# Grade 4 - Language

## Grade 4 | Oral Communication

### Overall Expectations

By the end of Grade 4, students will:
1. listen in order to understand and respond appropriately in a variety of situations for a variety of purposes;
2. use speaking skills and strategies appropriately to communicate with different audiences for a variety of purposes;
3. 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

#### 1. Listening to Understand

**Purpose**
1.1 identify purposes for listening in a variety of situations, formal and informal, and set goals related to specific listening tasks (e.g., to summarize the theme of a small group drama presentation; to record important details about an upcoming event announced on the radio; to clarify suggestions for improvements in a peer writing conference)

**Active Listening Strategies**
1.2 demonstrate an understanding of appropriate listening behaviour by adapting active listening strategies to suit a variety of situations, including work in groups (e.g., demonstrate an understanding of when to speak, when to listen, and how much to say; summarize information and ideas from a small group meeting; ask relevant questions to clarify meaning and link responses appropriately to the topic of conversation; adapt listening behaviour to the requirements of informal social settings and more formal settings)

**Comprehension Strategies**
1.3 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 oral texts (e.g., make notes to summarize what has been heard; use graphic organizers, diagrams, or sketches to record information or ideas presented orally; prepare for a visit to the theatre by activating prior knowledge of the structure of a play and discussing the subject of the play with peers)

**Demonstrating Understanding**
1.4 demonstrate an understanding of the information and ideas in a variety of oral texts by summarizing important ideas and citing important details (e.g., present an oral report to the class after listening to a guest speaker; use a graphic organizer to map the important ideas in a text; represent the important ideas of an oral text through visual art, music, or drama)

**Making Inferences/Interpreting Texts**
1.5 make inferences using stated and implied ideas in oral texts (e.g., listen "between the lines" to detect bias in an oral text)

**Extending Understanding**
1.6 extend understanding of oral texts by connecting the ideas in them to their own knowledge, experience, and insights; to other texts, including print and visual texts; and to the world around them (e.g., relate the topic of an oral presentation to prior knowledge and information from personal experiences, articles, movies, stories, or television shows; ask questions about relevant stated and implied details; relate the ideas of other speakers in a dialogue group to their own experiences; use role play and drama to connect the themes and emotions depicted in an oral text to real-life situations)

**Analysing Texts**
1.7 analyse oral texts and explain how specific elements in them contribute to meaning (e.g., ideas and information, body language, tone of voice)

**Point of View**
1.8 identify the point of view presented in oral texts and ask questions about possible bias (e.g., identify the use of words and/or phrases that signal generalizations or stereotypes about gender, culture, ability, or age)

**Presentation Strategies**
1.9 identify the presentation strategies used in oral texts and analyse their effect on the audience (e.g., the use of emotive language)

#### 2. Speaking to Communicate

**Purpose**
2.1 identify a variety of purposes for speaking (e.g., to entertain a wider school audience; to establish positive personal and learning relationships with peers; to ask questions or explore solutions to problems in small group and paired activities; to solicit opinions and react to information and ideas in a discussion or dialogue group; to explain to another person how something works; to summarize and comment on an event or oral text for the class; to clarify and organize thinking in order to contribute to understanding in large and small groups)

**Interactive Strategies**
2.2 demonstrate an understanding of appropriate speaking behaviour in a variety of situations, including paired sharing and small- and large-group discussions (e.g., acknowledge and extend other group members’ contributions; make relevant and constructive comments on the contributions of other group members)

**Clarity and Coherence**

### Grade 4 | Language Tracking

Student’s Name: ________________________
Teacher: ________________________
School Year: ________________________
Term: ________________________

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Grade 4 Ontario Curriculum Tracking Template - Grade 4 Language
Grade 4 Ontario Curriculum Tracking Template – Grade 4 Language

2.3 communicate in a clear, coherent manner, presenting ideas, opinions, and information in a readily understandable form (e.g., respond in an appropriate order to multi-part, higher-level questions in a student-teacher conference or a group discussion; explain the results of research in an oral presentation, including a statement of the research focus, the procedures followed, and the conclusions reached; use an organizational pattern such as chronological order or cause and effect to present ideas in a dialogue or discussion)

Appropriate Language

2.4 use appropriate words and phrases from the full range of their vocabulary, including inclusive and non-discriminatory terms, and appropriate elements of style, to communicate their meaning accurately and engage the interest of their audience (e.g., use evaluative terms to clarify opinions and for emphasis; use descriptive words to give specificity and detail to personal anecdotes; use humour or emotive language to engage the audience’s interest or sympathy)

Vocal Skills and Strategies

2.5 identify some vocal effects, including tone, pace, pitch, volume, and a range of sound effects, and use them appropriately and with sensitivity towards cultural differences to help communicate their meaning (e.g., adjust the pace of speaking for effect and to hold the listener’s attention)

Non-Verbal Cues

2.6 identify some 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 (e.g., use body language, such as moving closer, leaning forward, nodding or shaking their head for emphasis, to connect with their audience)

Visual Aids

2.7 use a variety of appropriate visual aids (e.g., CDs or DVDs, computer-generated graphic organizers, concrete materials, artefacts) to support or enhance oral presentations (e.g., use pictures or samples of different kites to illustrate a talk on how to build a kite)

3. Reflecting on Oral Communication Skills and Strategies

By the end of Grade 4, students will:

1. Identify, in conversation with the teacher and peers, 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

2. Identify, in conversation with the teacher and peers, how their skills as viewers, representers, readers, and writers help them improve their oral communication skills

GRADE 4 | READING

OVERALL EXPECTATIONS

By the end of Grade 4, students will:

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

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

3. use knowledge of words and cueing systems to read fluently;

4. 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

1. Reading for Meaning

By the end of Grade 4, students will:

Variety of Texts

1.1 read a variety of texts from diverse cultures, including literary texts (e.g., myths, plays, short stories, chapter books, letters, diaries, poetry), graphic texts (e.g., graphic novels, diagrams, brochures, graphs and graphic organizers, charts and tables, maps), and informational texts (e.g., textbooks, non-fiction books on a range of topics, print and online newspaper and magazine articles or reviews, print and online encyclopedias and atlases, electronic texts such as e-mails or zines)

Purpose

1.2 identify a variety of purposes for reading and choose reading materials appropriate for those purposes (e.g., letters and diaries for information and new ideas, leisure/hobby books and magazines for recreation and interest, print and online magazine or newspaper articles to research a current issue, instructions or information about how to play a computer game)

Comprehension Strategies

1.3 identify a variety of reading comprehension strategies and use them appropriately before, during, and after reading to understand texts (e.g., activate prior knowledge through brainstorming; ask questions to focus or clarify reading; use visualization to clarify details about such things as the sights, sounds, and smells in a medieval castle; make and confirm predictions based on evidence from the text; synthesize ideas during reading to generate a new understanding of a text)

Demonstrating Understanding

1.4 demonstrate understanding of a variety of texts by summarizing important ideas and citing supporting details (e.g., make an outline of a section from a textbook in another subject to prepare for a test)

Making Inferences/Interpreting Texts

1.5 make inferences about texts using stated and implied ideas from the texts as evidence

Extending Understanding

1.6 extend understanding of 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

1.7 analyse texts and explain how specific elements in them contribute to meaning (e.g., narrative: characters, setting, main idea, problem/challenge and resolution, plot development; review: statement of opinion, reasons for opinion, concluding statement)

Opposing and Evaluating Texts
1.8 express opinions about the ideas and information in texts and cite evidence from the text to support their opinions

Point of View

1.9 identify the point of view presented in a text, citing supporting evidence from the text, and suggest some possible alternative perspectives (e.g., identify words or phrases that reveal the point of view presented; write a letter or use role play to present the perspective of a character whose voice is not heard in the text)

2. Understanding Form and Style

by the end of Grade 4, students will:

Text Forms

2.1 explain how the particular characteristics of various text forms help communicate meaning, with a focus on literary texts such as a diary or journal (e.g., first-person record of events, thoughts, and feelings, usually in prose, gives a personal perspective on events; dated daily or weekly entries provide context), graphic texts such as a brochure (e.g., headings, subheadings, text boxes, photographs, lists, and maps clarify and highlight important material), and informational texts such as an encyclopedia (e.g., table of contents, glossary, index, headings, and subheadings help the reader use key words to locate information)

Text Patterns

2.2 recognize a variety of organizational patterns in texts of different types and explain how the patterns help readers understand the texts (e.g., comparison in an advertisement; cause and effect in a magazine or newspaper article)

Text Features

2.3 identify a variety of text features and explain how they help readers understand texts (e.g., the back cover copy for a book helps readers decide whether the book will interest them; titles, subtitles, captions, labels, a menu allow the reader to skim a text to get a general idea of what it is about)

Elements of Style

2.4 identify various elements of style - including alliteration, descriptive adjectives and adverbs, and sentences of different types, lengths, and structures - and explain how they help communicate meaning (e.g., alliteration and rhythm can emphasize ideas or help convey a mood or sensory impression)

3. Reading With Fluency

by the end of Grade 4, students will:

Reading Familiar Words

3.1 automatically read and understand high-frequency words, most regularly used words, and words of personal interest or significance in a variety of reading contexts (e.g., words from grade-level texts; terminology used regularly in discussions and posted on anchor charts; words from shared-, guided-, and independent-reading texts and some regularly used resource materials in the curriculum subject areas)

Reading Unfamiliar Words

3.2 predict the meaning of and rapidly solve unfamiliar words using different types of cues, including:

- semantic (meaning) cues (e.g., prefixes, suffixes, base words, phrases, sentences, and visuals that activate existing knowledge of oral and written language);
- syntactic (language structure) cues (e.g., word order; language patterns such as those for regular and irregular plurals, possessives, and contractions; punctuation);
- graphophonic (phonological and graphic) cues (e.g., familiar words within larger words: highlight, enlighten; recognizable sequences of letters within long words: spacious, conscious, delicious)

Reading Fluently

3.3 read appropriate texts at a sufficient rate and with sufficient expression to convey the sense of the text readily to the reader and an audience (e.g., read orally in role as part of a readers' theatre, using appropriate phrasing and expression)

4. Reflecting on Reading Skills and Strategies

by the end of Grade 4, students will:

Metacognition

4.1 identify, in conversations with the teacher and peers or in a reader's notebook, what strategies they found most helpful before, during, and after reading and how they can use these and other strategies to improve as readers

Interconnected Skills

4.2 explain, in conversations with the teacher and 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 (e.g., orally summarizing what has been read helps a reader to check on understanding; engaging in dialogue about a text helps the reader understand other perspectives and interpretations of a text)

GRADE 4 | WRITING

OVERALL EXPECTATIONS

by the end of Grade 4, students will:

1. generate, gather, and organize ideas and information to write for an intended purpose and audience;
2. draft and revise their writing, using a variety of informational, literary, and graphic forms and stylistic elements appropriate for the purpose and audience;
3. use editing, proofreading, and publishing skills and strategies, and knowledge of language conventions, to correct errors, refine expression, and present their work effectively;
4. 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

1. Developing and Organizing Content

by the end of Grade 4, students will:

Purpose and Audience
## Grade 4 Ontario Curriculum Tracking Template – Grade 4 Language

1.1 Identify the topic, purpose, and audience for a variety of writing forms (e.g., a cinquain or shape poem modeled on the structures and style of poems read, to contribute to a student poetry anthology for the school library; a set of directions to complete a science experiment on pulleys and gears, for a class presentation; a timeline of significant events in the writer's life, to accompany a biography for a class collection)

### Developing Ideas

2.1 Write more complex texts using a variety of forms (e.g., a storyboard using captions and photographs or drawings to recount a significant event in their life; a report, including jot notes, comparing the environments of two or more regions in Canada; a letter to the author about the student's reaction to a particular text; a summary of the role of a medieval person; a review of a book or website; an original folk tale, fairy tale, or tall tale, or an extension of an existing tale; a board game related to a unit of study)

### Voice

2.2 Establish a personal voice in their writing, with a focus on using words and stylistic elements that convey a specific mood such as amusement (e.g., use simple irony to poke fun at themselves: “Lucky me. I got to do the dishes.”)

