Ontario

Ministry of Education

Curriculum Expectations
GRADE 7

for

English Language
French as a Second Language
Mathematics
Science and Technology
History
Geography
Health & Physical Education
The Arts

2007

Oral Communication

Overall Expectations

7e1 1. listen in order to understand and respond appropriately in a variety of situations for a variety of purposes;

7e2 2. use speaking skills and strategies appropriately to communicate with different audiences for a variety of purposes;

7e3 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.

1. Listening to Understand

7e4 Purpose

1.1 identify a range of purposes for listening in a variety of situations, formal and informal, and set goals appropriate for specific listening tasks *(e.g., to analyse the arguments on both sides of a class debate; to create a character sketch based on a sound clip from a film or an audiotape of an interview; to synthesize ideas in a literature circle)*

7e5 Active Listening Strategies

1.2 demonstrate an understanding of appropriate listening behaviour by adapting active listening strategies to suit a wide variety of situations, including work in groups (*e.g., take turns without interrupting or overlapping during a class debate or panel discussion; ask questions to make connections to the ideas of others; use vocal prompts in dialogue to express empathy, interest, and personal regard:* After an experience like that, I can imagine how you felt*).*

7e6 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 increasingly complex or challenging oral texts (*e.g., use background knowledge about the structure of oral texts such as debates, interviews, speeches, monologues, lectures, and plays to make predictions and identify important ideas while listening; ask questions for clarification or further information; visualize scenes suggested by evocative or descriptive language in a text; use notetaking strategies to keep track of or summarize important points made by a speaker)*

7e7 Demonstrating Understanding

1.4 demonstrate an understanding of the information and ideas in increasingly complex oral texts in a variety of ways *(e.g., briefly outline the main ideas in a text; accurately carry out a procedure or follow instructions; use a graphic form of expression, such as drawing or tableaux, to depict the important ideas in an oral text)*

7e8 Making Inferences/Interpreting Texts

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

Teacher prompt: "Explain what evidence you used to determine the theme(s) in this oral text."

7e9 Extending Understanding

1.6 extend understanding of oral texts, including increasingly complex texts, by connecting, comparing, and contrasting the ideas and information in them to their own knowledge, experience, and insights; to other texts, including print and visual texts; and to the world around them *(e.g., activate prior knowledge in order to assess the credibility of a speaker's assertions; assess the validity of other speakers' ideas in relation to their own and modify their own ideas if appropriate; compare the information or ideas in an oral text to those in another text on the same topic)*

7e10 Analysing Texts

1.7 analyse oral texts in order to evaluate how effectively they communicate ideas, opinions, themes, or experiences, and suggest possible improvements *(e.g., listen to two sides of an argument in a debate, make a judgement, and develop a personal position on the topic)*

7e11 Point of View

1.8 explain the connection between a speaker's tone and the point of view or perspective presented in oral texts *(e.g., the reason why a speaker might employ humour to present a serious theme)* *Teacher prompts:* "How does the use of humour in this text influence the audience?" "Why do you think the speaker uses sarcasm? Is it effective? Why, or why not?"

7e12 Presentation Strategies

1.9 identify a wide variety of presentation strategies used in oral texts and evaluate their effectiveness *(e.g., the use of humour, body language, visual aids, vocal effects)*

2. Speaking to Communicate

7e13 Purpose

2.1 identify a range of purposes for speaking and explain how the purpose and intended audience might influence the choice of speaking strategies *(e.g., to present conclusions about a research project through dramatization, a role play, or a monologue; to interest classmates in a social issue through a debate; to solve problems or investigate issues and ideas through a group brainstorming session)*

7e14 Interactive Strategies

2.2 demonstrate an understanding of appropriate speaking behaviour in most situations, adapting contributions and responses to suit the purpose and audience *(e.g., ask questions and paraphrase to confirm understanding; request repetition or an explanation from other group members when meaning is unclear; use language and forms of address that are appropriate to the formality or informality of the situation)*

7e15 Clarity and Coherence

2.3 communicate orally in a clear, coherent manner, using a structure and style appropriate to both the topic and the intended audience *(e.g., use a formal structure of opening statement, enumeration of points, and summary/conclusion, and a straightforward, impersonal style, to present a position statement on an issue)*

7e16 2.4 use appropriate words, phrases, and terminology from the full range of their vocabulary, including inclusive and non-discriminatory language, and a range of stylistic devices, to communicate their meaning accurately and engage the interest of their intended audience *(e.g., use the technical vocabulary of the subject area during a scientific investigation in a group setting; incorporate literary language and structures into personal anecdotes or imaginative narratives; use emotive language in a persuasive appeal to a large group)*

