal, structural stability)

3.6 identify and describe factors that can cause a structure to fail (e.g., bad design, faulty construction, foundation failure, extraordinary loads)

3.7 identify the factors (e.g., properties of the material as they relate to the product, availability, costs of shipping, aesthetic appeal, disposal) that determine the suitability of materials for use in manufacturing a product (e.g., a running shoe)

Understanding Matter and Energy
Pure Substances and Mixtures

Fundamental Concepts	Big Ideas
Matter	Matter can be classified according to its physical characteristics. *(Overall expectations 2 and 3)*
Systems and Interactions	The particle theory of matter helps to explain the physical characteristics of matter. *(Overall expectations 2 and 3)*
	Pure substances and mixtures have an impact on society and the environment. *(Overall expectation 1)*
	Understanding the characteristics of matter allows us to make informed choices about how we use it. *(Overall expectations 1 and 3)*

Understanding Matter and Energy - Pure Substances and Mixtures: Grade 7

Overall Expectations

By the end of Grade 7, students will:

1. evaluate the social and environmental impacts of the use and disposal of pure substances and mixtures;

2. investigate the properties and applications of pure substances and mixtures;

3. demonstrate an understanding of the properties of pure substances and mixtures, and describe these characteristics using the particle theory.

Specific Expectations

By the end of Grade 7, students will

Relating Science and Technology to Society and the Environment

1.1 assess positive and negative environmental impacts related to the disposal of pure substances (e.g., uranium) and mixtures (e.g., paint, sewage)

1.2 assess the impact on society and the environment of different industrial methods of separating mixtures and solutions

Specific Expectations

By the end of Grade 7, students will:

Developing Investigation and Communication Skills

2.1 follow established safety procedures for handling chemicals and apparatus (e.g., wash hands after handling chemicals, take note of universal warning symbols)

2.2 use scientific inquiry/experimentation skills to investigate factors (e.g., temperature, type of solute or solvent, particle size, stirring) that affect the solubility of a substance and the rate at which substances dissolve

2.3 investigate processes (e.g., filtration, distillation, settling, magnetism) used for separating different mixtures

2.4 use scientific inquiry/experimentation skills to investigate the properties of mixtures and solutions (e.g., the amount of solute required to form a saturated solution; differences between pure substances and mixtures)

2.5 use appropriate science and technology vocabulary, including mechanical mixture, solution, solute, insoluble, saturated, unsaturated, and dilute, in oral and written communication

2.6 use a variety of forms (e.g., oral, written, graphic, multimedia) to communicate with different audiences and for a variety of purposes (e.g., using appropriate mathematical conventions, make a scatter plot to show the relationship between solute, solvent, and temperature)

Specific Expectations

By the end of Grade 7, students will:

Understanding Basic Concepts

3.1 distinguish between pure substances (e.g., distilled water, salt, copper pipe) and mixtures (e.g., salad dressing, chocolate chip cookies)

3.2 state the postulates of the particle theory of matter (all matter is made up of particles; all particles are in constant motion; all particles of one substance are identical; temperature affects the speed at which particles move; in a gas, there are spaces between the particles; in liquids and solids, the particles are close together and have strong forces of attraction between them)

3.3 use the particle theory to describe the difference between pure substances (which have identical particles) and mixtures (which have different particles)

3.4 distinguish between solutions and mechanical mixtures

3.5 describe the processes (e.g., evaporation, sifting, filtration, distillation, magnetism) used to separate mixtures or solutions into their components, and identify some industrial applications of these processes (e.g., use of cheesecloth to separate seeds and skins from juice and pulp to make fruit jellies; use of evaporation in maple syrup production; use of different sizes of sieves to separate wheat grains in white bread production; use of strainers in industries to separate slurry into solids and liquids)

3.6 identify the components of a solution (e.g., solvent, solute)

3.7 identify solutes and solvents in various kinds of solutions (e.g., copper and tin in bronze; iodine and alcohol in iodine solution)

3.8 describe the concentration of a solution in qualitative terms (e.g., dilute, concentrated) and in quantitative terms (e.g., 5 grams of salt in 1000 ml of water)

3.9 describe the difference between saturated and unsaturated solutions

3.10 explain why water is referred to as the universal solvent

Understanding Earth and Space Systems
Heat in the Environment

Fundamental Concepts	Big Ideas
Energy **Sustainability and Stewardship** **Systems and Interactions**	Heat is a form of energy that can be transformed and transferred. These processes can be explained using the particle theory of matter. *(Overall expectations 2 and 3)* There are many sources of heat. *(Overall expectation 3)* Heat has both positive and negative effects on the environment. *(Overall expectation 1)*

Understanding Earth and Space Systems - Heat in the Environment: Grade 7

Overall Expectations

By the end of Grade 7, students will:

1. assess the costs and benefits of technologies that reduce heat loss or heat-related impacts on the environment;

2. investigate ways in which heat changes substances, and describe how heat is transferred;

3. demonstrate an understanding of heat as a form of energy that is associated with the movement of particles and is essential to many processes within the earth's systems.

Specific Expectations

By the end of Grade 7, students will:

Relating Science and Technology to Society and the Environment

1.1 assess the social and environmental benefits of technologies that reduce heat loss or transfer (e.g., insulated clothing, building insulation, green roofs, energy-efficient buildings)

1.2 assess the environmental and economic impacts of using conventional (e.g., fossil fuel, nuclear) and alternative forms of energy (e.g., geothermal, solar, wind, wave, biofuel)

Specific Expectations

By the end of Grade 7, students will:

Developing Investigation and Communication Skills

2.1 follow established safety procedures for using heating appliances and handling hot materials (e.g., use protective gloves when removing items from hot plates)

2.2 investigate the effects of heating and cooling on the volume of a solid, a liquid, and a gas

2.3 use technological problem-solving skills to identify ways to minimize heat loss

2.4 use scientific inquiry/experimentation skills to investigate heat transfer through conduction, convection, and radiation

2.5 use appropriate science and technology vocabulary, including heat, temperature, conduction, convection, and radiation, in oral and written communication

2.6 use a variety of forms (e.g., oral, written, graphic, multimedia) to communicate with different audiences and for a variety of purposes (e.g., using the conventions of science, create a labelled diagram to illustrate convection in a liquid or a gas)

Specific Expectations

By the end of Grade 7, students will:

Understanding Basic Concepts

3.1 use the particle theory to compare how heat affects the motion of particles in a solid, a liquid, and a gas

3.2 identify ways in which heat is produced (e.g., burning fossil and renewable fuels, electrical resistance, physical activity)

3.3 use the particle theory to explain the effects of heat on volume in solids (e.g., rails, sidewalks, and bridge segments expand in hot weather), liquids (e.g., sea levels are rising partly because global warming is making the oceans warmer and the water in them is expanding), and gases (e.g., the air in car tires expands on hot pavement)

3.4 explain how heat is transmitted through conduction (e.g., the transmission of heat from a stove burner to a pot and from the pot to the pot handle), and describe natural processes that are affected by conduction (e.g., the formation of igneous and metamorphic rocks and diamonds)

3.5 explain how heat is transmitted through convection, and describe natural processes that depend on convection (e.g., thunderstorms, land and sea breezes)

3.6 explain how heat is transmitted through radiation, and describe the effects of radiation from the sun on different kinds of surfaces (e.g., an ice-covered lake, a forest, an ocean, an asphalt road)

3.7 describe the role of radiation in heating and cooling the earth, and explain how greenhouse gases affect the transmission of radiated heat through the atmosphere (e.g.,The earth is warmed by absorbing radiation from the sun. It cools by radiating thermal energy back to space. Greenhouse gases absorb some of the radiation that the earth emits to space and reradiate it back to the earth's surface. If the quantity of greenhouse gases in the atmosphere increases, they absorb more outgoing radiation, and the earth becomes warmer.)