### Word Choice

2.3 Use specific words and phrases to create an intended impression (e.g., comparative adjectives such as faster; words that create specific effects through sound, as in alliteration for emphasis: rotten rain)

### Sentence Fluency

2.4 Use sentences of different lengths and structures (e.g., complex sentences incorporating conjunctions such as because, so, if)

### Point of View

2.5 Identify their point of view and other possible points of view on the topic, and determine whether their information sufficiently supports their own view

### Revision

2.7 Make revisions to improve the content, clarity, and interest of their written work, using several types of strategies (e.g., reordering sentences; removing repetition or unnecessary information; changing the sequence of ideas and information and adding material if appropriate; adding transition words and phrases to link sentences and/or paragraphs and improve the flow of writing; adding or substituting words from other subject areas, word lists, and a variety of sources, such as a dictionary or thesaurus and the Internet, to clarify meaning or add interest; checking for and removing negative stereotypes, as appropriate)

### Producing Drafts

2.8 Produce revised, draft pieces of writing to meet identified criteria based on the expectations related to content, organization, style, and use of conventions

## 3. Applying Knowledge of Language Conventions and Presenting Written Work Effectively

### Spelling Familiar Words

3.1 Spell familiar words correctly (e.g., words from their oral vocabulary, anchor charts, and shared-, guided-, and independent-reading texts; words used regularly in instruction across the curriculum)

### Spelling Unfamiliar Words

3.2 Spell unfamiliar words using a variety of strategies that involve understanding sound-symbol relationships, word structures, word meanings, and generalizations about spelling (e.g., pronounce the silent letters in words: k-now; divide long words into manageable chunks; make connections between words with similar spellings; apply knowledge of vowel patterns to new words; apply knowledge of letter patterns and rules for forming regular and irregular plurals and possessive contractions; identify roots in related words: explore, explorer, exploration; highlight the differences between similar words; use mnemonics: twin is two)
3.3 confirm spellings and word meanings or word choice using different types of resources appropriate for the purpose (e.g., locate words in online and print dictionaries using alphabetical order, entry words, guide words, pronunciation, and homographs; use a variety of dictionaries such as a dictionary of idioms or homonyms; use a thesaurus to find alternative words)

Punctuation
3.4 use punctuation appropriately to help communicate their intended meaning, with a focus on the use of: the apostrophe to indicate possession, and quotation marks to indicate direct speech

Grammar
3.5 use parts of speech appropriately to communicate their meaning clearly, with a focus on the use of: common and proper nouns; verbs in the simple present, past, and future tenses; adjectives and adverbs; subject/verb agreement; prepositions; and conjunctions (e.g., since, through, until)

Proofreading
3.6 proofread and correct their writing using guidelines developed with peers and the teacher (e.g., an editing checklist specific to the writing task; a posted class writing guideline)

Publishing
3.7 use some appropriate elements of effective presentation in the finished product, including print, script, different fonts, graphics, and layout (e.g., use legible printing and some cursive writing; use a variety of font sizes and colours to distinguish headings and subheadings from the body of the text; supply detailed labels for diagrams in a report; include graphs such as a bar graph or a pie graph)

Producing Finished Works
3.8 produce pieces of published work to meet identified criteria based on the expectations related to content, organization, style, use of conventions, and use of presentation strategies

4. Reflecting on Writing Skills and Strategies
By the end of Grade 4, students will:

Metacognition
4.1 identify what strategies they found most helpful before, during, and after writing and what steps they can take to improve as writers

Interconnected Skills
4.2 describe, with prompting by the teacher, how their skills in listening, speaking, reading, viewing, and representing help in their development as writers

Portfolio
4.3 select pieces of writing that they think reflect their growth and competence as writers and explain the reasons for their choice

GRADE 4 | MEDIA LITERACY

OVERALL EXPECTATIONS
By the end of Grade 4, students will:
1. demonstrate an understanding of a variety of media texts;
2. identify some media forms and explain how the conventions and techniques associated with them are used to create meaning;
3. create a variety of media texts for different purposes and audiences, using appropriate forms, conventions, and techniques;
4. 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
1. Understanding Media Texts
By the end of Grade 4, students will:

Purpose and Audience
1.1 identify the purpose and audience for a variety of media texts (e.g., this print advertisement is designed to interest children in taking karate lessons; this website is designed to provide information to fans about a favourite singer; this CD cover is designed to attract classical music fans/pop fans/rap fans)

Making Inferences/Interpreting Messages
1.2 use overt and implied messages to draw inferences and construct meaning in media texts (e.g., overt message on packaging for a video game: In this adventure game, characters take big risks and perform amazing deeds; implied message: If you buy this game, you can share in the excitement and be more like the daring characters)

Responding to and Evaluating Texts
1.3 express opinions about ideas, issues, and/or experiences presented in media texts, and give evidence from the texts to support their opinions (e.g., “I think this documentary about lions is one-sided because it only shows them as predators”, defend an opinion about whether or not a sitcom or video game reflects reality)

Audience Responses
1.4 explain why different audiences might respond differently to specific media texts (e.g., examine children’s books or video games that have been rated as suitable for different age groups and suggest reasons for the ratings)

Point of View
1.5 identify whose point of view is presented or reflected in a media text, citing supporting evidence from the text, and suggest how the text might change if a different point of view were used (e.g., explain how the point of view reflected in an advertisement is conveyed and describe how the advertisement might change to reflect the point of view of a different audience; describe how a TV show might change if it were told from the point of view of a different character)

Production Perspectives
1.6 identify who produces various media texts and the reason for their production (e.g., the government produces public service announcements, and the media broadcast them at no charge, to protect citizens’ safety and the public interest; arts groups produce posters to advertise upcoming events; publishers produce newspapers to provide information, influence people’s thinking, and make money)
2. Understanding Media Forms, Conventions, and Techniques

By the end of Grade 4, students will:

Form

2.1 identify elements and characteristics of some media forms (e.g., a television game show: game host/hostess, contestants, prizes; a television nature program: outdoor setting, wildlife "actors", voice-over narration, background music; a billboard: frame, large surface area, colour, images, graphics, words, font, punctuation)

Conventions and Techniques

2.2 identify the conventions and techniques used in some familiar media forms and explain how they help convey meaning (e.g., movies and videos use camera close-ups to show details, medium and long shots to put people and objects in perspective, high and low camera angles to create illusions of size or artistic effects, environmental sounds for realistic effects, background music to suggest a mood)

3. Creating Media Texts

By the end of Grade 4, students will:

Purpose and Audience

3.1 describe in detail the topic, purpose, and audience for media texts they plan to create (e.g., an album of camera shots to help classmates understand the uses of different camera angles and distances in photography and/or film)

Form

3.2 identify an appropriate form to suit the specific purpose and audience for a media text they plan to create (e.g., a poster advertising a school science fair; a flyer to encourage students to participate in the fair)

Conventions and Techniques

3.3 identify conventions and techniques appropriate to the form chosen for a media text they plan to create (e.g., a board game related to a unit of study from a curriculum subject area could include a list of game rules; a board showing the game name, movement path, obstacles, and finish line; and visual details that will appeal to the intended audience)

Producing Media Texts

3.4 produce media texts for specific purposes and audiences, using a few simple media forms and appropriate conventions and techniques (e.g.,

- a poster for a school science fair
- a newspaper article that includes a photograph and headline
- a board game related to a unit of study from a curriculum subject area

4. Reflecting on Media Literacy Skills and Strategies

By the end of Grade 4, students will:

Metacognition

4.1 identify, initially with support and direction, 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

4.2 explain, initially with support and direction, how their skills in listening, speaking, reading, and writing help them to make sense of and produce media texts
### Grade 4: Number Sense and Numeration

By the end of Grade 4, students will:

- represent, compare, and order whole numbers to 10,000, using a variety of tools (e.g., drawings of base ten materials, number lines with increments of 100 or other appropriate amounts);
- demonstrate an understanding of place value in whole numbers and decimal numbers from 0.1 to 10,000, using a variety of tools and strategies (e.g., use base ten materials to represent 9307 as 9000 + 300 + 0 + 7) (Sample problem: Use the digits 1, 9, 5, 4 to create the greatest number and the least number possible, and explain your thinking);
- read and print in words whole numbers to one thousand, using meaningful contexts (e.g., books, highway distance signs);
- round four-digit whole numbers to the nearest ten, hundred, and thousand, in problems arising from real-life situations;
- represent, compare, and order decimal numbers to tenths, using a variety of tools (e.g., concrete materials such as paper strips divided into tenths and base ten materials, number lines, drawings) and using standard decimal notation (Sample problem: Draw a partial number line that extends from 4.2 to 6.7, and mark the location of 5.6);
- represent fractions using concrete materials, words, and standard fractional notation, and explain the meaning of the denominator as the number of the fractional parts of a whole or a set, and the numerator as the number of fractional parts being considered;
- compare and order fractions (i.e., halves, thirds, fourths, fifths, tenths) by considering the size and the number of fractional parts (e.g., 4/5 is greater than 3/5 because there are more parts in 4/5; 1/4 is greater than 1/5 because the size of the part is larger in 1/4);
- compare fractions to the benchmarks of 0, 1/2, and 1 (e.g., 1/8 is less than 1/2; 3/5 more than 1/2); demonstrate and explain the relationship between equivalent fractions, using concrete materials (e.g., fraction circles, fraction strips, pattern blocks) and drawings (e.g., "I can say that 3/6 of my cubes are white, or half of the cubes are white. This means that 3/6 and 1/2 are equal.");
- read and represent money amounts to $100 (e.g., five dollars, two quarters, one nickel, and four cents is $5.99);
- solve problems that arise from real-life situations and that relate to the magnitude of whole numbers up to 10,000 (Sample problem: How high would a stack of 10,000 pennies be? Justify your answer.).

### Counting

By the end of Grade 4, students will:

- count forward by halves, thirds, fourths, and tenths to beyond one whole, using concrete materials and number lines (e.g., use fraction circles to count fourths: “One fourth, two fourths, three fourths, four fourths, four fifths, six fourths, ...”);
- count forward by tenths from any decimal number expressed to one decimal place, using concrete materials and number lines (e.g., use base ten materials to represent 3.7 and count forward: 3.8, 3.9, 4.0, 4.1, ...; “Three and seven tenths, three and nine tenths, four, four and one tenth, ...”) (Sample problem: What connections can you make between counting by tenths and measuring lengths in millimetres and in centimetres?).

### Operational Sense

By the end of Grade 4, students will:

- add and subtract two-digit numbers, using a variety of mental strategies (e.g., one way to calculate 73 – 39 is to subtract 40 from 73 to get 33, and then add 1 back to get 34);
- solve problems involving the addition and subtraction of four-digit numbers, using student-generated algorithms and standard algorithms (e.g., “I added 4217 + 1914 using 5000 + 1100 + 20 + 11.”);
- add and subtract decimal numbers to tenths, using concrete materials (e.g., paper strips divided into tenths, base ten.
materials) and student-generated algorithms (e.g., "When I added 6.5 and 5.6, I took five tenths in fraction circles and added six tenths in fraction circles to give me one whole and one tenth. Then I added 6 + 5 + 1.1, which equals 12.1.");

– add and subtract money amounts by making simulated purchases and providing change for amounts up to $100, using a variety of tools (e.g., currency manipulatives, drawings);

– multiply to 9 \times 9 and divide to 81 ÷ 9, using a variety of mental strategies (e.g., doubles, doubles plus another set, skip counting);

– solve problems involving the multiplication of one-digit whole numbers, using a variety of mental strategies (e.g., 6 \times 8 can be thought of as 5 \times 8 + 1 \times 8);

– multiply whole numbers by 10, 100, and 1000, and divide whole numbers by 10 and 100, using mental strategies (e.g., use a calculator to look for patterns and generalize to develop a rule);

– multiply two-digit whole numbers by one-digit whole numbers, using a variety of tools (e.g., base ten materials or drawings of them, arrays), student-generated algorithms, and standard algorithms;

– divide two-digit whole numbers by onedigit whole numbers, using a variety of tools (e.g., concrete materials, drawings) and student-generated algorithms;

– use estimation when solving problems involving the addition, subtraction, and multiplication of whole numbers, to help are 9 classes and each class needs about 110 pencils, estimate how many boxes the school should buy.