7e17 Vocal Skills and Strategies

2.5 identify a range of vocal effects, including tone, pace, pitch, volume, and a variety of sound effects, and use them appropriately and with sensitivity towards cultural differences to communicate their meaning *(e.g., use pauses and changes of pace to highlight the introduction of each new point in a speech to the student body)*

7e18 Non-Verbal Cues

2.6 identify a variety of non-verbal cues, including facial expression, gestures, and eye contact, and use them in oral communications, appropriately and with sensitivity towards cultural differences, to help convey their meaning *(e.g., lean into a group to make a point; make eye contact with the person to whom the response/question is directed)*

7e19 Visual Aids
2.7 use a variety of appropriate visual aids *(e.g., charts, videos, props, multimedia)* to support and enhance oral presentations *(e.g., use a short video clip to support a formal presentation)*

3. Reflecting on Oral Communication Skills and Strategies

7e20 Metacognition
3.1 identify what strategies they found most helpful before, during, and after listening and speaking and what steps they can take to improve their oral communication skills
Teacher prompts: "What do you try to find out before you begin to listen to an oral text?" "How can a partner help you clarify your ideas after listening to an oral text?" "What steps help you prepare to speak in a formal situation?"

7e21 Interconnected Skills
3.2 identify how their skills as viewers, representers, readers, and writers help them improve their oral communication skills
Teacher prompt: "How does reading about an issue help you participate in a discussion about it?"

Reading

Overall Expectations

7e22 1. read and demonstrate an understanding of a variety of literary, graphic, and informational texts, using a range of strategies to construct meaning;

7e23 2. recognize a variety of text forms, text features, and stylistic elements and demonstrate understanding of how they help communicate meaning;

7e24 3. use knowledge of words and cueing systems to read fluently;

7e25 4. reflect on and identify their strengths as readers, areas for improvement, and the strategies they found most helpful before, during, and after reading.

1. Reading for Meaning

7e26 Variety of Texts
1.1 read a wide variety of increasingly complex or difficult texts from diverse cultures, including literary texts *(e.g., short stories, poetry, novels, mysteries, historical fiction, autobiographies, scripts, lyrics)*, graphic texts *(e.g., graphs and graphic organizers, charts and tables, diagrams, surveys, maps)*, and informational texts *(e.g., print and online encyclopedias, manuals, and magazine and newspaper articles; magazines in their first languages, where appropriate; electronic texts, textbooks, and non-fiction materials; a variety of dictionaries, thesauri, and websites)*

7e27 Purpose
1.2 identify a variety of purposes for reading and choose reading materials appropriate for those purposes *(e.g., an electronic database listing magazines, newspapers, and journals to verify information; a national, local, or community newspaper for coverage of a specific/current issue; scripts and lyrics for enjoyment, recreation, and interest; an online or print encyclopedia article for background information)*

7e28 Comprehension Strategies

1.3 identify a variety of reading comprehension strategies and use them appropriately before, during, and after reading to understand increasingly complex texts *(e.g., activate prior knowledge on a topic through dialogue and discussion; use visualization and comparisons with images from other media to clarify details of characters, scenes, or concepts; ask questions to monitor understanding; summarize sections of text during reading; synthesize ideas to broaden understanding)*

7e29 Demonstrating Understanding

1.4 demonstrate understanding of increasingly complex texts by summarizing important ideas and citing a variety of details that support the main idea *(e.g., key information in manuals, surveys, graphs, online and print encyclopedias, websites, tables and charts; theme and related ideas in magazine articles, dramatic monologues, television programs)*

7e30 Making Inferences/Interpreting Texts

1.5 develop and explain interpretations of increasingly complex or difficult texts using stated and implied ideas from the texts to support their interpretations

Teacher prompts: "How does the information in the graphic influence your interpretation of the text?" "What do you think the author wants you to realize about the character's decision in this scene? How is this information communicated?"

7e31 Extending Understanding

1.6 extend understanding of texts, including increasingly complex or difficult texts, by connecting the ideas in them to their own knowledge, experience, and insights, to other familiar texts, and to the world around them *(e.g., by comparing their own perspective to those of the characters in a historical novel)*

Teacher prompt: "How is the immigration experience of these characters similar to that of new arrivals today? How is it different?"

7e32 Analysing Texts

1.7 analyse a variety of texts, both simple and complex, and explain how the different elements in them contribute to meaning and influence the reader's reaction *(e.g., narrative:* having ordinary characters caught up in an exciting plot makes the story seem more real; *debate:* the formal, balanced structure encourages the reader to pay equal attention to both sides of the argument*)*

Teacher prompts: "What does the author do to engage our sympathy for the main character? Why do you think the author makes us wait to find out what happens to this character?" "Does reading about another point of view make you think about this issue differently?"

7e33 Responding to and Evaluating Texts

1.8 evaluate the effectiveness of both simple and complex texts based on evidence from the texts

Teacher prompt: "Did the author's argument convince you? What impressed you the most – the facts themselves or the way they were presented?"