3.8 identify common sources of greenhouse gases (e.g., carbon dioxide comes from plant and animal respiration and the burning of fossil fuels; methane comes from wetlands, grazing livestock, termites, fossil fuel extraction, and landfills; nitrous oxide comes from soils and nitrogen fertilizers), and describe ways of reducing emissions of these gases

Achievement Chart - Science and Technology, - Grades 1-8

Categories	Level 1	Level 2	Level 3	Level 4
Knowledge and Understanding *Subject-specific content acquired in each grade (knowledge), and the comprehension of its meaning and significance (understanding)*	**The student:**			
Knowledge of content *(e.g., facts; terminology; definitions; safe use of tools, equipment, and materials)*	→ demonstrates limited knowledge of content	→ demonstrates some knowledge of content	→ demonstrates considerable knowledge of content	→ demonstrates thorough knowledge of content
Understanding of content *(e.g., concepts, ideas, theories, principles, procedures, processes)*	→ demonstrates limited understanding of content	→ demonstrates some understanding of content	→ demonstrates considerable understanding of content	→ demonstrates thorough understanding of content
Thinking and Investigation - *The use of critical and creative thinking skills and inquiry and problem solving skills and/or processes*	**The student:**			
Use of initiating and planning skills and strategies *(e.g., formulating questions, identifying the problem, developing hypotheses, scheduling, selecting strategies and resources, developing plans)*	→ uses initiating and planning skills and strategies with limited effectiveness	→ uses initiating and planning skills and strategies with some effectiveness	→ uses initiating and planning skills and strategies with considerable effectiveness	→ uses initiating and planning skills and strategies with a high degree of effectiveness
Use of processing skills and strategies *(e.g., performing and recording, gathering evidence and data, observing, manipulating materials and using equipment safely, solving equations, proving)*	→ uses processing skills and strategies with limited effectiveness	→ uses processing skills and strategies with some effectiveness	→ uses processing skills and strategies with considerable effectiveness	→ uses processing skills and strategies with a high degree of effectiveness
Use of critical/creative thinking processes, skills, and strategies *(e.g., analysing, interpreting, problem solving, evaluating, forming and justifying conclusions on the basis of evidence)*	→ uses critical/creative thinking processes, skills, and strategies with limited effectiveness	→ uses critical/creative thinking processes, skills, and strategies with some effectiveness	→ uses critical/creative thinking processes, skills, and strategies with considerable effectiveness	→ uses critical/creative thinking processes, skills, and strategies with a high degree of effectiveness
Communication *The conveying of meaning through various forms*	**The student:**			
Expression and organization of ideas and information *(e.g., clear expression, logical organization)* **in oral, visual, and/or written forms** *(e.g., diagrams, models)*	→ expresses and organizes ideas and information with limited effectiveness	→ expresses and organizes ideas and information with some effectiveness	→ expresses and organizes ideas and information with considerable effectiveness	→ expresses and organizes ideas and information with a high degree of effectiveness

Categories	Level 1	Level 2	Level 3	Level 4
Communication (continued)				
	The student:			
Communication for different audiences *(e.g., peers, adults)* **and purposes** *(e.g., to inform, to persuade)* **in oral, visual, and/or written forms**	→ communicates for different audiences and purposes with limited effectiveness	→ communicates for different audiences and purposes with some effectiveness	→ communicates for different audiences and purposes with considerable effectiveness	→ communicates for different audiences and purposes with a high degree of effectiveness
Use of conventions, vocabulary, and terminology of the discipline in oral, visual, and/or written forms *(e.g., symbols, formulae, scientific notation, SI units)*	→ uses conventions, vocabulary, and terminology of the discipline with limited effectiveness	→ uses conventions, vocabulary, and terminology of the discipline with some → effectiveness	→ uses conventions, vocabulary, and terminology of the discipline with considerable effectiveness	→ uses conventions, vocabulary, and terminology of the discipline with a high degree of effectiveness
Application *The use of knowledge and skills to make connections within and between various contexts*				
	The student:			
Application of knowledge and skills *(e.g., concepts and processes, safe use of equipment and technology,investigation skills)* **in familiar contexts**	→ applies knowledge and skills in familiar contexts with limited effectiveness	→ applies knowledge and skills in familiar contexts with some effectiveness	→ applies knowledge and skills in familiar contexts with considerable effectiveness	→ applies knowledge and skills in familiar contexts with a high degree of effectiveness
Transfer of knowledge and skills *(e.g., concepts and processes, safe use of equipment and technology, investigation skills)* **to unfamiliar contexts**	→ transfers knowledge and skills to unfamiliar contexts with limited effectiveness	→ transfers knowledge and skills to unfamiliar contexts with some effectiveness	→ transfers knowledge and skills to unfamiliar contexts with considerable effectiveness	→ transfers knowledge and skills to unfamiliar contexts with a high degree of effectiveness
Making connections between science, technology, society, and the environment *(e.g., assessing the impact of science and technology on people, other living things, and the environment)*	→ makes connections between science, technology, society, and the environment with limited effectiveness	→ makes connections between science, technology, society, and the environment with some effectiveness	→ makes connections between science, technology, society, and the environment with considerable effectiveness	→ makes connections between science, technology, society, and the environment with a high degree of effectiveness
Proposing courses of practical action to deal with problems relating to science, technology, society, and the environment	→ proposes courses of practical action of limited effectiveness	→ proposes courses of practical action of some effectiveness	→ makes connections between science, technology, society, and the environment with considerable effectiveness	→ makes connections between science, technology, society, and the environment with a high degree of effectiveness

The Importance of History

History involves the examination of individuals and unique events, as well as of groups, movements, institutions, nations, and eras. The history course focuses on Canada and provides students with an understanding of the development of their country and its role in the world. Students learn how lessons from the past can be used to make wise decisions for the future, and by exploring various points of view and evaluating a variety of historical evidence, they practise achieving a balanced viewpoint. In these ways, the study of history helps prepare students to be contributing and responsible citizens in a complex society characterized by rapid technological, economic, political and social change. The study of history at this grade builds on the skills, attitudes, and knowledge developed in social studies in earlier years. The study of the strands and topics in this course lays the foundation for the compulsory secondary school course in Canadian history.