Proportional Relationships

By the end of Grade 4, students will:

– describe relationships that involve simple whole-number multiplication (e.g., "If you have 2 marbles and I have 6 marbles, I can say that I have three times the number of marbles you have.");

– determine and explain, through investigation, the relationship between fractions (i.e., halves, fifths, tenths) and decimals to tenths, using a variety of tools (e.g., concrete materials, drawings, calculators) and strategies (e.g., decompose 2/5 into 4/10 by dividing each fifth into two equal parts to show that 2/5 can be represented as 0.4);

– demonstrate an understanding of simple multiplicative relationships involving unit rates, through investigation using concrete materials and drawings (e.g., scale drawings in which 1 cm represents 2 m) (Sample problem: If 1 book costs $4, how do you determine the cost of 2 books?... 3 books?... 4 books?).

– demonstrate an understanding of the use of non-standard units of the same size (e.g., straws, index cards) for measuring

Grade 4: Measurement

Overall Expectations

By the end of Grade 4, students will:

• estimate, measure, and record length, perimeter, area, mass, capacity, volume, and elapsed time, using a variety of strategies;

• determine the relationships among units and measurable attributes, including the area and perimeter of rectangles.

Specific Expectations

– estimate, measure, and describe the capacity and/or mass of an object, through investigation using non-standard units

By the end of Grade 4, students will:

– estimate, measure, and record length, height, and distance, using standard units (i.e., millimetre, centimetre, metre, kilometre) (e.g., a pencil that is 75 mm long);

– draw items using a ruler, given specific lengths in millimetres or centimetres (Sample problem: Use estimation to draw a line that is 115 mm long. Beside it, use a ruler to draw a line that is 115 mm long. Compare the lengths of the lines.);

– estimate, measure (i.e., using an analogue clock), and represent time intervals to the nearest minute;

– estimate and determine elapsed time, with and without using a time line, given the durations of events expressed in five-minute intervals, hours, days, weeks, months, or years (Sample problem: If you wake up at 7:30 a.m., and it takes you 10 minutes to eat your breakfast, 5 minutes to brush your teeth, 25 minutes to wash and get dressed, 5 minutes to get your backpack ready, and 20 minutes to get to school, will you be at school by 9:00 a.m.?);

– estimate, measure using a variety of tools (e.g., centimetre grid paper, geoboard) and strategies, and record the perimeter and area of polygons;

– estimate, measure, and record the mass of objects (e.g., apple, baseball, book), using the standard units of the kilogram and the gram;
– estimate, measure, and record the capacity of containers (e.g., a drinking glass, a juice box), using the standard units of the litre and the millilitre;
– estimate, measure using concrete materials, and record volume, and relate volume to the space taken up by an object (e.g., use centimetre cubes to demonstrate how much space a rectangular prism takes up) (Sample problem: Build a rectangular prism using connecting cubes. Describe the volume of the prism using the number of connecting cubes.).

Measurement Relationships
By the end of Grade 4, students will:
– describe, through investigation, the relationship between various units of length (i.e., millimetre, centimetre, decimetre, metre, kilometre);
– select and justify the most appropriate standard unit (i.e., millimetre, centimetre, decimetre, metre, kilometre) to measure the side lengths and perimeters of various polygons;
– pose and solve meaningful problems that require the ability to distinguish perimeter and area (e.g., “I need to know about area when I cover a bulletin board with construction paper. I need to know about perimeter when I make the border.”);
– compare and order a collection of objects, using standard units of mass (i.e., gram, kilogram) and/or capacity (i.e., millilitre, litre);
– determine, through investigation, the relationship between grams and kilograms (Sample problem: Use centimetre cubes with a mass of one gram, or other objects of known mass, to balance a one-kilogram mass.);
– determine, through investigation, the relationship between millilitres and litres (Sample problem: Use small containers of different known capacities to fill a one-litre container.);
– select and justify the most appropriate standard unit to measure mass (i.e., milligram, gram, kilogram) and the most appropriate standard unit to measure the capacity of a container (i.e., millilitre, litre);
– solve problems involving the relationship between years and decades, and between decades and centuries (Sample problem: How many decades old is Canada?);
– compare, using a variety of tools (e.g., geoboard, patterns blocks, dot paper), two-dimensional shapes that have the same perimeter or the same area (Sample problem: Draw, using grid paper, as many different rectangles with a perimeter of 10 units as you can make on a geoboard.).

Grade 4: Geometry and Spatial Sense

Overall Expectations
By the end of Grade 4, students will:
• identify quadrilaterals and three-dimensional figures and classify them by their geometric properties, and compare various angles to benchmarks;
• construct three-dimensional figures, using two-dimensional shapes;
• identify and describe the location of an object, using a grid map, and reflect two-dimensional shapes.

Specific Expectations
Geometric Properties
By the end of Grade 4, students will:
– draw the lines of symmetry of two-dimensional shapes, through investigation using a variety of tools (e.g., Mira, grid paper) and strategies (e.g., paper folding) (Sample problem: Use paper folding to compare the symmetry of a rectangle with the symmetry of a square.);
– identify and compare different types of quadrilaterals (i.e., rectangle, square, trapezoid, parallelogram, rhombus) and sort and classify them by their geometric properties (e.g., sides of equal length; parallel sides; symmetry; number of right angles);
– identify benchmark angles (i.e., straight angle, right angle, half a right angle), using a reference tool (e.g., paper and fasteners, pattern blocks, straws), and compare other angles to these benchmarks (e.g., “The angle the door makes with the wall is smaller than a right angle but greater than half a right angle.”) (Sample problem: Use paper folding to create benchmarks for a straight angle, a right angle, and half a right angle, and use these benchmarks to describe angles found in pattern blocks.);
– relate the names of the benchmark angles to their measures in degrees (e.g., a right angle is 90º);
– identify and describe prisms and pyramids, and classify them by their geometric properties (i.e., shape of faces, number of edges, number of vertices), using concrete materials.

Geometric Relationships
By the end of Grade 4, students will:

- construct a three-dimensional figure from a picture or model of the figure, using connecting cubes (e.g., use connecting cubes to construct a rectangular prism);
- construct skeletons of three-dimensional figures, using a variety of tools (e.g., straws and modelling clay, toothpicks and marshmallows, Polydrons), and sketch the skeletons;
- draw and describe nets of rectangular and triangular prisms (Sample problem: Create as many different nets for a cube as you can, and share your results with a partner.);
- construct prisms and pyramids from given nets;
- construct three-dimensional figures (e.g., cube, tetrahedron), using only congruent shapes.

**Location and Movement**

By the end of Grade 4, students will:

- identify and describe the general location of an object using a grid system (e.g., “The library is located at A3 on the map.”);
- identify, perform, and describe reflections using a variety of tools (e.g., Mira, dot paper, technology);
- create and analyse symmetrical designs by reflecting a shape, or shapes, using a variety of tools (e.g., pattern locks, Mira, geoboard, drawings), and identify the congruent shapes in the designs.

**Grade 4: Patterning and Algebra**

**Overall Expectations**

By the end of Grade 4, students will:

- describe, extend, and create a variety of numeric and geometric patterns, make predictions related to the patterns, and investigate repeating patterns involving reflections;
- demonstrate an understanding of equality between pairs of expressions, using addition, subtraction, and multiplication.

**Specific Expectations**

**Patterns and Relationships**

By the end of Grade 4, students will:

- extend, describe, and create repeating, growing, and shrinking number patterns (e.g., “I created the pattern 1, 3, 4, 6, 7, 9, … I started at 1, then added 2, then added 1, then added 2, then added 1, and I kept repeating this.”);
- connect each term in a growing or shrinking pattern with its term number (e.g., in the sequence 1, 4, 7, 10, …, the first term is 1, the second term is 4, the third term is 7, and so on), and record the patterns in a table of values that shows the term number and the term;
- create a number pattern involving addition, subtraction, or multiplication, given a pattern rule expressed in words (e.g., the pattern rule “start at 1 and multiply each term by 2 to get the next term” generates the sequence 1, 2, 4, 8, 16, 32, 64, …);
- make predictions related to repeating geometric and numeric patterns (Sample problem: Create a pattern block train by alternating one green triangle with one red trapezoid. Predict which block will be in the 30th place.);
- extend and create repeating patterns that result from reflections, through investigation using a variety of tools (e.g., pattern blocks, dynamic geometry software, dot paper).

**Expressions and Equality**

By the end of Grade 4, students will:

- determine, through investigation, the inverse relationship between multiplication and division (e.g., since 4 x 5 = 20, then 20 ÷ 5 = 4; since 35 ÷ 5 = 7, then 7 x 5 = 35);
- determine the missing number in equations involving multiplication of one- and two-digit numbers, using a variety of tools and strategies (e.g., modelling with concrete materials, using guess and check with and without the aid of a calculator).

**Grade 4: Data Management and Probability**

**Overall Expectations**

By the end of Grade 4, students will:

- collect and organize discrete primary data and display the data using charts and graphs, including stem-and-leaf plots and double bar graphs;
- read, describe, and interpret primary data and secondary data presented in charts and graphs, including stem-and-leaf plots and double bar graphs;
• predict the results of a simple probability experiment, then conduct the experiment and compare the prediction to the results.

**Specific Expectations**

**Collection and Organization of Data**

By the end of Grade 4, students will:

– collect data by conducting a survey (e.g., “Choose your favourite meal from the following list: breakfast, lunch, dinner, other.”) or an experiment to do with themselves, their environment, issues in their school or the community, or content from another subject, and record observations or measurements;

– collect and organize discrete primary data and display the data in charts, tables, and graphs (including stem-and-leaf plots and double bar 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, simple spreadsheets, dynamic statistical software).

**Data Relationships**

By the end of Grade 4, students will:

– read, interpret, and draw conclusions from primary data (e.g., survey results, measurements, observations) and from secondary data (e.g., temperature data in the newspaper, data from the Internet about endangered species), presented in charts, tables, and graphs (including stem-and-leaf plots and double bar graphs);

– demonstrate, through investigation, an understanding of median (e.g., “The median is the value in the middle of the data. If there are two middle values, you have to calculate the middle of those two values.”), and determine the median of a set of data (e.g., “I used a stem-and-leaf plot to help me find the median.”);

– describe the shape of a set of data across its range of values, using charts, tables, and graphs (e.g. “The data values are spread out evenly.”; ”The set of data bunches up around the median.”);

– compare similarities and differences between two related sets of data, using a variety of strategies (e.g., by representing the data using tally charts, stem-and-leaf plots, or double bar graphs; by determining the mode or the median; by describing the shape of a data set across its range of values).