7e34 Point of View

1.9 identify the point of view presented in texts, including increasingly complex or difficult texts; give evidence of any biases they may contain; and suggest other possible perspectives *(e.g., determine whether an author's choice of voices to include seems justified and suggest how the meaning would change if different voices were chosen)*

2. Understanding Form and Style

7e35 Text Forms

2.1 analyse a variety of text forms and explain how their particular characteristics help communicate meaning, with a focus on literary texts such as a novel *(e.g., the realistic portrayal of imagined characters and actions helps the reader become involved in the story)*, graphic texts such as a photo essay *(e.g., the pictures and captions together communicate much more than they could separately)*, and informational texts such as a manual *(e.g., the use of headings, numbered steps, and illustrations makes the procedures easy to follow)*

7e36 Text Patterns

2.2 analyse increasingly complex texts to identify organizational patterns used in them and explain how the patterns help communicate meaning *(e.g., a questionand- answer format in a report or article; groups and subgroups in a table or web)*

Teacher prompt: "How does the organizational pattern make it easy for you to find the information you need?"

7e37 Text Features

2.3 identify a variety of text features and explain how they help communicate meaning *(e.g., a task bar, hyperlinks, margin notes,"Works Cited" or "References"lists)*

7e38 Elements of Style

2.4 identify various elements of style – including foreshadowing, metaphor, and symbolism – and explain how they help communicate meaning and enhance the effectiveness of texts (*e.g., a metaphor creates vivid, striking pictures in the reader's mind by suggesting an unexpected analogy between one type of object or idea and a different object or idea:* a *budding* poet*)*

3. Reading With Fluency

7e39 Reading Familiar Words

3.1 automatically read and understand most words in a wide range of reading contexts *(e.g., words from grade-level texts; terminology used in discussions and posted on anchor charts; words from shared-, guided-, and independent-reading texts, electronic texts, and resource materials in the curriculum subject areas)*

7e40 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, punctuation)* ;
- graphophonic (phonological and graphic) cues *(e.g., familiar words within larger words, syllables within longer words, similarities between words with known spelling patterns and unknown words)*

7e41 Reading Fluently

3.3 read appropriate texts with expression and confidence, adjusting reading strategies and reading rate to match the form and purpose *(e.g., read in role with suitable emphasis and phrasing to dramatize a text for an audience)*

4. Reflecting on Reading Skills and Strategies

7e42 Metacognition

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

Teacher prompts: "What strategies helped you to synthesize ideas while reading a longer text?" "What kind of graphic organizers helped you to represent your understanding of the text after reading?" "What strategy works best for you when you come to a word or concept that is unfamiliar?" "What questions do you ask yourself that help you monitor your reading?" "What is the most effective use of your reader's notebook?"

7e43 Interconnected Skills

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

Teacher prompts: "How has your experience of writing influenced the way you read?" "How do you think a literature circle discussion helps you to understand a text?" "How does writing about what you read in your reader's notebook help you as a reader?"

Writing

Overall Expectations

7e44 1. generate, gather, and organize ideas and information to write for an intended purpose and audience;

7e45 2. draft and revise their writing, using a variety of informational, literary, and graphic forms and stylistic elements appropriate for the purpose and audience;

7e46 3. use editing, proofreading, and publishing skills and strategies, and knowledge of language conventions, to correct errors, refine expression, and present their work effectively;

7e47 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.

1. Developing and Organizing Content

7e48 Purpose and Audience

1.1 identify the topic, purpose, and audience for more complex writing forms *(e.g., a rap poem or jingle, to express a personal view to the class; a report for a community newspaper about a public meeting on an environmental issue affecting local neighbourhoods; an autobiography for a youth magazine, web page, blog, or zine)*

7e49 Developing Ideas

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

7e50 Research

1.3 gather information to support ideas for writing, using a variety of strategies and a wide range of print and electronic resources *(e.g., use a timeline to organize research tasks; interview people with knowledge of the topic; identify and use appropriate graphic and multimedia resources; record sources used and information gathered in a form that makes it easy to understand and retrieve)*

7e51 Classifying Ideas

1.4 sort and classify ideas and information for their writing in a variety of ways that allow them to manipulate information and see different combinations and relationships in their data *(e.g., by underlining or highlighting key words or phrases; by using a graphic organizer such as a "Plus/Minus/Interesting" chart)*

7e52 Organizing Ideas

1.5 identify and order main ideas and supporting details and group them into units that could be used to develop a multi-paragraph piece of writing, using a variety of strategies *(e.g., making jot notes; grouping according to key words; making charts; drawing webs)* and organizational patterns *(e.g., combined/multiple orders such as comparison and cause and effect)*