New France: Grade 7

Overview

Students examine the roots and culture of the French communities in North America during the seventeenth and eighteenth centuries. They determine what changes resulted from the interaction among First Nation peoples and French and English settlers during this time period. Students examine historical developments from diverse and sometimes conflicting points of view, in order to develop skills of historical analyse and the ability to think critically about information and issues.

Overall Expectations:

By the end of Grade 7, students will:

- outline the reasons why settlers came to New France; identify the social, political, religious, and economic factors that shaped the colony; and describe how settlers and fur traders interacted with the First Nation peoples;
- use a variety of resources and tools to gather, process, and communicate information about how settlers in New France met the physical, social, and economic challenges of the new land;
- identify and explain similarities and differences in the goals and interests of various groups in New France, including French settlers, First Nation peoples, and both French and English fur traders.

British North America: Grade 7

Overview

Students examine where and why colonists settled in British North America after the fall of New France, focusing on the American Revolution as a catalyst for the migration of the Loyalists, the Iroquois, and others. They also examine the causes, events, and results of the War of 1812, including its influence on Canadian-American relations. Students use inquiry/research and communication skills to explore how personalities and events shaped the new British colonies.

Overall Expectations:

By the end of Grade 7, students will:

- explain the origins of English settlement in British North America after the fall of New France, describe the migration and settlement experiences of the various groups of settlers, and outline the causes, events, and results of the War of 1812;
- use a variety of resources and tools to gather, process, and communicate information about the beginnings and development of the new British colonies;
- identify some themes and personalities from the period, and explain their relevance to contemporary Canada.

Conflict and Change: Grade 7

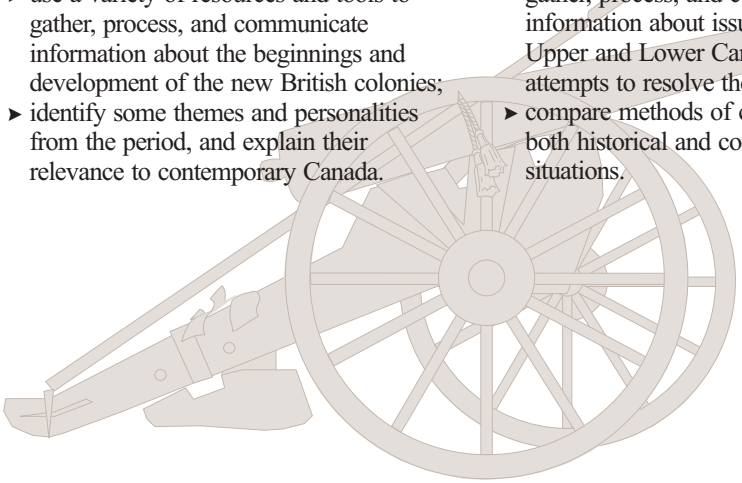
Overview

Students examine the causes of the rebellions of 1837–38 in Upper and Lower Canada and describe the roles various men and women played in the conflict. Students use inquiry/research and communication skills to identify social, economic, political, and legal changes in the colonies between 1837 and 1850 and to analyse their importance. Students consider ideas about conflict and change, methods of creating change, and methods of conflict resolution in both historical and contemporary contexts.

Overall Expectations:

By the end of Grade 7, students will:

- describe the causes, personalities, and results of the rebellions of 1837–38 in Upper and Lower Canada in relation to themes of conflict and change;
- use a variety of resources and tools to gather, process, and communicate information about issues and conflicts in Upper and Lower Canada, and about the attempts to resolve them;
- compare methods of conflict resolution in both historical and contemporary situations.



The Importance of Geography

Geography is the study of place. It looks at the earth's physical systems and the people in them. It also investigates how people and environments affect each other. Geography students learn to gather, organize, analyze, and present information obtained from fieldwork, models, simulations, aerial photographs, satellite imaging, maps, and computers. They learn to apply a conceptual framework of location/place, environment, region, interaction and movement. By integrating various aspects of place, the study of geography provides students with a unique opportunity to learn about the world around them. The study of the strands and topics in this course lays the foundation for the compulsory secondary school course in Canadian geography.

The Themes of Geographic Inquiry: Grade 7

Overview

Students are introduced to foundational concepts, methods, and skills of geographic study through an exploration of the five essential themes of geography: location/place, environment, region, interaction, and movement. Students investigate current local, national, or global environmental issues and events to extend their understanding of these themes.

Overall Expectations:

By the end of Grade 7, students will:

- identify and explain the themes of geographic inquiry: location/place, environment, region, interaction, and movement;
- use a variety of geographic resources and tools to gather, process, and communicate geographic information;
- analyse current environmental issues or events from the perspective of one or more of the themes of geographic inquiry.

Patterns in Physical Geography: Grade 7

Overview

Students explore how physical features, climate, and vegetation interact to form patterns on the earth's surface. They investigate the natural forces that contribute to these patterns and identify and explore relationships between natural and human systems. They also analyse and explain a variety of human responses to the physical environment.

Overall Expectations:

By the end of Grade 7, students will:

- identify patterns in physical geography and explain the factors that produce them;
- use a variety of resources and tools to gather, process, and communicate geographic information about the earth's physical features and patterns;
- explain how patterns of physical geography affect human activity around the world.

Natural Resources: Grade 7

Overview

Students explore the many ways that people acquire and use natural resources, and the environmental impact of these actions. They discover how factors such as demand and accessibility determine the importance of resources. They also examine various ways in which human activity affects the sustainability of natural resources.

Overall Expectations:

By the end of Grade 7, students will:

- describe how humans acquire, manage, and use natural resources, and identify factors that affect the importance of those resources;
- use a variety of resources and tools to gather, process, and communicate geographic information about the distribution, use, and importance of natural resources;
- describe positive and negative ways in which human activity can affect resource sustainability and the health of the environment.

Achievement Chart for Social Studies, History, and Geography - Grades 1-8

Categories	Level 1	Level 2	Level 3	Level 4
Knowledge and Understanding *Subject-specific content acquired in each grade (knowledge), and the comprehension of its meaning and significance (understanding)*	**The student:**			
Knowledge of content (e.g., facts, terms, definitions)	→ demonstrates limited knowledge of content	→ demonstrates some knowledge of content	→ demonstrates considerable knowledge of content	→ demonstrates thorough knowledge of content
Understanding of content (e.g., concepts, ideas, theories, procedures, processes, methodologies, and/or technologies)	→ demonstrates limited understanding of content	→ demonstrates some understanding of content	→ demonstrates considerable understanding of content	→ demonstrates thorough understanding of content
Thinking *The use of critical and creative thinking skills and/or processes*	**The student:**			
Use of planning skills (e.g., focusing research, gathering information, organizing an inquiry, asking questions, setting goals)	→ uses planning skills with limited effectiveness	→ uses planning skills with some effectiveness	→ uses planning skills with considerable effectiveness	→ uses planning skills with a high degree of effectiveness
Use of processing skills (e.g., analyzing, generating, integrating, synthesizing, evaluating, detecting point of view and bias)	→ uses processing skills with limited effectiveness	→ uses processing skill with some effectiveness	→ uses processing skills with considerable effectiveness	→ uses processing skills with a high degree of effectiveness
Use of critical/creative thinking processes (e.g., inquiry process, problem-solving process, decision-making process, research process)	→ uses critical/creative thinking processes with limited effectiveness	→ uses critical/creative thinking processes with some effectiveness	→ uses critical/creative thinking processes with considerable effectiveness	→ uses critical/creative thinking processes with a high degree of effectiveness
Communication *The conveying of meaning through various forms*	**The student:**			
Expression and organization of ideas and information (e.g., clear expression, logical organization) in oral, visual, and written forms	→ expresses and organizes ideas and information with limited effectiveness	→ expresses and organizes ideas and information with some effectiveness	→ expresses and organizes ideas and information with considerable effectiveness	→ expresses and organizes ideas and information with a high degree of effectiveness