**Probability**

By the end of Grade 4, students will:

– predict the frequency of an outcome in a simple probability experiment, explaining their reasoning; conduct the experiment; and compare the result with the prediction (Sample problem: If you toss a pair of number cubes 20 times and calculate the sum for each toss, how many times would you expect to get 12? 7? 1? Explain your thinking. Then conduct the experiment and compare the results with your predictions.);

– determine, through investigation, how the number of repetitions of a probability experiment can affect the conclusions drawn (Sample problem: Each student in the class tosses a coin 10 times and records how many times tails comes up. Combine the individual student results to determine a class result, and then compare the individual student results and the class result).
## GRADE 4 - SCIENCE AND TECHNOLOGY

### GRADE 4 | UNDERSTANDING LIFE SYSTEMS

#### OVERALL EXPECTATIONS

By the end of Grade 4, students will:
1. analyse the effects of human activities on habitats and communities;
2. investigate the interdependence of plants and animals within specific habitats and communities;
3. demonstrate an understanding of habitats and communities and the relationships among the plants and animals that live in them.

#### SPECIFIC EXPECTATIONS

1. **Relating Science and Technology to Society and the Environment**

   By the end of Grade 4, students will:
   1.1 analyse the positive and negative impacts of human interactions with natural habitats and communities (e.g., human dependence on natural materials), taking different perspectives into account (e.g., the perspectives of a housing developer, a family in need of housing, an ecologist), and evaluate ways of minimizing the negative impacts
   1.2 identify reasons for the depletion or extinction of a plant or animal species (e.g., hunting, disease, invasive species, changes in or destruction of its habitat), evaluate the impacts on the rest of the natural community, and propose possible actions for preventing such depletions or extinctions from happening

   (b) A plant called American ginseng has commonly been used as a traditional medicine and may be useful in preventing colds and treating diabetes and other diseases. Because of harvesting, timber extraction, and the clearing of land for agriculture and development, American ginseng is on the endangered species list in Ontario. It is a long-lived perennial herb, but slow-growing, so replenishing its population will take time. How can we protect the wild plant? What might be some alternative ways of getting the plant without taking it from the wild?

2. **Developing Investigation and Communication Skills**

   By the end of Grade 4, students will:
   2.1 follow established safety procedures for working with soils and natural materials (e.g., wear gloves when handling soils to set up a working terrarium)
   2.2 build food chains consisting of different plants and animals, including humans
   2.3 use scientific inquiry/research skills (see page 15) to investigate ways in which plants and animals in a community depend on features of their habitat to meet important needs (e.g., beavers use water for shelter [they build their lodges so the entrance is under water], food [cattails, water lilies, and other aquatic plants], and protection [they slap their tails on the water to warn of danger])
   2.4 use scientific inquiry/research skills (see page 15) to create a living habitat containing a community, and describe and record changes in the community over time
   2.5 use appropriate science and technology vocabulary, including habitat, population, community, adaptation, and food chain, 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., use presentation software to show the steps one might follow to set up and maintain a terrarium)

3. **Understanding Basic Concepts**

   By the end of Grade 4, students will:
   3.1 demonstrate an understanding of habitats as areas that provide plants and animals with the necessities of life (e.g., food, water, air, space, and light)
   3.2 demonstrate an understanding of food chains as systems in which energy from the sun is transferred to producers (plants) and then to consumers (animals)
   3.3 identify factors (e.g., availability of water or food, amount of light, type of weather) that affect the ability of plants and animals to survive in a specific habitat
   3.4 demonstrate an understanding of a community as a group of interacting species sharing a common habitat (e.g., the life in a meadow or in a patch of forest)
   3.5 classify organisms, including humans, according to their role in a food chain (e.g., producer, consumer, decomposer)
   3.6 identify animals that are carnivores, herbivores, or omnivores
3.7 describe structural adaptations that allow plants and animals to survive in specific habitats (e.g., the thick stem of a cactus stores water for the plant; a duck’s webbed feet allow it to move quickly and efficiently in water)

3.8 explain why changes in the environment have a greater impact on specialized species than on generalized species (e.g., diminishing ice cover hampers the ability of polar bears to hunt seals, their main food source, and so the polar bear population in some areas is becoming less healthy and may begin to decrease; black bear habitat has been heavily disrupted by human encroachment, but because black bears are highly adaptable omnivores that eat everything from insects to garbage generated by humans, their numbers have been increasing)

3.9 demonstrate an understanding of why all habitats have limits to the number of plants and animals they can support

3.10 describe ways in which humans are dependent on natural habitats and communities (e.g., for water, medicine, flood control in wetlands, leisure activities)

GRADE 4 | UNDERSTANDING STRUCTURES AND MECHANISMS

PULLEYS AND GEARS

OVERALL EXPECTATIONS
By the end of Grade 4, students will:
1. evaluate the impact of pulleys and gears on society and the environment;
2. investigate ways in which pulleys and gears modify the speed and direction of, and the force exerted on, moving objects;
3. demonstrate an understanding of the basic principles and functions of pulley systems and gear systems.

SPECIFIC EXPECTATIONS
1. Relating Science and Technology to Society and the Environment
By the end of Grade 4, students will:
1.1 assess the impact of pulley systems and gear systems on daily life
Sample issues: Elevators and other lifting devices use pulley and gear systems; they allow people with physical challenges to have equal access to all floors of a building.
1.2 assess the environmental impact of using machines with pulleys and gears, taking different perspectives into account (e.g., the perspectives of a car driver or cyclist, someone who is physically challenged, the owner of a multi-floor building), and suggest ways to minimize negative impacts and maximize positive impacts

2. Developing Investigation and Communication Skills
By the end of Grade 4, students will:
2.1 follow established safety procedures for working with machinery (e.g., check to ensure that pulley systems are firmly attached to a secure support before operating them; be aware that changing a larger gear wheel to a smaller one will change the speed at which the mechanism moves)
2.2 use scientific inquiry/experimentation skills (see page 12) to investigate changes in force, distance, speed, and direction in pulley and gear systems
2.3 use technological problem-solving skills (see page 16) to design, build, and test a pulley or gear system that performs a specific task
2.4 use appropriate science and technology vocabulary, including pulley, gear, force, and speed, 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., write a set of instructions for setting up a pulley system)

3. Understanding Basic Concepts
By the end of Grade 4, students will:
3.1 describe the purposes of pulley systems and gear systems (e.g., to facilitate changes in direction, speed, or force)
3.2 describe how rotary motion in one system or its components (e.g., a system of pulleys of different sizes) is transferred to another system or component (e.g., a system of various gears) in the same structure
3.3 describe how one type of motion can be transformed into another type of motion using pulleys or gears (e.g., rotary to linear in a rack and pinion system, rotary to oscillating in a clock pendulum)
3.4 describe, using their observations, how gears operate in one plane (e.g., spur gears, idler gears) and in two planes (e.g., crown, bevel, or worm gears)
3.5 distinguish between pulley systems and gear systems that increase force and those that increase speed
3.6 identify pulley systems (e.g., clotheslines, flagpoles, cranes, elevators, farm machinery) and gear systems (e.g., bicycles, hand drills, can openers) that are used in daily life, and explain the purpose and basic operation of each
3.7 explain how the gear system on a bicycle works (e.g., by using the largest gear on the front chain ring and the smallest gear on the rear wheel, we can move quickly along a flat surface)
3.8 identify the input components that drive a mechanism and the output components that are driven by it (e.g., the pedals on a bike are the input component; the rear wheel is the output component)
**GRADE 4 | UNDERSTANDING MATTER AND ENERGY**

### LIGHT AND SOUND

**OVERALL EXPECTATIONS**

By the end of Grade 4, students will:

1. assess the impact on society and the environment of technological innovations related to light and sound;
2. investigate the characteristics and properties of light and sound;
3. demonstrate an understanding of light and sound as forms of energy that have specific characteristics and properties.

#### SPECIFIC EXPECTATIONS

**1. Relating Science and Technology to Society and the Environment**

By the end of Grade 4, students will:

1.1 assess the impacts on personal safety of devices that apply the properties of light and/or sound (e.g., UV-coated lenses in sunglasses, safety eyes on garage door openers, reflective material on clothing, ear plugs, backup signals on trucks and cars, MP3 players, cellphones), and propose ways of using these devices to make our daily activities safer

1.2 assess the impacts on society and the environment of light and/or sound energy produced by different technologies, taking different perspectives into account (e.g., the perspectives of someone who has to walk on the street late at night, a cottage owner, a person who is hearing impaired, manufacturers of and merchants who sell MP3 players)

**2. Developing Investigation and Communication Skills**

By the end of Grade 4, students will:

2.1 follow established safety procedures for protecting eyes and ears (e.g., use proper eye and ear protection when working with tools)

2.2 investigate the basic properties of light (e.g., conduct experiments to show that light travels in a straight path, that light reflects off of shiny surfaces, that light refracts [bends] when passing from one medium to another, that white light is made up of many colours, that light diffracts [bends and spreads out] when passing through an opening)

2.3 investigate the basic properties of sound (e.g., conduct experiments to show that sound travels, that sound can be absorbed or reflected, that sound can be modified [pitch, volume], that there is a relationship between vibrations and sound)

2.4 use technological problem-solving skills (see page 16) to design, build, and test a device that makes use of the properties of light (e.g., a periscope, a kaleidoscope) or sound (e.g., a musical instrument, a sound amplification device)

Sample guiding questions: How might you use what you know about sound or about light and mirrors in your device? Which properties of light or sound will be most useful to you in your device? What challenges might you encounter, and how can you overcome them?

2.5 use scientific inquiry/research skills (see page 15) to investigate applications of the properties of light or sound (e.g., careers where knowledge of the properties of light and/or sound play an important role [photography, audio engineering]; ways in which light and/or sound are used at home, at school, and in the community; ways in which animals use sound)

2.6 use appropriate science and technology vocabulary, including natural, artificial, beam of light, pitch, loudness, and vibration, 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., create a song or short drama presentation for younger students that will alert them to the dangers of exposure to intense light and sound)

**3. Understanding Basic Concepts**

By the end of Grade 4, students will:

3.1 identify a variety of natural light sources (e.g., the sun, a firefly) and artificial light sources (e.g., a candle, fireworks, a light bulb)

3.2 distinguish between objects that emit their own light (e.g., stars, candles, light bulbs) and those that reflect light from other sources (e.g., the moon, safety reflectors, minerals)

3.3 describe properties of light, including the following: light travels in a straight path; light can be absorbed, reflected, and refracted

3.4 describe properties of sound, including the following: sound travels; sound can be absorbed or reflected and can be modified (e.g., pitch, loudness)

3.5 explain how vibrations cause sound

3.6 describe how different objects and materials interact with light and sound energy (e.g., prisms separate light into colours; voices echo off mountains; some light penetrates through wax paper; sound travels further in water than air)

3.7 distinguish between sources of light that give off both light and heat (e.g., the sun, a candle, an incandescent light bulb) and those that give off light but little or no heat (e.g., an LED, a firefly, a compact fluorescent bulb, a glow stick)

3.8 identify devices that make use of the properties of light and sound (e.g., a telescope, a microscope, and a motion detector make use of the properties of light; a microphone, a hearing aid, and a telephone handset make use of the properties of sound)
GRADE 4 | UNDERSTANDING EARTH AND SPACE SYSTEMS
ROCKS AND MINERALS

OVERALL EXPECTATIONS
By the end of Grade 4, students will:
1. assess the social and environmental impacts of human uses of rocks and minerals;
2. investigate, test, and compare the physical properties of rocks and minerals;
3. demonstrate an understanding of the physical properties of rocks and minerals.