7e53 Review

1.6 determine whether the ideas and information they have gathered are relevant, appropriate, and sufficiently specific for the purpose, and do more research if
necessary (e.g., check for errors or omissions in information using a T-chart)

2. Using Knowledge of Form and Style in Writing

7e54 Form

2.1 write complex texts of different lengths using a wide range of forms *(e.g., a description of the procedure for growing rice or coffee; an explanation of multiple ways to solve a mathematical problem or investigation; an argument stating the opposing points of view on a community issue, including the response of each side to the points made by the other side, for a class/school debate, or to report on the debate in a newsletter; a fictional narrative about a historical event to dramatize material studied; a mystery story modelled on the structures and conventions of the genre)*

7e55 Voice

2.2 establish a distinctive voice in their writing appropriate to the subject and audience *(e.g., use language that communicates their "stance"or point of view on an issue and identify the words and/or phrases that help them achieve this goal)*

7e56 Word Choice

2.3 regularly use vivid and/or figurative language and innovative expressions in their writing *(e.g., a wide variety of adjectives and adverbs; similes, metaphors, and other rhetorical devices such as exaggeration or personification)*

Teacher prompt: "Identify three language choices you have made and explain the effect they will have on a reader."

7e57 Sentence Fluency

2.4 vary sentence structures to give their writing rhythm and pacing by using a variety of connecting and/or introductory words and phrases *(e.g., however, for example, therefore, as a result)* to help combine short, simple sentences into longer, more complex sentences

7e58

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

Teacher prompt: "How could you let your audience know you have thought about other points of view?"

7e59 Preparing for Revision

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

Teacher prompts: "Would your audience understand your feelings about your topic?" "Could you add one figurative expression or rhetorical device that would strengthen your work?" "Will your opening sentence engage the interest of your audience?"

7e60 Revision

2.7 make revisions to improve the content, clarity, and interest of their written work, using a variety of strategies *(e.g., use margin notes or sticky notes while rereading to record ideas for additions or changes; add or substitute words and phrases, including vocabulary from other subjects; use hetorical devices such as understatement to achieve particular effects; adjust sentence length, type, and complexity to suit the audience and purpose; use patterns such as repetition of key phrases for emphasis and to engage the attention of the audience)*

Teacher prompt: "Would a variety of sentence types and lengths help to create suspense?"

7e61 Producing Drafts

2.8 produce revised draft pieces of writing to meet identified criteria based on the expectations *(e.g., adequate development of information and ideas, logical organization, appropriate use of form and style, appropriate use of conventions)*

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

7e62 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)*

7e63 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., write words syllable by syllable; sort words by visual patterns; highlight tricky letters or groups of letters; cluster root words and related forms:* beauty, beautiful, beautician*; apply knowledge of vowel and consonant patterns and rules for forming possessives, contractions, and plurals)*

7e64 Vocabulary

3.3 confirm spellings and word meanings or word choice using a variety of resources appropriate for the purpose *(e.g., locate syllables, stress patterns, inflected forms, multiple meanings, and information about word origins in online and print dictionaries, including thematic dictionaries such as a medical dictionary, bilingual dictionary, or dictionary of idioms; use a thesaurus to explore alternative word choices)*

7e65 Punctuation

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

7e66 Grammar

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

7e67 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)*

7e68 Publishing

3.7 use a wide range of appropriate elements of effective presentation in the finished product, including print, script, different fonts, graphics, and layout (*e.g., use legible printing and cursive writing; supply a timeline; supply captions and text boxes to accompany the photographs in a photo essay; use a bulleted or point-form layout in a summary of key points for a debate)*

7e69 Producing Finished Works

3.8 produce pieces of published work to meet identified criteria based on the expectations *(e.g., adequacy of information and ideas, logic and effectiveness of organization, effective use of form and stylistic elements, appropriate use of conventions, effective presentation)*

4. Reflecting on Writing Skills and Strategies

7e70 Metacognition

4.1 identify a variety of strategies they used before, during, and after writing, explain which ones were most helpful, and suggest future steps they can take to improve as writers *(e.g., use a three-column reflection journal to monitor the writing process:* What I did/What I learned/How I can use it*)*

Teacher prompt: "Explain how you used your writer's notebook to help you identify your strengths as a writer and your next steps for writing."

7e71 Interconnected Skills

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

Teacher prompt: "In what way have your experiences with reading, viewing, and listening to texts changed the way you think about the audience for your writing?"

7e72 Portfolio

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

Media Literacy

Overall Expectations

7e73 1. demonstrate an understanding of a variety of media texts;

7e74 2. identify some media forms and explain how the conventions and techniques associated with them are used to create meaning;

7e75 3. create a variety of media texts for different purposes and audiences, using appropriate forms, conventions, and techniques;

7e76 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.