Categories	Level 1	Level 2	Level 3	Level 4
Communication *The conveying of meaning through various forms*				
	The student:			
Communication for different audiences (e.g., peers, adults) and purposes (e.g., to inform, to persuade) in oral, visual, and written forms	→ communicates for different audiences and purposes with limited effectiveness	→ communicates for different audiences and purposes with some effectiveness	→ communicates for different audiences and purposes with considerable effectiveness	→ communicates for different audiences and purposes with a high degree of effectiveness
Use of conventions (e.g., conventions of form, map conventions), vocabulary, and terminology of the discipline in oral, visual, and written forms	→ uses conventions, vocabulary, and terminology of the discipline with limited effectiveness	→ uses conventions, vocabulary, and terminology of the discipline with some effectiveness	→ uses conventions, vocabulary, and terminology of the discipline with considerable effectiveness	→ uses conventions, vocabulary, and terminology of the discipline with a high degree of effectiveness
Application *The use of knowledge and skills to make connections within and between various contexts*				
	The student:			
Application of knowledge and skills (e.g., concepts, procedures, processes, and/or technologies) in familiar contexts	→ applies knowledge and skills in familiar contexts with limited effectiveness	→ applies knowledge and skills in familiar contexts with some effectiveness	→ applies knowledge and skills in familiar contexts with considerable effectiveness	→ applies knowledge and skills in familiar contexts with a high degree of effectiveness
Transfer of knowledge and skills (e.g., concepts, procedures, methodologies, technologies) to new contexts	→ transfers knowledge and skills to new contexts with limited effectiveness	→ transfers knowledge and skills to new contexts with some effectiveness	→ transfers knowledge and skills to new contexts with considerable effectiveness	→ transfers knowledge and skills to new contexts with a high degree of effectiveness
Making connections within and between various contexts (e.g., Past, present, and future; environment; social; cultural; spatial; personal; multidisciplinary)	→ makes connections within and between various contexts with limited effectiveness	→ makes connections within and between various contexts with some effectiveness	→ makes connections within and between various contexts with considerable effectiveness	→ makes connections within and between various contexts with a high degree of effectiveness

The Importance of Health & Physical Education in the Curriculum

The health and physical education curriculum helps students develop an understanding of what they need in order to make a commitment to lifelong healthy, active living and develop the capacity to live satisfying, productive lives. Healthy, active living benefits both individuals and society in many ways – for example, by increasing productivity and readiness for learning, improving morale, decreasing absenteeism, reducing health-care costs, decreasing anti-social behaviour such as bullying and violence, promoting safe and healthy relationships, and heightening personal satisfaction. Research has shown a connection between increased levels of physical activity and better academic achievement, better concentration, better classroom behaviour, and more focused learning. Other benefits include improvements in psychological well-being, physical capacity, self-concept, and the ability to cope with stress. The expectations that make up this curriculum also provide the opportunity for students to develop social skills and emotional well-being. This practical, balanced approach will help students move successfully through elementary and secondary school and beyond. In health and physical education, students will learn the skills needed to be successful in life as active, socially responsible citizens.

Living Skills: Grade 7

Overall Expectations:

By the end of Grade 7, students will:

- demonstrate personal and interpersonal skills and the use of critical and creative thinking processes as they acquire knowledge and skills in connection with the expectations in the Active Living, Movement Competence, and Healthy Living strands for this grade.

Specific Expectations:

By the end of Grade 7, students will:

Personal Skills:

- use self-awareness and self-monitoring skills to help them understand their strengths and needs, take responsibility for their actions, recognize sources of stress, and monitor their own progress, as they participate in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living
- use adaptive, management, and coping skills to help them respond to the various challenges they encounter as they participate in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living

Interpersonal Skills:

- communicate effectively, using verbal or non-verbal means, as appropriate, and interpret information accurately as they participate in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living
- apply relationship and social skills as they participate in physical activities, develop movement competence, and acquire knowledge and skills related to healthy living to help them interact positively with others, build healthy relationships, and become effective team members

Critical and Creative Thinking:

- use a range of critical and creative thinking skills and processes to assist them in making connections, planning and setting goals, analysing and solving problems, making decisions, and evaluating their choices in connection with learning in health and physical education

Active Living: Grade 7

Overall Expectations:

By the end of Grade 7, students will:

- participate actively and regularly in a wide variety of physical activities, and demonstrate an understanding of factors that encourage lifelong participation in physical activity;
- demonstrate an understanding of the importance of being physically active, and apply physical fitness concepts and practices that contribute to healthy, active living;
- demonstrate responsibility for their own safety and the safety of others as they participate in physical activities.

Specific Expectations:

By the end of Grade 7, students will:

Active Participation:

- actively participate in a wide variety of program activities, according to their capabilities, while applying behaviours that enhance their readiness and ability to take part in all aspects of the program
- demonstrate an understanding of factors that contribute to their personal enjoyment of being active, as they participate in a diverse range of physical activities in a variety of indoor and outdoor environments
- demonstrate an understanding of the factors that motivate or impede participation in physical activity every day

Physical Fitness:

- Daily physical activity (DPA): participate in sustained moderate to vigorous physical activity, with appropriate warm-up and cool-down activities, to the best of their ability for a minimum of twenty minutes each day
- identify factors that can affect health-related fitness, and describe how training principles can be applied to develop fitness
- assess their level of health-related fitness during various physical activities and monitor changes in fitness levels over time
- develop, implement, and revise a personal plan to meet short-term, health-related fitness goals

Safety:

- demonstrate behaviours and apply procedures that maximize their safety and that of others in a variety of physical activity settings
- demonstrate an understanding of procedures for anticipating and responding to hazards that

Movement Competence: Skills, Concepts, and Strategies: Grade 7

Overall Expectations:

By the end of Grade 7, students will:

- perform movement skills, demonstrating an understanding of the basic requirements of the skills and applying movement concepts as appropriate, as they engage in a variety of physical activities;
- apply movement strategies appropriately, demonstrating an understanding of the components of a variety of physical activities, in order to enhance their ability to participate successfully in those activities.