SPECIFIC EXPECTATIONS
1. Relating Science and Technology to Society and the Environment
By the end of Grade 4, students will:
1.1 assess the social and environmental costs and benefits of using objects in the built environment that are made from rocks and minerals
1.2 analyse the impact on society and the environment of extracting and refining rocks and minerals for human use, taking different perspectives into account (e.g., the perspectives of mine owners, the families of the miners, Aboriginal communities, the refinery workers, manufacturers of items who need the refined rocks and minerals to make their products, residents who live in communities located near refineries and manufacturing facilities and who are concerned about the environment)

2. Developing Investigation and Communication Skills
By the end of Grade 4, students will:
2.1 follow established safety procedures for outdoor activities and for working with tools, materials, and equipment (e.g., use scratch and streak test materials for the purposes for which they are intended; when working outdoors, leave the site as it was found)
2.2 use a variety of tests to identify the physical properties of minerals (e.g., hardness [scratch test], colour [streak test], magnetism)
2.3 use a variety of criteria (e.g., colour, texture, lustre) to classify common rocks and minerals according to their characteristics
2.4 use scientific inquiry/research skills (see page 15) to investigate how rocks and minerals are used, recycled, and disposed of in everyday life (e.g., nickel and copper are made into coins; coins that are out of circulation can be melted down and the metal can be used for making other things; calcium [from limestone], silicon [from sand or clay], aluminum [from bauxite], and iron [from iron ore] are made into cement that is used for roads and buildings; concrete can be returned to cement and concrete production facilities, and can be recycled; rocks from quarries are used for garden landscaping, and these rocks can be reused; marble is used for countertops and statues)
2.5 use appropriate science and technology vocabulary, including hardness, colour, lustre, and texture, 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., use a graphic organizer to show how rocks and minerals are used in daily life)

3. Understanding Basic Concepts
By the end of Grade 4, students will:
3.1 describe the difference between rocks (composed of two or more minerals) and minerals (composed of the same substance throughout), and explain how these differences determine how they are used
3.2 describe the properties (e.g., colour, lustre, streak, transparency, hardness) that are used to identify minerals
3.3 describe how igneous, sedimentary, and metamorphic rocks are formed (e.g., igneous rocks form when hot, liquid rock from deep below the earth’s surface rises towards the surface, cools, and solidifies, for instance, after a volcanic eruption. Sedimentary rocks form when small pieces of the earth that have been worn away by wind and water accumulate at the bottom of rivers, lakes, and oceans and are eventually compacted and consolidated into rock; they can also be formed when sea water evaporates and the dissolved minerals are deposited on the sea floor. Metamorphic rocks form when pre-existing rocks are changed by heat and pressure.)
3.4 describe the characteristics of the three classes of rocks (e.g., Sedimentary rocks often have flat layers, are composed of pieces that are roughly the same size with pores between these pieces that are commonly filled with smaller grains, and sometimes contain fossils. Igneous rocks generally have no layers, have variable textures, and do not contain fossils. Metamorphic rocks may have alternating bands of light and dark minerals, or may be composed predominantly of only one mineral, such as marble or quartzite, and rarely contain fossils.), and explain how their characteristics are related to their origin
GRADE 4 - HERITAGE AND IDENTITY: EARLY SOCIETIES, 3000 BCE–1500 CE

Overall Expectations

By the end of Grade 4, students will:

A1. Application: compare key aspects of life in a few early societies (3000 BCE–1500 CE), each from a different region and era and representing a different culture, and describe some key similarities and differences between these early societies and present-day Canadian society (FOCUS ON: Continuity and Change; Perspective)

A2. Inquiry: use the social studies inquiry process to investigate ways of life and relationships with the environment in two or more early societies (3000 BCE–1500 CE), with an emphasis on aspects of the interrelationship between the environment and life in those societies (FOCUS ON: Interrelationships)

A3. Understanding Context: demonstrate an understanding of key aspects of a few early societies (3000 BCE–1500 CE), each from a different region and era and representing a different culture, with reference to their political and social organization, daily life, and relationships with the environment and with each other (FOCUS ON: Significance)

Specific Expectations

A1. Application: Past and Present Societies - FOCUS ON: Continuity and Change; Perspective

By the end of Grade 4, students will:

A1.1 compare social organization (e.g., social classes, general political structure, inherited privilege, the status of women) in two or more early societies

A1.2 compare aspects of the daily lives of different groups in an early society (e.g., the work, family life, education, food, dress, and/or housing of a slave and senator in ancient Rome, women of different castes in medieval India, a serf and lord in feudal England, a man and a woman in medieval China or Mohawk society, or a merchant and noble in Renaissance Italy), and explain how differences were related to the social organization of that society

A1.3 describe some of the ways in which their daily life differs from the lives of young people from different backgrounds (e.g., wealthy, poor, slave, urban, rural, nomadic) in two or more early societies

A1.4 compare two or more early societies in terms of their relationship with the environment (e.g., with reference to seasonal rhythms, use of land and resources, differences between urban and rural communities, religious/spiritual practices/beliefs with respect to the environment), and describe some key similarities and differences in environmental practices between these societies and present-day Canada

A2. Inquiry: Ways of Life and Relationships with the Environment - FOCUS ON: Interrelationships

By the end of Grade 4, students will:

A2.1 formulate questions to guide investigations into ways of life and relationships with the environment in two or more early societies, with an emphasis on aspects of the interrelationship between the environment and life in those societies

A2.2 gather and organize information on ways of life and relationships with the environment in early societies, using a variety of primary and secondary sources in both print and electronic formats

A2.3 analyse and construct print and/or digital maps, including thematic maps, as part of their investigations into interrelationships between the environment and life in early societies

A2.4 interpret and analyze information relevant to their investigations, using a variety of tools

A2.5 evaluate evidence and draw conclusions about ways of life and relationships with the environment in early societies, with an emphasis on aspects of the interrelationship between the environment and life in those societies

A2.6 communicate the results of their inquiries, using appropriate vocabulary

A3. Understanding Context: Characteristics of Early Societies - FOCUS ON: Significance

By the end of Grade 4, students will:

A3.1 identify the location of some different early societies on a globe or on print, digital, and/or interactive maps, and demonstrate the ability to extract information on early societies' relationship with the environment from thematic maps

A3.2 demonstrate the ability to extract information on daily life in early societies from visual evidence

A3.3 describe significant aspects of daily life in two or more early societies
A3.4 describe significant physical features and natural processes and events in two or more early societies (e.g., physical features: rivers, flood plains, mountains, volcanoes, ocean shore, fertile soil; natural processes: seasonal changes in climate, animal migration, erosion; natural events: earthquakes, floods, volcanic eruptions) and how they affected these societies, with a focus on the societies’ sustainability and food production
A3.5 describe the importance of the environment for two or more early societies, including how the local environment affected the ways in which people met their physical needs
A3.6 identify and describe some of the major scientific and technological developments in the ancient and medieval world
A3.7 describe how two or more early societies were governed
A3.8 describe the social organization of some different early societies (e.g., a slave-owning society, a feudal society, an agrarian society, a nomadic society) and the role and status of some significant social and work-related groups in these societies
A3.9 describe some key reasons why different groups in early societies cooperated or came into conflict at different times
A3.10 describe some attempts within early societies to deal with conflict and to establish greater cooperation
# Grade 4 - People and Environments: Political and Physical Regions of Canada

## Overall Expectations
By the end of Grade 4, students will:

**B1. Application:** assess some key ways in which industrial development and the natural environment affect each other in two or more political and/or physical regions of Canada (FOCUS ON: Cause and Consequence; Interrelationships)

**B2. Inquiry:** use the social studies inquiry process to investigate some issues and challenges associated with balancing human needs/wants and activities with environmental stewardship in one or more of the political and/or physical regions of Canada (FOCUS ON: Perspective)

**B3. Understanding Context:** identify Canada’s political and physical regions, and describe their main characteristics and some significant activities that take place in them (FOCUS ON: Significance; Patterns and Trends)

## Specific Expectations

### B1. Application: Industrial Development and the Environment - FOCUS ON: Cause and Consequence; Interrelationships
By the end of Grade 4, students will:

**B1.1** analyse some of the general ways in which the natural environment of regions in Canada has affected the development of industry

**B1.2** assess aspects of the environmental impact of different industries in two or more physical and/or political regions of Canada

**B1.3** describe some key actions taken by both industries and citizens to address the need for more sustainable use of land and resources (e.g., controlling industrial tailings; putting solar panels on houses or other buildings; ensuring responsible hunting and fishing practices; consulting with First Nations, Métis, and/or Inuit communities about resource development in their territories), and assess their effectiveness

### B2. Inquiry: Balancing Human Needs and Environmental Stewardship - FOCUS ON: Perspective
By the end of Grade 4, students will:

**B2.1** formulate questions to guide investigations into some of the issues and challenges associated with balancing human needs/wants and activities with environmental stewardship in one or more of the political and/or physical regions of Canada

**B2.2** gather and organize information and data from various sources to investigate issues and challenges associated with balancing human needs/wants and activities with environmental stewardship in one or more of the political and/or physical regions of Canada

**B2.3** analyse and construct print and/or digital maps, including thematic maps, as part of their investigations into balancing human needs/wants and activities with environmental stewardship in Canada

**B2.4** interpret and analyse information and data related to their investigations, using a variety of tools

**B2.5** evaluate evidence and draw conclusions about issues and challenges associated with balancing human needs/wants and activities with environmental stewardship in Canada

**B2.6** communicate the results of their inquiries using appropriate vocabulary

### B3. Understanding Context: Regions in Canada - FOCUS ON: Significance; Patterns and Trends
By the end of Grade 4, students will:

**B3.1** identify various physical regions in Canada (e.g., landform, vegetation, and climatic regions), and describe their location and some of the major ways in which they are distinct from and similar to each other

**B3.2** identify some of the main human activities, including industrial development and recreational activities, in various physical regions of Canada

**B3.3** describe the four main economic sectors (i.e., the primary sector is resource based, the secondary sector is based on manufacturing and processing, the tertiary sector is service based, the quaternary sector is information based), and identify some industries that are commonly associated with each sector

**B3.4** identify various types of political regions in Canada (e.g., provinces, territories, municipalities, First Nations bands and reserves), and describe some of their basic similarities and differences

**B3.5** identify Canada’s provinces and territories and their capital cities, and describe them with reference to their location and some of the peoples who live in them
B3.6 describe significant opportunities and challenges related to quality of life in some of Canada’s political regions
B3.7 demonstrate an understanding of cardinal and intermediate directions (i.e., NW, SW, NE, and SE), and use these directions as well as number and letter grids to locate selected political and physical regions of Canada on a variety of print and digital/interactive maps
### Grade 4 - Physical Education and Health

**LIVING SKILLS**

**OVERALL EXPECTATIONS**

By the end of Grade 4, students will:

1. 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**

1. **Living Skills**

   By the end of Grade 4, students will:

   Personal Skills (PS)*

   1.1 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 (e.g., Active Living: explain what makes them enjoy their favourite activities, and consider what this tells them about themselves; Movement Competence: identify which skills they perform with the most confidence and which ones are most difficult for them; Healthy Living: set a healthy eating goal connected to Canada’s Food Guide serving requirements for their age)

   1.2 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 (e.g., Active Living: describe how joining a school-wide activity such as an intramural team or club can benefit them; Movement Competence: choose equipment that will help them succeed in learning a skill or refining a skill; Healthy Living: describe how being aware of their feelings can help them adjust to physical and emotional changes at puberty)

   Interpersonal Skills (IS)*

   1.3 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 (e.g., Active Living: think through and apply the steps they will take to avoid injury while participating in a physical activity; Movement Competence: cooperate with group members to develop a creative movement sequence; Healthy Living: explain what they can do, when sending text messages or communicating online, to avoid saying something that they wouldn’t say face to face; identify some of the teachings of First Nation, Métis, or Inuit cultures that can help them strengthen their own relationships; Critical and Creative Thinking (CT)*

   1.4 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 (e.g., Active Living: play fairly by maintaining self-control and sharing opportunities to play; Movement Competence: cooperate with group members to develop a creative movement sequence; Healthy Living: explain what they can do, when sending text messages or communicating online, to avoid saying something that they wouldn’t say face to face; identify some of the teachings of First Nation, Métis, or Inuit cultures that can help them strengthen their own relationships; Critical and Creative Thinking (CT)*

   1.5 use a range of critical and creative thinking 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 (e.g., Active Living: think through and apply the steps they will take to avoid injury while participating in a physical activity; Movement Competence: group different games and activities according to features they have in common; Healthy Living: explain what they can do, when sending text messages or communicating online, to avoid saying something that they wouldn’t say face to face; identify some of the teachings of First Nation, Métis, or Inuit cultures that can help them strengthen their own relationships; Critical and Creative Thinking (CT)*

**A. ACTIVE LIVING**

**OVERALL EXPECTATIONS**

By the end of Grade 4, students will:

A1. participate actively and regularly in a wide variety of physical activities, and demonstrate an understanding of factors that encourage lifelong participation in physical activity;

A2. demonstrate an understanding of the importance of being physically active, and apply physical fitness concepts and practices that contribute to healthy, active living;

A3. demonstrate responsibility for their own safety and the safety of others as they participate in physical activities.