1. Understanding Media Texts

7e77 Purpose and Audience

1.1 explain how various media texts address their intended purpose and audience *(e.g., this sports team uniform uses school colours and an image of the school's mascot to give the team a "brand" or "identity" to encourage fan loyalty; this music group's web page uses electronic graphics and intense colours to reflect the group's style and to encourage fans to buy its new CD) Teacher prompt:* "Why do companies and organizations consider it important to have a logo that gives them an 'identity' or 'brand'?"

7e78 Making Inferences/Interpreting Messages

1.2 interpret increasingly complex or difficult media texts, using overt and implied messages as evidence for their interpretations *(e.g., identify the editorial positions of two different newspapers by comparing the selection of stories and the composition of elements [photos, images, text] on their front pages; identify the themes in a contemporary action movie or comedy and explain how these themes contribute to the popularity of the film; explain how standards of beauty are established in advertising)*

Teacher prompts: "What are the differences in the way these sources cover this event? What do the differences tell you about each news source?" "What standards of beauty are projected in movies and advertisements? How do these standards affect students?"

7e79 Responding to and Evaluating Texts

1.3 evaluate the effectiveness of the presentation and treatment of ideas, information, themes, opinions, issues, and/or experiences in media texts *(e.g., explain why the editorial/photo essay in this e-zine did or did not convince you of its position; debate whether violence in televised professional sporting events adds to or detracts from their appeal)*

Teacher prompts: "How was this theme developed as the movie unfolded? Did the use of suspense enhance the effectiveness of the message?" "Did this video game deliver the excitement that was promised in the advertisement? What made it succeed/fail?" "Do the sports you see on television affect your decision about participating in particular sports?"

7e80 Audience Responses

1.4 explain why different audiences *(e.g., with respect to gender, age, nationality, ability/disability income level)* might have different responses to a variety of media texts *(e.g., messages in chat rooms, television broadcasts of international news stories, music, documentaries, clothing)*

7e81 Point of View

1.5 demonstrate understanding that different media texts reflect different points of view *(e.g., compare pictures of the same character and/or event in media texts aimed at different audiences and identify the different perspectives represented)* *Teacher prompt:* "What differences can you identify in the way the character is represented in the different texts? Which representation seems most/ least fair? Why? What explanation can you suggest for the differences in the representations?"

7e82 Production Perspectives

1.6 identify who produces various media texts and determine the commercial, ideological, political, cultural, and/or artistic interests or perspectives that the texts may involve *(e.g., films may be classified as "artistic", "commercial", "documentary", and so on, reflecting the different perspectives and approaches they take; one magazine contains a majority of pieces offering a political perspective, whereas another features various pieces written from different perspectives)*

Teacher prompt: "Identify two or more perspectives evident on a cereal box. What makes these perspectives apparent? Are different kinds of graphics used for each? Are there differences in the positioning of elements? Is one perspective more dominant than the other? Explain why this might be the case."

2. Understanding Media Forms, Conventions, and Techniques

7e83 Form

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

Teacher prompt: "Explain how different elements of maps, such as colour (used to show different topographical features) and legends (used to show scale and compass orientation), are used in combination to make maps meaningful." "Describe the interrelationship of instrumentals, lyrics, and vocals in a favourite song."

7e84 Conventions and Techniques

2.2 identify the conventions and techniques used in a variety of media forms and explain how they help convey meaning and influence or engage the audience *(e.g., fashion magazine conventions:* fashion and cosmetics advertisements are more prominent than editorial content; *fashion magazine techniques:* "themed" presentation of clothing in photo spreads, dramatic modelling poses to display novel features of the clothing*)*

Teacher prompts: "What does the placement of the advertisements tell you about a magazine?" "Identify different camera angles used for the photographs in the advertisements and explain their effect."

3. Creating Media Texts

7e85 Purpose and Audience

3.1 explain why they have chosen the topic for a media text they plan to create *(e.g., a class newspaper or pamphlet to inform parents about the achievements and activities of students in the class)*, and identify challenges they may face in engaging and/or influencing their audience

Teacher prompt: "Parents are very busy people. What in your pamphlet will succeed in capturing their attention?"

7e86 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 website or multimedia presentation about a unit of study to present research findings to the class)*, and explain why it is an appropriate choice

Teacher prompt: "What makes this form an effective way to present your message to this particular audience?"