Specific Expectations:

By the end of Grade 7, students will:

Movement Skills and Concepts:

- perform smooth transfers of weight and rotations, in relation to others and equipment, in a variety of situations involving static and dynamic balance
- perform a wide variety of locomotor movements, with and without equipment, while responding to a variety of external stimuli
- send, receive, and retain a variety of objects, while taking into account their position and motion in relation to others, equipment, and boundaries, while applying basic principles of movement
- demonstrate an understanding of the phases of movement, and apply this understanding to the refinement of movement skills as they participate in a variety of physical activities

Movement Strategies:

- demonstrate an understanding of the components of a range of physical activities , and apply this understanding as they participate in a variety of physical activities in indoor and outdoor environments
- describe and compare different categories of physical activities, and describe strategies that they found effective while participating in a variety of physical activities in different categories
- apply a variety of tactical solutions to increase chances of success as they participate in physical activities

Healthy Living: Grade 7

Overall Expectations:

By the end of Grade 7, students will:

- demonstrate an understanding of factors that contribute to healthy development;
- demonstrate the ability to apply health knowledge and living skills to make reasoned decisions and take appropriate actions relating to their personal health and well-being;
- demonstrate the ability to make connections that relate to health and well-being – how their choices and behaviours affect both themselves and others, and how factors in the world around them affect their own and others' health and well-being.

Specific Expectations:

By the end of Grade 7, students will:

Understanding Health Concepts :

Personal Safety and Injury Prevention

- describe benefits and dangers, for themselves and others, that are associated with the use of computers and other technologies and identify protective responses

Substance Use, Addictions, and Related Behaviours*:*

- demonstrate an understanding of linkages between mental illness and problematic substance use, and identify school and community resources that can provide support for mental health concerns relating to substance use, addictions, and related behaviours

Making Healthy Choices:

Healthy Eating

- demonstrate the ability to make healthier food choices, using information about the role that different foods play as contributing or preventive factors in a variety of health disorders

Personal Safety and Injury Prevention

- assess the impact of different types of bullying or harassment on themselves and others, and identify ways of preventing or resolving such incidents

Substance Use, Addictions, and Related Behaviours

- explain how preoccupation with body image can contribute to substance abuse, and demonstrate the ability to make informed choices about caring for their bodies

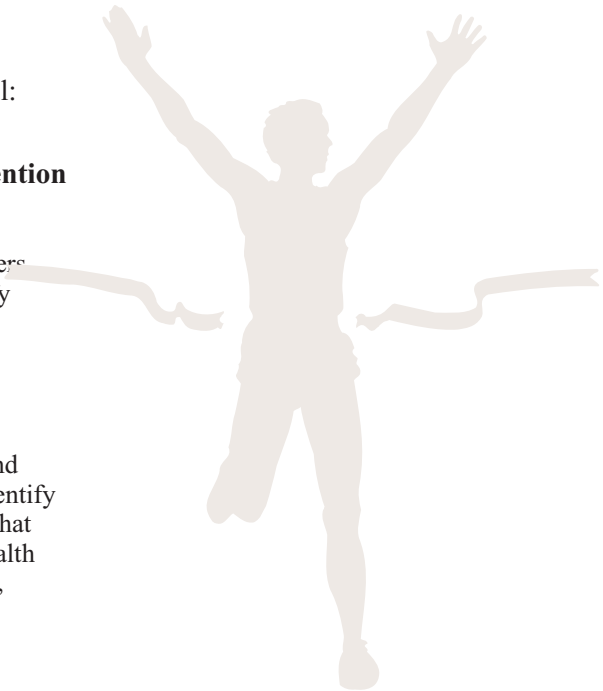
Making Connections for Healthy Living:

Healthy Eating

- demonstrate an understanding of personal and external factors that affect people's food choices and eating routines and identify ways of encouraging healthier eating practices

Substance Use, Addictions, and Related Behaviours

- analyse the personal and societal implications of issues related to substance use and addictive behaviours



Achievement Chart for Health and Physical Education - Grades 1-8

Categories	Level 1	Level 2	Level 3	Level 4
Knowledge and Understanding *Subject-specific content acquired in each grade (knowledge), and the comprehension of its meaning and significance (understanding)*				
	The student:			
Knowledge of content (e.g., facts, definitions, skills, principles and strategies, safe practices and procedures)	→ demonstrates limited knowledge of content	→ demonstrates some knowledge of content	→ demonstrates considerable knowledge of content	→ demonstrates thorough knowledge of content
Understanding of content (e.g., processes, techniques, ideas, relationships between concepts)	→ demonstrates limited understanding of content	→ demonstrates some understanding of content	→ demonstrates considerable understanding of content	→ demonstrates thorough understanding of content
Thinking *The use of critical and creative thinking skills and/or processes*				
	The student:			
Use of planning skills (e.g., identifying the problem, formulating questions and ideas, gathering and organizing information; developing fitness plans; selecting strategies)	→ uses planing skills with limited effectiveness	→ uses planning skills with some effectiveness	→ uses planning skills with considerable effectiveness	→ uses planning skills with a high degree of effectiveness
Use of processing skills (e.g., synthesizing information, evaluating risk and determining appropriate safety measures, revising fitness goals, detecting bias)	→ uses processing skills with limited effectiveness	→ uses processing skills with some effectiveness	→ uses processing skills with considerable effectiveness	→ uses processing skills with a high degree of effectiveness
Use of critical/creative thinking processes (e.g., goal setting, decision making, problem solving; analysing movement skills, strategizing, reflecting on learning and determining steps for improvement, critiquing)	→ uses critical/creative thinking processes with limited effectiveness	→ uses critical/creative thinking processes with some effectiveness	→ uses critical/creative thinking processes with considerable effectiveness	→ uses critical/creative thinking processes with a high degree of effectiveness
Communication *The conveying of meaning through various forms*				
	The student:			
Expression and organization of ideas and information in oral,visual, and/or written forms (e.g., demonstrations, role plays, conferences, presentations, posters, pamphlets, journals)	→ expresses and organizes ideas and information with limited effectiveness	→ expresses and organizes ideas and information with some effectiveness	→ expresses and organizes ideas and information with considerable effectiveness	→ expresses and organizes ideas and information with a high degree of effectiveness
Communication for different audiences (e.g., peers, teammates, adults) and purposes (e.g., to inform, instruct, promote) and in oral, visual, and/or written forms	→ communicates for different audiences and purposes with limited effectiveness	→ communicates for different audiences and purposes with some effectiveness	→ communicates for different audiences and purposes with considerable effectiveness	→ communicates for different audiences and purposes with a high degree of effectiveness