**SPECIFIC EXPECTATIONS**

A1. Active Participation

By the end of Grade 4, students will:

A1.1 actively participate in a wide variety of program activities (e.g., lead-up and small group games, recreational activities, cooperative games, fitness activities, dance activities), according to their capabilities, while applying behaviours that enhance their readiness and ability to take part (e.g., taking the initiative to be involved in the activity, being open to playing different positions and playing in different groups, respecting others’ ideas and opinions, encouraging others, speaking kindly, maintaining self-control at all times; PS, IS)
B2. Movement Strategies

- Scoop from one end of the gym to the other while avoiding contact with others. (PS, IS)
- Dribbling a ball between pylons or people with their dominant and non-dominant hand and foot; keep a basketball on their lap while wheeling in a straight line; carry a ball in a rubber ring close to their body while running; bounce and cradle a ball while pivoting during a rhythmic gymnastics routine.
- Practise keeping their head up while learning to juggle. (PS, IS)

B1.3 perform different combinations of locomotor movements with and without equipment, alone and with others, moving at different speeds and levels, using different pathways, and going in different directions. (PS, IS)

A1.2 demonstrate an understanding of factors that contribute to their personal enjoyment of being active (e.g., knowing rules of etiquette and fair play will be observed, having the opportunity to think creatively and adapt activities to individual needs or preferences, being physically and emotionally comfortable in the activities), as they participate in a wide variety of individual and small-group activities and lead-up games. (PS)

A1. identify factors that motivate participation in physical activity every day at school, at home, or in their communities (e.g., enjoyment; availability of programs; proximity and accessibility of facilities such as community centres, lakes, or nature trails; availability of bike racks; support of family and peer group; cultural relevance of activities). (CT)

A2.1 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. (PS)

B2. Movement Strategies

- By the end of Grade 4, students will:
  - A2.1 demonstrate the ability to jump and land, in control, from a low height. (PS)
  - A2.2 demonstrate the ability to jump and land, in control, from a low height. (PS, IS)
  - A2.3 perform different combinations of locomotor movements with and without equipment, alone and with others, moving at different speeds and levels, using different pathways, and going in different directions. (PS, IS)

A3. Safety

- By the end of Grade 4, students will:
  - A3.1 describe common precautions for preventing accidents and injuries while participating in different types of physical activity. (PS)

B. MOVEMENT COMPETENCE: SKILLS, CONCEPTS, AND STRATEGIES

OVERALL EXPECTATIONS

- By the end of Grade 4, students will:
  - A1. 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.

SPECIFIC EXPECTATIONS

- By the end of Grade 4, students will:
  - B1. Movement Skills and Concepts
    - B1.1 perform a variety of controlled static balances and transitions between balances, using a variety of body parts and shapes, at different levels, individually, and with partners and equipment. (PS, IS)
    - B1.2 demonstrate the ability to jump and land, in control, from a low height. (PS)

- B2. Movement Strategies

  - By the end of Grade 4, students will:
    - B2.1 perform different combinations of locomotor movements with and without equipment, alone and with others, moving at different speeds and levels, using different pathways, and going in different directions. (PS, IS)
    - B2.4 send and receive objects of a variety of shapes and sizes at different levels and speeds, using different body parts and equipment, while applying basic principles of movement. (PS, IS)
    - B2.5 retain objects of various shapes and sizes in different ways, using different body parts, with and without equipment, while moving around others and equipment. (PS, IS)
C3.2 describe the short- and long-term effects of first- and second-hand smoke on smokers and on people around them.

C3.1 identify ways of promoting healthier food choices in a variety of settings and situations (e.g., school, arena, recreation centre, stores, food courts, special events; when camping, having a snack or meal at a friend's house, eating on weekends versus weekdays) [CT]

C2.3 demonstrate the ability to make and support healthy, informed choices about smoking, using their understanding of factors that affect decisions about smoking and a variety of personal and interpersonal skills and thinking processes (e.g., applying decision-making, assertiveness, and refusal skills; thinking in advance about values and personal choices; identifying the pros and cons of both making a change and not making a change; being aware of peer pressure; avoiding situations where people will be smoking; using conversational strategies, such as saying no strongly and clearly, giving reasons, changing the topic, making a joke, asking a question) [CT]

C3.2 apply a variety of tactical solutions to increase their chances of success as they participate in physical activities (e.g., individual, target, net/wall, striking/fielding, territory), and identify common strategies and tactics that they found effective while participating in a variety of physical activities in different categories [CT]

C3.1 describe various types of bullying and abuse (e.g., social, physical, verbal), including bullying using technology (e.g., via e-mail, text messaging, chat rooms, websites), and describe precautions and strategies for using these technologies safely [IS]
OVERALL EXPECTATIONS
By the end of Grade 4, students will:
• explain the role of healthy eating practices, physical activity, and heredity as they relate to body shape and size;
• identify the physical, interpersonal, and emotional aspects of healthy human beings.

SPECIFIC EXPECTATIONS
By the end of Grade 4, students will:
• describe the four stages of human development (infancy, childhood, adolescence, and adulthood) and identify the physical, interpersonal, and emotional changes appropriate to their current stage;
• identify the characteristics of healthy relationships (e.g., showing consideration of others’ feelings by avoiding negative communication);
• identify the challenges (e.g., conflicting opinions) and responsibilities in their relationships with family and friends.
## A. DANCE

### OVERALL EXPECTATIONS

By the end of Grade 4, students will:

A1. Creating and Presenting: apply the creative process (see pages 19–22) to the composition of movement sequences and short dance pieces, using the elements of dance to communicate feelings and ideas;

A2. Reflecting, Responding, and Analysing: apply the critical analysis process (see pages 23–28) to communicate their feelings, ideas, and understandings in response to a variety of dance pieces and experiences;

A3. 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.

### SPECIFIC EXPECTATIONS

#### A1. Creating and Presenting

By the end of Grade 4, students will:

A1.1 translate into dance a variety of movement sequences observed in nature (e.g., wind developing into a tornado; water freezing and melting on a landscape; rain transforming into a storm; a caterpillar evolving into a butterfly)

A1.2 use dance as a language to explore and communicate ideas derived from a variety of literature sources (e.g., develop dance movements based on actions or emotions depicted in myths, short stories, legends from different cultures, picture books, or poetry)

A1.3 use narrative form to create short dance pieces on a variety of themes (e.g., a dance based on the theme of a quest or other type of journey; movements arranged [choreographed] to create a relationship [linking, parting] between some of the dancers)

A1.4 use the elements of energy (e.g., collapse, explode, float) and time (e.g., duration, suddenness) in a dance piece to communicate an idea (e.g., show the journey of a balloon as it floats, explodes suddenly, and then collapses back to the floor)

#### A2. Reflecting, Responding, and Analysing

By the end of Grade 4, students will:

A2.1 demonstrate an understanding of how the language of dance can clarify and highlight ideas, images, and characters from familiar stories (e.g., explain how gestures and actions reveal and express the mood or personality or social position of a character)

A2.2 identify, using dance vocabulary, the elements of dance used in their own and others' dance pieces and explain how each helps communicate ideas and feelings (e.g., symmetry/asymmetry [body] can reflect themes of unity and separation; sudden and sustained movements used sequentially can communicate the idea of a thunderstorm)

A2.3 identify and give examples of their strengths and areas for growth as dance creators and audience members (e.g., share with a small group what they did well, using dance terminology; explain what they need to practise to improve their ability to communicate through gesture and action)

#### A3. Exploring Forms and Cultural Contexts

By the end of Grade 4, students will:

A3.1 describe, with teacher guidance, how forms and styles of dance reflect people's different social and political roles in various communities, times, and places (e.g., court dances in different countries in the 1500s and 1600s reflect the customs of the upper class [kings, queens, and people of the court] while country dances reflect the customs of the common people; carnival dances in Toronto, Brazil, New Orleans, and Cuba reflect various cultural traditions; martial arts disguised as capoeira dance reflects)

A3.2 identify and describe the different roles of dance in their lives and in communities around the world (e.g., to socialize; for entertainment; to communicate and tell stories; to enrich the school experience [through a dance club]; to celebrate a good harvest year; as part of religious ceremonies)

## B. DRAMA

### OVERALL EXPECTATIONS

By the end of Grade 4, students will:

B1. Creating and Presenting: apply the creative process (see pages 19–22) to dramatic play and process drama, using the elements and conventions of drama to communicate feelings, ideas, and stories;

B2. Reflecting, Responding, and Analysing: apply the critical analysis process (see pages 23–28) to communicate feelings, ideas, and understandings in response to a variety of drama works and experiences;

B3. 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.

### SPECIFIC EXPECTATIONS

#### B1. Creating and Presenting

By the end of Grade 4, students will:
B1.1 engage actively in drama exploration and role play, with a focus on exploring drama structures, key ideas, and pivotal moments in their own stories and stories from diverse communities, times, and places (e.g., use role play to explore the hierarchical structure of medieval society; use “inner and outer circle” to examine moments of conflict and power imbalance in group improvisations on a common theme)

B1.2 demonstrate an understanding of the element of role by selectively using a few other elements of drama (e.g., time and place; relationship; focus and emphasis) to build belief in a role and establish its dramatic context

B1.3 plan and shape the direction of the drama or role play by posing questions and working with others to find solutions, both in and out of role (e.g., In role: improve possible solutions to a problem; Out of role: help select a drama form to represent the group’s ideal)

B1.4 communicate thoughts, feelings, and ideas to a specific audience, using audio, visual, and/or technological aids to enhance their drama work (e.g., use dimmed lights, black lights, and music to suggest a mood; project images with an overhead/data projector; use a microphone to enhance or create sound effects or amplify narration (such as a spirit communication in an Aboriginal story))

B2. Reflecting, Responding, and Analysing

By the end of Grade 4, students will:

B2.1 express personal responses and make connections to characters, themes, and issues presented in their own and others’ drama works (e.g., make a mural or map to explore the setting of the drama; interview a partner in and out of role to discover physical and personality traits of a character; write a diary entry describing the relationship between two fictitious characters)

B2.2 explain, using drama terminology, how elements and drama conventions are used to produce specific effects and/or audience responses in their own and others’ drama works (e.g., characters’ differing points of view can be used to create tension; comic characters and scenes can help relieve tension; thought tracking can give insight into a character)

B2.3 identify and give examples of their strengths, interests, and areas for growth as drama participants and audience members (e.g., strength: using expressive gestures to communicate; interest: creative use of props and costumes; area for growth: maintaining focus in role)

B3. Exploring Forms and Cultural Contexts

By the end of Grade 4, students will:

B3.1 identify and describe some similarities in the purposes of process drama and more formal, traditional theatre productions (e.g., both forms use the elements of drama to tell stories, to allow the audience to imagine the possible outcomes and implications of human actions, and to engage the emotions of actors and audience)

B3.2 demonstrate an awareness of different kinds of drama and theatre from different times and places and of how they reflect their contexts (e.g., popular contemporary forms such as films or television shows and public processions and spectacles; historical forms such as medieval tournaments; oral storytelling by troubadours in earlier times and in contemporary contexts: travelling plays or pageants)

C. MUSIC

OVERALL EXPECTATIONS

By the end of Grade 4, students will:

C1. Creating and Performing: apply the creative process (see pages 19–22) to create and perform music for a variety of purposes, using the elements and techniques of music;

C2. Reflecting, Responding, and Analysing: apply the critical analysis process (see pages 23–28) to communicate their feelings, ideas, and understandings in response to a variety of music and musical experiences;

C3. 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.