7e87 Conventions and Techniques

3.3 identify conventions and techniques appropriate to the form chosen for a media text they plan to create, and explain how they will use the conventions and techniques to help communicate their message *(e.g., movie poster conventions:* title, images of the actors "in role", positive quotations from reviewers; *movie poster techniques:* distinctive lettering, arresting or unusual layout or treatment of images*)*

7e88 Producing Media Texts

3.4 produce a variety of media texts of some technical complexity for specific purposes and audiences, using appropriate forms, conventions, and techniques*(e.g.,*

- *a class newspaper for parents*
- *a class magazine for students in a lower grade*
- *a multimedia report on a unit of study for geography*
- *a website about the school for new students*
- *a movie poster*
- *an advertisement for a new product*
- *a theatre review with commentary on the use of conventions and techniques for a class/school newspaper*
- *a scene for a film based on a prose narrative*
- *two media texts on the same subject using different media forms)*

4. Reflecting on Media Literacy Skills and Strategies

7e89 Metacognition

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

Teacher prompt: "What aspects of the planning process were most important to the success of your media text?"

7e90 Interconnected Skills

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

Teacher prompts: "How do reading skills help you judge the effectiveness of your own media texts?" "What writing skills might help you improve the effectiveness of your own media texts?"

French as a Second Language Expectations Grade 07

Oral Communication, Reading, and Writing

Overall Expectations

7f1	• listen to and talk about short, oral texts in structured and open-ended situations;
7f2	• read a variety of classroom and simple authentic materials, 200 to 400 words long, and demonstrate understanding;
7f3	• communicate information and ideas in writing, in structured and open-ended situations, for different purposes;
7f4	• identify and use the vocabulary and the grammar and language conventions appropriate for this grade level.

Oral Communication

7f5	– use compound sentences in conversations and dialogues (e.g., Les enfants jouent dans la cour et ils s'amusent beaucoup.);
7f6	– use language appropriately in a variety of rehearsed, routine, and open-ended situations (e.g., a cassette letter, an anti-smoking or anti-drinking message);
7f7	– respond to oral texts (e.g., express opinions) and connect to personal experience;
7f8	– give an oral presentation of fifteen to twenty sentences in length (e.g., report on reading material);
7f9	– make revisions to oral language in form, content, and organization (e.g., sequence of sentences, agreement of irregular adjectives), using resources and feedback.

Reading

7f10	– read at least twelve simple texts (e.g., letters, descriptions, essays), and identify main ideas and some supporting details;
7f11	– produce a variety of simple responses, in structured and open-ended situations, to convey understanding of written text in a different form (e.g., design a biography card);
7f12	– use various reading strategies to determine meaning, such as verbal cues, structures (e.g., inversion), personal experience, and resources;
7f13	– express personal preferences or reactions to a text.

Writing

7f14	– write simple and some compound sentences and questions, using familiar and new vocabulary;
7f15	– write in a variety of simple forms (e.g., letters, poems, descriptions), following a model and making substitutions and minor adaptations to the model;
7f16	– revise and edit personal writing, using feedback from the teacher and peers, and using resources including technology;
7f17	– use and spell the vocabulary appropriate for this grade level.

Mathematical Process Expectations

Problem Solving

7m1 • develop, select, apply, and compare a variety of problem-solving strategies as they pose and solve problems and conduct investigations, to help deepen their mathematical understanding;

Reasoning And Proving

7m2 • develop and apply reasoning skills (e.g., recognition of relationships, generalization through inductive reasoning, use of counter-examples) to make mathematical conjectures, assess conjectures and justify conclusions, and plan and construct organized mathematical arguments;

Reflecting

7m3 • demonstrate that they are reflecting on and monitoring their thinking to help clarify their understanding as they complete an investigation or solve a problem (e.g., by assessing the effectiveness of strategies and processes used, by proposing alternative approaches, by judging the reasonableness of results, by verifying solutions);

Selecting Tools and Computational Strategies

7m4 • select and use a variety of concrete, visual, and electronic learning tools and appropriate computational strategies to investigate mathematical ideas and to solve problems;

Connecting

7m5 • make connections among mathematical concepts and procedures, and relate mathematical ideas to situations or phenomena drawn from other contexts (e.g., other curriculum areas, daily life, current events, art and culture, sports);

Representing

7m6 • create a variety of representations of mathematical ideas (e.g., numeric, geometric, algebraic, graphical, pictorial; onscreen dynamic representations), connect and compare them, and select and apply the appropriate representations to solve problems;

Communicating

7m7 • communicate mathematical thinking orally, visually, and in writing, using mathematical vocabulary and a variety of appropriate representations, and observing mathematical conventions.

Number Sense and Numeration

Overall Expectations

7m8 • represent, compare, and order numbers, including integers;

7m9 • demonstrate an understanding of addition and subtraction of fractions and integers, and apply a variety of computational strategies to solve problems involving whole numbers and decimal numbers;

7m10 • demonstrate an understanding of proportional relationships using percent, ratio, and rate.