Categories	Level 1	Level 2	Level 3	Level 4
Communication *The conveying of meaning through various forms*				
	The student:			
Use of health and physical education conventions, vocabulary, and terminology (e.g., using and interpreting signals and body language; using correct terminology to discuss parts of the body, health-related components of fitness, phases of movement [preparation, execution, follow-through]) in oral, visual and/or written forms	→ uses conventions, vocabulary, and terminology with limited effectiveness	→ uses conventions, vocabulary, and terminology with some effectiveness	→ uses conventions, vocabulary, and terminology with considerable effectiveness	→ uses conventions, vocabulary, and terminology with a high degree of effectiveness
Application *The use of knowledge and skills to make connections within and between various contexts*				
	The student:			
Application of knowledge and skills (e.g.,movement skills, concepts, principles, strategies; training principles; health concepts; safe practices; personal and interpersonal skills, including teamwork, fair play, etiquette, leadership) in familiar contexts (e.g., physical activities, healthy living discussions)	→ applies knowledge and skills in familiar contexts with limited effectiveness	→ applies knowledge and skills in familiar contexts with some effectiveness	→ applies knowledge and skills in familiar contexts with considerable effectiveness	→ applies knowledge and skills in familiar contexts with a high degree of effectiveness
Transfer of knowledge and skills to new contexts (e.g., transfer of movement skills, strategies, and tactics from a familiar physical activity to a new activity, transfer of planning skills to contexts such as fitness, healthy eating, healthy sexuality)	→ applies knowledge and skills in familiar contexts with a high degree of effectiveness	→ transfers knowledge and skills to new contexts with some effectiveness	→ transfers knowledge and skills to new contexts with considerable effectiveness	→ transfers knowledge and skills to new contexts with a high degree of effectiveness
Making connections within and between various contexts (e.g., between active participation, learning in the health and physical education program, and healthy, active living; between health and physical education, other subjects, and personal experiences in and beyond school)	→ makes connections within and between various contexts with limited effectiveness	→ makes connections within and between various contexts with some effectiveness	→ makes connections within and between various contexts with considerable effectiveness	→ makes connections within and between various contexts with a high degree of effectiveness

Physical Literacy

Individuals who are physically literate move with competence in a wide variety of physical activities that benefit the development of the whole person.

Health Literacy

Health literacy involves the skills needed to get, understand and use information to make good decisions for health. The Canadian Public Health Association's Expert Panel on Health Literacy defines it as the ability to access, understand, evaluate and communicate information as a way to promote, maintain and improve health in a variety of settings across the life-course.

Health and Physical Education: Strands, Subgroups, and Living Skills

Living Skills

Personal Skills
- Self-awareness and self-monitoring skills
- Adaptive, management, and coping skills

Interpersonal Skills
- Communication skills
- Relationship and social skills

Critical and Creative Thinking
- Planning
- Processing
- Drawing conclusions/ presenting results
- Reflecting/ evaluating

Active Living

Active Participation
- Regular participation, variety, lifelong activity
- Enjoyment, motivation

Physical Fitness
- Fitness development through daily physical activity, personal fitness plans

Safety
- Personal safety and safety of others during physical activity

Movement Competence: Skills, Concepts, Strategies

Movement Skills and Concepts
- Movement skills – stability, locomotion, manipulation
- Movement concepts – body awareness, effort, spatial awareness, relationships
- Movement principles

Movement Strategies
- Components of physical activities
- Strategies and tactics in all physical activities

Healthy Living

Understanding Health Concepts
- Understanding the factors that contribute to healthy growth and development

Making Healthy Choices
- Applying health knowledge, making decisions about personal health and well-being

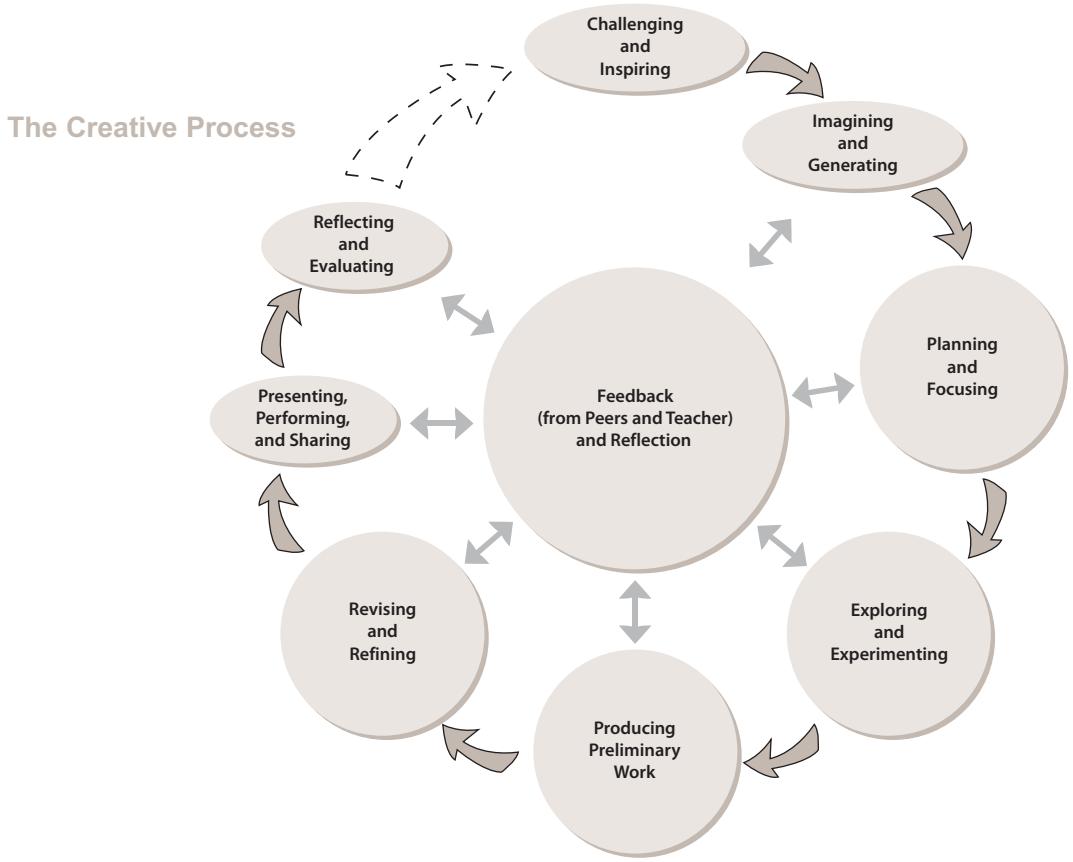
Making Connections for Healthy Living
- Making connections to link personal health and well-being to others and the world around them

Expectations in the Healthy Living strand focus on the following four health topics. Positive behaviours in relation to each topic area contribute to overall mental health and emotional well-being.
- Healthy Eating
- Personal Safety and Injury Prevention
- Substance Use, Addictions, and Related Behaviours
- Human Development and Sexual Health

▶ ***Mental Health and Emotional Well-being***

The Importance of the Arts

Education in the arts is essential to students' intellectual, social, physical, and emotional growth and well-being. Experiences in the arts – in dance, drama, music, and visual arts – play a valuable role in helping students to achieve their potential as learners and to participate fully in their community and in society as a whole. The arts provide a natural vehicle through which students can explore and express themselves and through which they can discover and interpret the world around them. Participation in the arts contributes in important ways to students' lives and learning – it involves intense engagement, development of motivation and confidence, and the use of creative and dynamic ways of thinking and knowing. It is well documented that the intellectual and emotional development of children is enhanced through study of the arts. Through the study of dance, drama, music, and visual arts, students develop the ability to think creatively and critically. The arts nourish and stimulate the imagination, and provide students with an expanded range of tools, techniques, and skills to help them gain insights into the world around them and to represent their understandings in various ways. Study of the arts also provides opportunities for differentiation of both instruction and learning environments.