SPECIFIC EXPECTATIONS

C1. Creating and Performing

By the end of Grade 4, students will:

C1.1 sing and/or play, in tune, from musical notation, unison and two-part music with simple accompaniments from a wide variety of cultures, styles, and historical periods (e.g., perform folk songs with syncopation and traditional songs with a simple harmony part)

C1.2 apply the elements of music when singing and/or playing, composing, and arranging music to create a specific effect (e.g., compose pieces using different expressive controls, such as staccato/legato or crescendo/decrescendo, to create contrasts and changes in mood; compose a pentatonic melody for recorder or voice with a bordun for an accompaniment)

C1.3 create musical compositions for specific purposes and audiences (e.g., write a composition for recorder using musical notation on the five-line staff; compose a piece using non-traditional notation, such as a melody map or icons; compose a soundscape to represent the physical landscape of Canada; create a composition to accompany a dance piece)

C1.4 use the tools and techniques of musicianship in musical performances (e.g., sing “O Canada” using controlled breathing technique and relaxed and straight posture while producing a clear and open head tone in their vocal range; play the xylophone using proper mallet technique)

C1.5 demonstrate an understanding of musical signs and standard notation on the five-line staff, and use devised notation to record the sequence of sounds in a composition of their own (e.g., create a soundscape with other students or a melody map using their own symbols; include fermata and sudden changes in dynamics in their compositions; use a system of syllables, numbers, or letters to represent simple pitch notation in a composition)

C2. Reflecting, Responding, and Analysing

By the end of Grade 4, students will:

C2.1 express detailed personal responses to musical performances in a variety of ways (e.g., respond by drawing, moving, using visual organizers, telling a story, making a collage; compare recordings of singers they think have a “good voice”; and defend their preferences)

C2.2 apply the elements of music when singing and/or playing, composing, and arranging music to create a specific effect (e.g., compose pieces using different expressive controls, such as staccato/legato or crescendo/decrescendo, to create contrasts and changes in mood; compose a pentatonic melody for recorder or voice with a bordun for an accompaniment)

C2.3 identify and give examples of their strengths and areas for growth for musical performers, creators, interpreters, and audience members (e.g., identify two musical qualities that were effective in their group’s performance and one area for improvement)

C3. Exploring Forms and Cultural Contexts

By the end of Grade 4, students will:

C3.1 explore forms and cultural contexts of their local community and their own heritage, and give examples of music that are used to create the mood

C3.2 identify and give examples of their strengths and areas for growth as musical performers, creators, interpreters, and audience members (e.g., identify two musical qualities that were effective in their group’s performance and one area for improvement)
By the end of Grade 4, students will:

C3.1 identify the role of music in a community today and compare it to its role in a community of the past (e.g., music for gatherings now and in the Middle Ages; songs sung now and by the voyageurs)

C3.2 demonstrate an awareness, through listening, of the characteristics of musical forms and traditions of diverse times, places, and communities (e.g., medieval musical genres performed by troubadours or minstrels, Indian classical music, music in Islamic cultures, music performed by female musical artists in North American culture, Aboriginal powwow music)

D. VISUAL ARTS

OVERALL EXPECTATIONS

By the end of Grade 4, students will:

D1. Creating and Presenting: apply the creative process (see pages 19–22) to produce a variety of two- and three-dimensional art works, using elements, principles, and techniques of visual arts to communicate feelings, ideas, and understandings;

D2. Reflecting, Responding, and Analysing: apply the critical analysis process (see pages 23–28) to communicate feelings, ideas, and understandings in response to a variety of art works and art experiences;

D3. 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.

SPECIFIC EXPECTATIONS

D1. Creating and Presenting

By the end of Grade 4, students will:

D1.1 create two- and three-dimensional works of art that express feelings and ideas inspired by their interests and experiences (e.g., a comic strip or a storyboard featuring a space voyage; an oil pastel drawing of peers in sports or dance poses; a painted still life of objects related to a hobby)

D1.2 demonstrate an understanding of composition, using selected principles of design to create narrative art works or art works on a theme or topic (e.g., a collaborative mural depicting a historical or an imaginary landscape in which objects and figures placed in the foreground create areas of emphasis, and objects placed in the background show diminishing size; a relief print of a seascape in which shapes that are similar, but are different in size or colour, give the work both unity and variety)

D1.3 use elements of design in art works to communicate ideas, messages, and understandings (e.g., create a poster using colour and cropping of space to propose a solution to climate change; use contour lines of various weights in a charcoal gesture drawing of a person to capture the impression of movement; create a paper sculpture portrait of a favourite comic character that explores positive and negative space, using techniques of folding, scoring, fringing, and crimping)

D1.4 use a variety of materials, tools, and techniques to determine solutions to design challenges (e.g.,

D2. Reflecting, Responding, and Analysing

By the end of Grade 4, students will:

D2.1 interpret a variety of art works, and identify the feelings, issues, themes, and social concerns that they convey (e.g., express their response to student drawings on a classroom gallery wall; identify artistic techniques that are used to influence the viewer; in role as a famous artist, write a journal entry or letter identifying the artist's compositional choices and intentions)

D2.2 analyse the use of elements and principles of design in a variety of art works, and explain how they are used to communicate meaning or understanding (e.g., the use of texture and negative space in Henry Moore’s abstract forms to suggest natural objects or figures; the use of tints and shades to explore vivid colour in Alma Thomas’s aerial view paintings; the use of bright colours and rounded shapes in children's advertising to get their attention and convey a friendly feeling)

D2.3 demonstrate awareness of the meaning of signs, symbols, and styles in works of art (e.g., symbols representing luck; fonts typically used in marketing; heraldic symbols; aboriginal totems around the world; Egyptian hieroglyphics)

D2.4 identify and document their strengths, their interests, and areas for improvement as creators and viewers of art (e.g., review notes and sketches they have made during a visit to a public gallery, and summarize what tends to interest them when they look at art; after a classroom gallery walk, identify what they think are the most useful of the comments and suggestions that their classmates had written on sticky notes and placed on their art work)

D3. Exploring Forms and Cultural Contexts

By the end of Grade 4, students will:

D3.1 describe how visual art forms and styles represent various messages and contexts in the past and present (e.g., images that promote businesses, events, or festivals; paintings in art galleries that enrich, challenge, and engage viewers; picture books and graphic novels that inform and entertain; traditional and contemporary purposes of Aboriginal sculpture)

D3.2 demonstrate an awareness of a variety of art forms, styles, and traditions, and describe how they reflect the diverse cultures, times, and places in which they were made (e.g., wax-resist batik as a national art form in Indonesia; masks used in the celebrations of various cultures; symbols, motifs, and designs on totem poles; radial symmetry in patterns in Islamic art; contemporary and historical oil paintings in an art gallery)
**GRADE 4 - FRENCH IMMERSION**

Grade 4: Oral Communication, Reading, and Writing

**Overall Expectations**

**By the end of Grade 4, student will:**

- *listen and respond to a variety of simple spoken texts and media works;*
- *express ideas, feelings, and opinions on a variety of familiar topics, using correct pronunciation and appropriate intonation;*
- *read a variety of texts and media works and demonstrate understanding through oral and written responses;*
- *produce short pieces of writing in a variety of forms for specific purposes;*
- *identify and use appropriate language conventions during oral communication activities, in their responses to reading materials, and in their written work.*

**Specific Expectations**

**Oral Communication Listening**

**By the end of Grade 4, students will:**

- *demonstrate an understanding of a variety of spoken texts and media works (e.g., stories, plays, children's television programs) (e.g., by asking questions, identifying the main idea and some supporting details, clarifying the meaning, drawing conclusions);*
- *listen and respond to the viewpoints of others in a group discussion on a specific topic (e.g., by asking questions and offering opinions);*
- *demonstrate the ability to concentrate on the topic under discussion (e.g., by identifying the main points, asking relevant questions).*

**Speaking**

**By the end of Grade 4, students will:**

- *participate in classroom activities by asking and answering questions, giving personal opinions, and expressing feelings on familiar topics;*
- *use simple and compound sentences to express feelings, opinions, and ideas;*
- *contribute to small-group discussions (e.g., ask questions to clarify a point, restate key points);*
- *prepare and give oral presentations (e.g., on a topic under study or of personal interest), incorporating descriptive vocabulary;*
- *create short media works (e.g., record an advertisement, tape a weather report), using appropriate technologies.*

**Application of Language Conventions**

**By the end of Grade 4, students will:**

- *recognize and use appropriate language structures in oral communication activities;*
- *observe the rules of pronunciation and intonation in their speech;*
- *use a variety of sentence types (e.g., declarative, interrogative, exclamatory) to enhance a message;*
- *correct errors in their spoken French (e.g., language and sentence structures, anglicisms), with prompting from the teacher.*

**Reading Comprehension and Response to Text**

**By the end of Grade 4, students will:**

- *read a variety of texts and media works (e.g., stories, short novels, myths, short articles) for different purposes (e.g., to expand knowledge of topics under study, to build knowledge of language structures);*
- *identify and describe the key elements of a written text (e.g., main ideas, supporting details, a sequence of events);*
- *interpret written texts, using evidence from the text and drawing upon their personal knowledge and experience;*
- *begin to use research skills (e.g., formulate questions, locate information, clarify their understanding through discussion);*
- *identify various forms of writing (e.g., narratives, stories, poems, plays) and describe their main characteristics.*

**Application of Language Conventions**

**By the end of Grade 4, students will:**

- *recognize and use appropriate language structures in their response to written texts;*
- *use reading strategies (e.g., knowledge of cognates, visual cues, context clues) to facilitate comprehension of reading materials;*
- *read aloud, with expression, observing the rules of pronunciation and intonation;*
- *use and interpret basic conventions of formal text (e.g., table of contents, headings, subheadings, charts, glossary, index) to find information and aid comprehension;*
- *use their knowledge of the structure of words (e.g., root words, prefixes, suffixes) to determine the meaning of unfamiliar words;*
- *identify synonyms and antonyms for familiar words;*
- *use French-English dictionaries to determine the meaning of unfamiliar vocabulary.*

**Writing Communication of Information and Ideas**

**By the end of Grade 4, students will:**
* write descriptive and narrative text in a variety of forms (e.g., reports, poems, journal entries, letters) to convey facts, feelings, personal opinions, and ideas;
* organize and develop ideas using paragraphs (e.g., to tell a story);
* produce short written text (e.g., captions, labels) to accompany visual information (e.g., charts, diagrams, illustrations, computer graphics);
* write a brief report, following a model, on a class research project.

**Application of Language Conventions**

By the end of Grade 4, students will:
* use appropriate language structures in their writing;
* use and spell correctly the vocabulary appropriate for this grade level;
* use cursive writing;
* extend their use of punctuation to include exclamation marks and colons;
* use capitals for place names;
* use compound sentences and sentences of varying length;
* use a variety of sentence types (e.g., declarative, interrogative, exclamatory) correctly and appropriately;
* use synonyms and antonyms;
* use a thesaurus to expand their vocabulary;
* revise, edit, and proofread their writing, with the teacher’s assistance, focusing on grammar, spelling, punctuation, and conventions of style;
* use French-English dictionaries to verify spelling and determine the meaning of unfamiliar vocabulary.