Quantity Relationships

7m11 – represent, compare, and order decimals to hundredths and fractions, using a variety of tools (e.g., number lines, Cuisenaire rods, base ten materials, calculators);

7m12 – generate multiples and factors, using a variety of tools and strategies (e.g., identify multiples on a hundreds chart; create rectangles on a geoboard) (Sample problem: List all the rectangles that have an area of 36 cm2 and have whole-number dimensions.);

7m13 – identify and compare integers found in real-life contexts (e.g., –10°C is much colder than +5°C);

7m14 – represent and order integers, using a variety of tools (e.g., two-colour counters, virtual manipulatives, number lines);

7m15 – select and justify the most appropriate representation of a quantity (i.e., fraction, decimal, percent) for a given context (e.g., "I would use a decimal for recording the length or mass of an object, and a fraction for part of an hour.");

7m16 – represent perfect squares and square roots, using a variety of tools (e.g., geoboards, connecting cubes, grid paper);

7m17 – explain the relationship between exponential notation and the measurement of area and volume (Sample problem: Explain why area is expressed in square units [units^2] and volume is expressed in cubic units [units^3].).

Operational Sense

7m18 – divide whole numbers by simple fractions and by decimal numbers to hundredths, using concrete materials (e.g., divide 3 by 1/2 using fraction strips; divide 4 by 0.8 using base ten materials and estimation);

7m19 – use a variety of mental strategies to solve problems involving the addition and subtraction of fractions and decimals (e.g., use the commutative property: 3 x 2/5 x 1/3 = 3x 1/3 x 2/5, which gives 1 x 2/5 = 2/5; use the distributive property: 16.8 ÷ 0.2 can be thought of as (16 + 0.8) ÷ 0.2 = 16 ÷ 0.2 + 0.8 ÷ 0.2, which gives 80 + 4 = 84);

7m20 – solve problems involving the multiplication and division of decimal numbers to thousandths by one-digit whole numbers, using a variety of tools (e.g., concrete materials, drawings, calculators) and strategies (e.g., estimation, algorithms);

7m21 – solve multi-step problems arising from real-life contexts and involving whole numbers and decimals, using a variety of tools (e.g., concrete materials, drawings, calculators) and strategies (e.g., estimation, algorithms);

7m22 – use estimation when solving problems involving operations with whole numbers, decimals, and percents, to help judge the reasonableness of a solution (Sample problem: A book costs $18.49. The salesperson tells you that the total price, including taxes, is $22.37. How can you tell if the total price is reasonable without using a calculator?);

7m23 – evaluate expressions that involve whole numbers and decimals, including expressions that contain brackets, using order of operations;

7m24 – add and subtract fractions with simple like and unlike denominators, using a variety of tools (e.g., fraction circles, Cuisenaire rods, drawings, calculators) and algorithms;

7m25 – demonstrate, using concrete materials, the relationship between the repeated addition of fractions and the multiplication of that fraction by a whole number (e.g., 1/2 + 1/2 + 1/2 = 3 x 1/2);

7m26 – add and subtract integers, using a variety of tools (e.g., two-colour counters, virtual manipulatives, number lines).

Proportional Relationships

7m27 – determine, through investigation, the relationships among fractions, decimals, percents, and ratios;

7m28 – solve problems that involve determining whole number percents, using a variety of tools (e.g., base ten materials, paper and pencil, calculators) (Sample problem: If there are 5 blue marbles in a bag of 20 marbles, what percent of the marbles are not blue?);

7m29 – demonstrate an understanding of rate as a comparison, or ratio, of two measurements with different units (e.g., speed is a rate that compares distance to time and that can be expressed as kilometres per hour);

7m30 – solve problems involving the calculation of unit rates (Sample problem:You go shopping and notice that 25 kg of Ryan's Famous Potatoes cost $12.95, and 10 kg of Gillian's Potatoes cost $5.78. Which is the better deal? Justify your answer.).

Measurement

Overall Expectations

7m31 • report on research into real-life applications of area measurements;

7m32 • determine the relationships among units and measurable attributes, including the area of a trapezoid and the volume of a right prism.

Attributes, Units, and Measurement Sense

7m33 – research and report on real-life applications of area measurements (e.g., building a skateboard; painting a room).

Measurement Relationships

7m34 – sketch different polygonal prisms that share the same volume (Sample problem: The Neuman Company is designing a new container for its marbles. The container must have a volume of 200 cm^3. Sketch three possible containers, and explain which one you would recommend.);

7m35 – solve problems that require conversion between metric units of measure (e.g., millimetres and centimetres, grams and kilograms, millilitres and litres) (Sample problem: At Andrew's Deli, cheese is on sale for $11.50 for one kilogram. How much would it cost to purchase 150 g of cheese?);

7m36 – solve problems that require conversion between metric units of area (i.e., square centimetres, square metres) (Sample problem: What is the ratio of the number of square metres to the number of square centimetres for a given area? Use this ratio to convert 6.25 m^2 to square centimetres.);