Achievement Chart - The Arts, Grades 1–8

Categories	Level 1	Level 2	Level 3	Level 4
Knowledge and Understanding *Subject-specific content acquired in each grade (knowledge), and the comprehension of its meaning and significance (understanding)*				
	The student:			
Knowledge of content *(e.g., facts, genres, terms, definitions, techniques, elements, principles, forms, structures, conventions)*	→ demonstrates limited knowledge of content	→ demonstrates some knowledge of content	→ demonstrates considerable knowledge of content	→ demonstrates thorough knowledge of content
Understanding of content *(e.g., concepts, ideas, procedures, processes, themes, relationships among elements, informed opinions)*	→ demonstrates limited understanding of content	→ demonstrates some understanding of content	→ demonstrates considerable understanding of content	→ demonstrates thorough understanding of content
Thinking *The use of critical and creative thinking skills and/or processes*				
	The student:			
Use of planning skills *(e.g., formulating questions, generating ideas, gathering information, focusing research, outlining, organizing an arts presentation or project, brainstorming/ bodystorming, blocking, sketching, using visual organizers, listing goals in a rehearsal log, inventing notation)*	→ uses planning skills with limited effectiveness	→ uses planning skills with some effectiveness	→ uses planning skills with considerable effectiveness	→ uses planning skills with a high degree of effectiveness
Use of processing skills *(e.g.,analysing, evaluating, inferring, interpreting, editing, revising, refining, forming conclusions, detecting bias, synthesizing)*	→ uses processing skills with limited effectiveness	→ uses processing skills with some effectiveness	→ uses processing skills with considerable effectiveness	→ uses processing skills with a high degree of effectiveness
Use of critical/creative thinking processes *(e.g., creative and analytical processes, design process, exploration of the elements, problem solving, reflection, elaboration, oral discourse, evaluation, critical literacy, metacognition, invention, critiquing, reviewing)*	→ uses critical/creative thinking processes with limited effectiveness	→ uses critical/creative thinking processes with some effectiveness	→ uses critical/ creative thinking processes with considerable effectiveness	→ uses critical/ creative thinking processes with a high degree of effectiveness

Categories	Level 1	Level 2	Level 3	Level 4
Communication *The conveying of meaning through various forms*				
	The student:			
Expression and organization of ideas and understandings in art forms *(dance, drama, music, and the visual arts)*, including media/multimedia forms *(e.g., expression of ideas and feelings using visuals, movements, the voice, gestures, phrasing, techniques)*, **and in oral and written forms** *(e.g.,clear expression and logical organization in critical responses to art works and informed opinion pieces)*	→ expresses and organizes ideas and understandings with limited effectiveness	→ expresses and organizes ideas and understandings with some effectiveness	→ expresses and organizes ideas and understandings with considerable effectiveness	→ expresses and organizes ideas and understandings with a high degree of effectiveness
Communication for different audiences *(e.g., peers, adults, younger children)* **and purposes through the arts** *(e.g., drama presentations, visual arts exhibitions, dance and music performances)* **and in oral and written forms** *(e.g., debates, analyses)*	→ communicates for different audiences and purposes with limited effectiveness	→ communicates for different audiences and purposes with some effectiveness	→ communicates for different audiences and purposes with considerable effectiveness	→ communicates for different audiences and purposes with a high degree of effectiveness
Use of conventions in dance, drama, music, and the visual arts *(e.g., allegory, narrative or symbolic representation, style, articulation, drama conventions, choreographic forms, movement vocabulary)* **and arts vocabulary and terminology in oral and written forms**	→ uses conventions, vocabulary, and terminology of the arts with limited effectiveness	→ uses conventions, vocabulary, and terminology of the arts with some effectiveness	→ uses conventions, vocabulary, and terminology of the arts with considerable effectiveness	→ uses conventions, vocabulary, and terminology of the arts with a high degree of effectiveness
Application *The use of knowledge and skills to make connections within and between various contexts*				
	The student:			
Application of knowledge and skills *(e.g., performance skills, composition, choreography, elements, principles, processes, technologies, techniques, strategies, conventions)* **in familiar contexts** *(e.g., guided improvisation, performance of a familiar work, use of familiar forms)*	→ applies knowledge and skills in familiar contexts with limited effectiveness	→ applies knowledge and skills in familiar contexts with some effectiveness	→ applies knowledge and skills in familiar contexts with considerable effectiveness	→ applies knowledge and skills in familiar contexts with a high degree of effectiveness
Transfer of knowledge and skills *(e.g., concepts, strategies, processes, techniques)* **to new contexts** *(e.g., a work requiring stylistic variation, an original composition, student-led choreography, an interdisciplinary or multidisciplinary project)*	→ transfers knowledge and skills to new contexts with limited effectiveness	→ transfers knowledge and skills to new contexts with some effectiveness	→ transfers knowledge and skills to new contexts with considerable effectiveness	→ transfers knowledge and skills to new contexts with a high degree of effectiveness
Making connections within and between various contexts *(e.g., between the arts; between the arts and personal experiences and the world outside the school; between cultural and historical, global, social, and/or environmental contexts; between the arts and other subjects)*	→ makes connections within and between various contexts with limited effectiveness	→ makes connections within and between various contexts with some effectiveness	→ makes connections within and between various contexts with considerable effectiveness	→ makes connections within and between various contexts with a high degree of effectiveness

Dance: Grade 7

Overall Expectations
By the end of Grade 7, students will:

- **Creating and Presenting:** apply the creative process to the composition of a variety of dance pieces, using the elements of dance to communicate feelings and ideas;
- **Reflecting, Responding, and Analysing:** apply the critical analysis process to communicate their feelings, ideas, and understandings in response to a variety of dance pieces and experiences;
- **Exploring Forms and Cultural Contexts:** demonstrate an understanding of a variety of dance forms, traditions, and styles from the past and present, and their sociocultural and historical contexts.

Dance: Fundamental Concepts for Grade 7

Students in Grade 7 will develop or extend understanding of the following concepts through participation in various dance experiences (e.g., using elements and choreographic forms to communicate themes and moods).