**Language Structures**

Students should recognize and use the following language structures in their communicative activities in all three strands.

**Nouns and Pronouns**
* vous as polite form of tu
* nouns with masculine and feminine forms (e.g., un fermier/une fermière, un directeur/une directrice)
* formation of plural of irregular nouns (e.g., un travail/des travaux, un cheval/des chevaux)

**Verbs**
* présent of -ir and -re verbs
* expressions with avoir and faire (e.g., J’ai faim. J’ai dix ans. Il fait chaud. Il fait du ski.)
* passé récent using venir de (e.g., Je viens de finir mes devoirs.)

**Adjectives**
* demonstrative adjectives ce, cet, cette, ces
* position and agreement, in gender and number, of irregular adjectives with nouns (e.g., un bel arbre, une maison blanche)
* possessive adjectives notre/nos, votre/vos, leur/leurs

**Adverbs**
* use and position of frequently used adverbs (e.g., peu, beaucoup, assez, trop)

**Prepositions and Conjunctions**
* use of voici, voilà

**Interrogative Constructions**
* subject/verb inversion with avoir (e.g., As-tu faim?, As-tu besoin de . . . ?)

**Sentence Structure**
* compound sentences using connecting words (e.g., d’abord, et puis, ensuite)
### Grade 4: Oral Communication, Reading, and Writing

#### Overall Expectations
By the end of Grade 4, student will:
- listen and respond to a variety of short, simple spoken texts and media works;
- express ideas, feeling, and opinions on familiar topics, using correct pronunciation and appropriate intonation;
- read variety of short, simple written materials and demonstrate understanding through oral and brief written responses;
- produce short pieces of writing in a variety of forms;
- identify and use appropriate language conventions during oral communication activities, in their responses to reading materials, and in their written work.

#### Specific Expectations
**Oral Communication**

**Listening**
By the end of Grade 4, students will:
- demonstrate an understanding of short spoken texts and media works (e.g., stories, songs, poems) (e.g., by answering questions, identifying words and expressions, retelling the story, identifying the main idea, illustrating the events described);
- follow instructions to perform a sequence of tasks;
- identify rhymes and language patterns in familiar contexts (e.g., poems, songs);
- recognize and interpret visual and verbal cues (e.g., gestures, facial expressions, tone of voice) to aid in understanding what they hear.

**Speaking**
By the end of Grade 4, students will:
- repeat and recite a variety of spoken texts (e.g., poems, rhymes, songs) to develop vocabulary, pronunciation, and knowledge of language structures;
- ask and respond to simple questions to clarify understanding of familiar topics;
- use visual and verbal cues (e.g., gestures, facial expressions, tone of voice) to communicate information;
- use simple but complete sentences to communicate ideas, feelings, and opinions on familiar topics;
- contribute to classroom routines and activities (e.g., by asking and answering questions, making suggestions);
- prepare and give short oral presentations (e.g., dialogues, skits), based on a model.

**Application of Language Conventions**
By the end of Grade 4, students will:
- recognize and use appropriate language structures in oral communication activities;
- use correct pronunciation and appropriate intonation in familiar contexts;
- correct basic errors in their spoken French (e.g., use of gender, anglicisms), with prompting from the teacher;
- use linking words such as et, ou, puis, and mais to connect ideas in speech;
- recognize and use masculine and feminine word endings in adjectives (e.g., grand/grande, petit/petite);
- recognize silent word endings in nouns (e.g., chat) and the silent "s" in plurals (e.g., tables), and correctly pronounce words with silent endings.

**Reading Comprehension and Response to Text**
By the end of Grade 4, students will:
- read a variety of simple written materials (e.g., stories, poems, myths, short articles) for different purposes (e.g., to obtain information, to build vocabulary and knowledge of language structures);
- demonstrate comprehension of a range of short texts (e.g., by answering questions, retelling the story, restating the main ideas, illustrating events described);
- follow written instructions (e.g., to play a game, complete a task, solve a problem);
- read simple informational texts and identify the main idea and some supporting details;
* identify and describe different forms of writing (e.g., stories, poems, plays);
* identify the key elements of a story (e.g., plot, characters, setting).

**Application of Language Conventions:**

**By the end of Grade 4, students will:**

* recognize and use appropriate language structures in their response to written texts;
* use reading strategies (e.g., visual cues, language and word patterns, context clues, knowledge of cognates, phonics) to determine the meaning of unfamiliar words and expressions;
* read aloud, observing the rules of pronunciation and intonation;
* recognize and use punctuation as an aid to comprehension;
* use and interpret basic conventions of text (e.g., table of contents, headings, illustrations, diagrams) to find information and aid comprehension;
* use French-English dictionaries to determine the meaning of unfamiliar vocabulary.

**Writing Communication of Information and Ideas**

**By the end of Grade 4, students will:**

* write short, simple texts in a variety of forms (e.g., greeting cards, rhymes, letters, invitations, stories), following a model;
* organize information to convey a clear message (e.g., present facts or describe events in their proper sequence);
* write brief descriptions of people, places, and situations;
* produce short written text (e.g., titles, captions, labels) to accompany visual information (e.g., computer graphics, simple charts, illustrations).

**Application of Language Conventions**

**By the end of Grade 4, students will:**

* use appropriate language structures in their writing;
* use and spell correctly the vocabulary appropriate for this grade level;
* write simple sentences, using familiar and newly acquired vocabulary and appropriate punctuation (e.g., capital letters for proper nouns and at the beginning of sentences, periods at the end of sentences, commas to separate a series of items, question marks, exclamation marks);
* revise and proofread their writing, with the teacher’s assistance;
* use appropriate resources (e.g., dictionaries, word lists) to verify the meaning and spelling of familiar and newly acquired vocabulary.

**Language Structures**

Students should recognize and use the following language structures in their communicative activities in all three strands. Nouns and Pronouns

* personal pronouns je, tu, il, elle, nous, vous, ils, elles
* agreement of definite articles (le, la, l’, les ) and indefinite articles (un, une, des) with nouns
* addition of "s" to form the plural of nouns (e.g., un enfant/des enfants)
* subject/verb agreement
* présent of regular -er verbs
* présent of frequently used verbs avoir, être, aller, faire, pouvoir
* aller + infinitive to form the futur proche
* direct infinitive to show preferences (e.g., _aimer manger.)

Adjectives

* position and agreement, in gender and number, of regular adjectives with nouns (e.g., le chat noir, la voiture noire, les crayons noirs, les plumes noires )
* possessive adjectives mon/ma/mes, ton/ta/tes, son/sa/ses
* comparative form of adjectives (plus, moins)
* demonstrative adjectives ce, cet, cette, ces

Adverbs

* use and position of frequently used adverbs (e.g., bien, vite, lentement, souvent)

Prepositions and Conjunctions

* preposition de to indicate possession
* use of avec, pour
* prepositions of place au, à la, à l', aux, avec, chez, dans, sous, sur

Interrogative Constructions

* questions starting with est-ce que
* questions indicated by rising intonation (e.g., Tu viens?)
* questions starting with question words quand, qui, qu’est-ce que, combien, où, comment, quel/quelle

Sentence Structure
* simple sentences consisting of subject + verb + object (e.g., J’aime la pizza.)
* negative form ne . . . pas
Grade 4 Ontario Curriculum Tracking Template – Grade 4 Native Language

**GRADE 4 - NATIVE LANGUAGE**

**Grade 4: Oral Communication, Reading, and Writing**

**Overall Expectations**

By the end of Grade 4, student will:

+ communicate in familiar contexts using simple sentences;
+ demonstrate an understanding of spoken language in familiar contexts, using both verbal and non-verbal cues;
+ demonstrate an understanding of vocabulary and language structures appropriate for this grade;
+ read simple sentences in the writing system used in the program;
+ write simple sentences in the writing system used in the program;
+ demonstrate an appreciation and understanding of aspects of the Native culture under study.

**Specific Expectations**

**Oral Communication**

By the end of Grade 4, students will:

+ communicate in familiar contexts using basic vocabulary and simple sentences (e.g., give simple directions - Put the books there);
+ participate in structured oral language activities appropriate for the grade (e.g., answer questions with simple sentences - I am not going there);
+ demonstrate an understanding of various types of simple sentences;
+ respond to a variety of oral messages using simple sentences;
+ demonstrate an understanding of simple oral messages using both verbal and non-verbal cues.

**Reading**

By the end of Grade 4, students will:

+ read simple sentences in the writing system used in the program;
+ demonstrate an understanding of what they read (e.g., by answering simple questions or explaining the meaning of simple sentences);
+ participate in structured reading activities appropriate for the grade (e.g., identify words or phrases that contain the same root words);
+ use visual cues (e.g., pictures, illustrations) and other reading strategies (e.g., consider word order) to determine the meaning of simple sentences;
+ recognize simple sentence patterns that have been introduced orally;
+ read simple sentences aloud using pictures.

**Writing**

By the end of Grade 4, students will:

+ write simple sentences in the writing system used in the program;
+ write simple messages using simple sentences (e.g., I went home);
+ participate in structured writing activities appropriate for the grade (e.g., write simple sentences that describe a thing or animal);
+ spell words and phrases correctly in simple sentences, using available resources to confirm spelling.

**Grammar, Language Conventions, and Vocabulary**

Students should develop and apply knowledge of the language elements, vocabulary, and spelling items listed below through communicative activities in all three strands. The language elements and vocabulary introduced in a specific grade are not repeated in subsequent grades unless they are combined with new elements or studied in a new context. This method of citing language elements and vocabulary is not meant to imply that students will work with the language elements and vocabulary of a given grade only while they are in that grade. On the contrary, it is expected that students will continue to work with all the language elements, vocabulary, and spelling items listed in the document as they advance through the grades, and that they will apply them in progressively more complex and sophisticated contexts.

Since a number of different Native languages are used in Ontario, the most commonly used language elements have been selected, and all the examples have been given in English. Native language teachers will need to adapt these lists and prepare their own materials to accommodate the distinctive features of the Native language being studied. Language elements.
**nouns and pronouns**
- formation of the plural of nouns through the addition of suffixes (e.g., many bottles, fruits, trees)
- possessive form of nouns (incorporation of nouns with possessive pronouns) using new vocabulary (e.g., our jackets, their fishing gear)
- incorporation of nouns to express ideas of location (e.g., in front of the house, at the pond)

**verbs**
- present, past, and future tenses with plural pronoun (e.g., they are fishing, they were fishing, they will fish)
- imperative plural forms, including inclusive and exclusive plurals (e.g., sit down [the person(s) addressed]; let us leave [all of us, the speaker and his/her companion(s) and the person(s) addressed]; let us eat [us, the speaker and his/her companion(s), but not the person(s) addressed])

**syntax**
- sentences with singular subject and third person plural object (e.g., I see them)
- descriptive sentences (e.g., The bear is brown)
- locative constructions in sentences (e.g., Joe is standing behind the desk)
- interrogative sentences (e.g., What colour is it?)
- simple negative sentences using a pronoun (e.g., No, it is not; No, she is not eating)

**Vocabulary**
- numbers from 1 to 1000; numbers to 100,000 by 1000's
- words used in counting
- words used in measuring (e.g., standard units of measurement)
- words associated with obtaining food (e.g., words used in gathering, fishing, hunting, shopping)

**Spelling**
- correct spelling of words and phrases in simple sentences
- use of resources to confirm spelling (e.g., personal lexicon, classroom-displayed vocabulary lists, syllabics chart)