ELEMENTS OF DANCE

• ***body:*** body awareness, use of body parts, body shapes, locomotor and non-locomotor movements, body bases, symmetry versus asymmetry, geometric versus organic shape, angular versus curved shape, isolation of body parts (e.g., moving just the shoulder when the rest of the body is still), weight transfer (e.g., lunge, leap, roll)
• ***space:*** levels, pathways, directions, positive versus negative space, proximity of dancers to one another, various group formations, performance space (e.g., confined, large)
• ***time:*** pause, freeze, with music, without music, duration, rhythm, tempo, acceleration/deceleration
• ***energy:*** effort, force, quality, inaction versus action, percussion, fluidity (e.g., wring, dab, mould, flow, bind)
• ***relationship:*** dancers to objects, opposition, groupings (e.g., large and small groups), meet/part, follow/lead, emotional connections between dancers, groupings

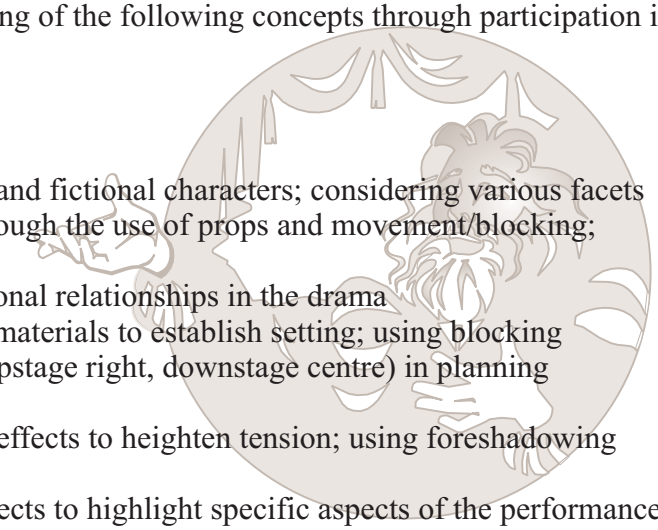
Drama: Grade 7

Overall Expectations
By the end of Grade 7, students will:

- **Creating and Presenting:** apply the creative process to process drama and the development of drama works, using the elements and conventions of drama to communicate feelings, ideas, and multiple perspectives;
- **Reflecting, Responding, and Analysing:** apply the critical analysis process to communicate feelings, ideas, and understandings in response to a variety of drama works and experiences;
- **Exploring Forms and Cultural Contexts:** demonstrate an understanding of a variety of drama and theatre forms, traditions, and styles from the past and present, and their sociocultural and historical contexts.

Drama: Fundamental Concepts for Grade 7

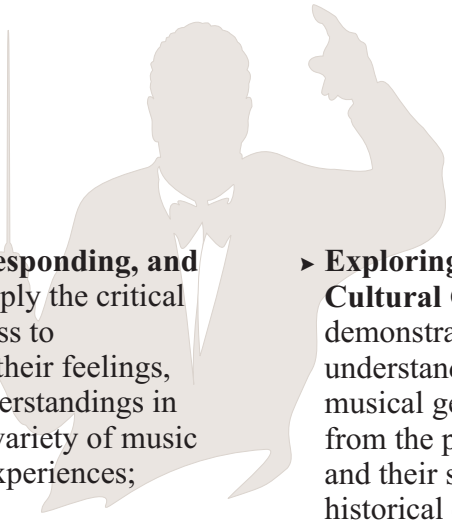
Students in Grade 7 will develop or extend understanding of the following concepts through participation in various drama experiences.



ELEMENTS OF DRAMA

- ***role/character:*** considering motivations of historical and fictional characters; considering various facets of multidimensional characters; revealing character through the use of props and movement/blocking; maintaining commitment to role
- ***relationship:*** developing and analysing multidimensional relationships in the drama
- ***time and place:*** improvising with/adapting available materials to establish setting; using blocking (e.g., when and where to move) and stage areas (e.g., upstage right, downstage centre) in planning and performance
- ***tension:*** using sound, lighting, technology, and stage effects to heighten tension; using foreshadowing to create suspense
- ***focus and emphasis:*** using a range of devices and effects to highlight specific aspects of the performance for the audience

Music: Grade 7

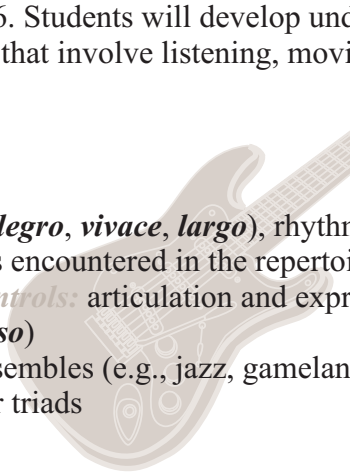


Overall Expectations
By the end of Grade 7, students will:

- **Creating and Performing:** apply the creative process to create and perform music for a variety of purposes, using the elements and techniques of music;
- **Reflecting, Responding, and Analysing:** apply the critical analysis process to communicate their feelings, ideas, and understandings in response to a variety of music and musical experiences;
- **Exploring Forms and Cultural Contexts:** demonstrate an understanding of a variety of musical genres and styles from the past and present, and their sociocultural and historical contexts.

Music: Fundamental Concepts for Grade 7

In Grade 7, students will build on their knowledge of the elements of music and related musical concepts that were introduced in Grades 1 to 6. Students will develop understanding of musical concepts through participation in musical experiences that involve listening, moving, creating, and performing (vocal and/or instrumental music).



ELEMENTS OF MUSIC

- ***duration:*** tempo markings (e.g., ***allegro***, ***vivace***, ***largo***), rhythms in the repertoire they play and/or sing
- ***pitch:*** blues scale, grand staff, keys encountered in the repertoire they perform
- ***dynamics and other expressive controls:*** articulation and expression marks encountered in the repertoire they perform (e.g., ***marcato***, ***maestoso***)
- ***timbre:*** tone colour of complex ensembles (e.g., jazz, gamelan, choral, orchestral)
- ***texture/harmony:*** major and minor triads
- ***form:*** 12-bar blues

Visual Arts: Grade 7

Overall Expectations
By the end of Grade 7, students will:

- **Creating and Presenting:** apply the creative process to produce art works in a variety of traditional two- and three-dimensional forms, as well as multimedia art works, that communicate feelings, ideas, and understandings, using elements, principles, and techniques of visual arts as well as current media technologies;
- **Reflecting, Responding, and Analysing:** apply the critical analysis process to communicate feelings, ideas, and understandings in response to a variety of art works and art experiences;
- **Exploring Forms and Cultural Contexts:** demonstrate an understanding of a variety of art forms, styles, and techniques from the past and present, and their sociocultural and historical contexts.

Visual Arts: Fundamental Concepts for Grade 7

In addition to the concepts introduced in Grades 1 to 6, students in Grade 7 will develop understanding of the following concepts through participation in a variety of hands-on, open-ended visual arts experiences.

ELEMENTS OF DESIGN

Students will develop understanding of all elements of design.
• **line:** lines for expressive purposes; diagonal and converging lines to create depth of space; repetition of lines to create visual rhythm
• ***shape and form:*** various shapes and forms, symbols, icons, logos, radial balance
• ***space:*** use of blue or complementary colours in shadows and shading to create depth; one- and twopoint perspective; open-form sculpture versus closed-form sculpture; installations
• ***colour:*** analogous colours; transparent colour created with watercolour or tissue paper decoupage
Note: In creating multimedia art works, students may need some understanding of different colour models, such as RGB and CMY(K), and websafe colours.
• ***texture:*** textures created with a variety of tools, materials, and techniques (e.g., use of texture in a landscape work)
• ***value:*** shading (e.g., modulation, scumbling, stippling)

PRINCIPLES OF 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 7 will be on unity and harmony.
• ***unity and harmony:*** radial balance (e.g., a mandala); similarity (e.g., consistency and completeness through repetition of colours, shapes, values, textures, or lines); continuity (e.g., treatment of different elements in a similar manner); alignment (e.g., arrangement of shapes to follow an implied axis); proximity (e.g., grouping of related items together)