7m37 – determine, through investigation using a variety of tools (e.g., concrete materials, dynamic geometry software) and strategies, the relationship for calculating the area of a trapezoid, and generalize to develop the formula [i.e., Area = (sum of lengths of parallel sides x height) ÷ 2] (Sample problem: Determine the relationship between the area of a parallelogram and the area of a trapezoid by composing a parallelogram from congruent trapezoids.);

7m38 – solve problems involving the estimation and calculation of the area of a trapezoid;

7m39 – estimate and calculate the area of composite two-dimensional shapes by decomposing into shapes with known area relationships (e.g., rectangle, parallelogram, triangle) (Sample problem: Decompose a pentagon into shapes with known area relationships to find the area of the pentagon.);

7m40 – determine, through investigation using a variety of tools and strategies (e.g., decomposing right prisms; stacking congruent layers of concrete materials to form a right prism), the relationship between the height, the area of the base, and the volume of right prisms with simple polygonal bases (e.g., parallelograms, trapezoids), and generalize to develop the formula (i.e., Volume = area of base x height) (Sample problem: Decompose right prisms with simple polygonal bases into triangular prisms and rectangular prisms. For each prism, record the area of the base, the height, and the volume on a chart. Identify relationships.);

7m41 – determine, through investigation using a variety of tools (e.g., nets, concrete materials, dynamic geometry software, Polydrons), the surface area of right prisms;

7m42 – solve problems that involve the surface area and volume of right prisms and that require conversion between metric measures of capacity and volume (i.e., millilitres and cubic centimetres) (Sample problem: An aquarium has a base in the shape of a trapezoid. The aquarium is 75 cm high. The base is 50 cm long at the front, 75 cm long at the back, and 25 cm wide. Find the capacity of the aquarium.).

Geometry and Spatial Sense

Overall Expectations

7m43 • construct related lines, and classify triangles, quadrilaterals, and prisms;

7m44 • develop an understanding of similarity, and distinguish similarity and congruence;

7m45 • describe location in the four quadrants of a coordinate system, dilatate two-dimensional shapes, and apply transformations to create and analyse designs.

Geometric Properties

7m46 – construct related lines (i.e., parallel; perpendicular; intersecting at 30º, 45º, and 60º), using angle properties and a variety of tools (e.g., compass and straight edge, protractor, dynamic geometry software) and strategies (e.g., paper folding);

7m47 – sort and classify triangles and quadrilaterals by geometric properties related to symmetry, angles, and sides, through investigation using a variety of tools (e.g., geoboard, dynamic geometry software) and strategies (e.g., using charts, using Venn diagrams) (Sample problem: Investigate whether dilatations change the geometric properties of triangles and quadrilaterals.);

7m48 – construct angle bisectors and perpendicular bisectors, using a variety of tools (e.g., Mira, dynamic geometry software, compass) and strategies (e.g., paper folding), and represent equal angles and equal lengths using mathematical notation;

7m49 – investigate, using concrete materials, the angles between the faces of a prism, and identify right prisms (Sample problem: Identify the perpendicular faces in a set of right prisms.).

Geometric Relationships

7m50 – identify, through investigation, the minimum side and angle information (i.e., side-side-side; side-angle-side; angle-sideangle) needed to describe a unique triangle (e.g., "I can draw many triangles if I'm only told the length of one side, but there's only one triangle I can draw if you tell me the lengths of all three sides.");

7m51 – determine, through investigation using a variety of tools (e.g., dynamic geometry software, concrete materials, geoboard), relationships among area, perimeter, corresponding side lengths, and corresponding angles of congruent shapes (Sample problem: Do you agree with the conjecture that triangles with the same area must be congruent? Justify your reasoning.);

7m52 – demonstrate an understanding that enlarging or reducing two-dimensional shapes creates similar shapes;

7m53 – distinguish between and compare similar shapes and congruent shapes, using a variety of tools (e.g., pattern blocks, grid paper, dynamic geometry software) and strategies (e.g., by showing that dilatations create similar shapes and that translations, rotations, and reflections generate congruent shapes) (Sample problem: A larger square can be composed from four congruent square pattern blocks. Identify another pattern block you can use to compose a larger shape that is similar to the shape of the block.).

Location and Movement

7m54 – plot points using all four quadrants of the Cartesian coordinate plane;

7m55 – identify, perform, and describe dilatations (i.e., enlargements and reductions), through investigation using a variety of tools (e.g., dynamic geometry software, geoboard, pattern blocks, grid paper);

7m56 – create and analyse designs involving translations, reflections, dilatations, and/or simple rotations of two-dimensional shapes, using a variety of tools (e.g., concrete materials, Mira, drawings, dynamic geometry software) and strategies (e.g., paper folding) (Sample problem: Identify transformations that may be observed in architecture or in artwork [e.g., in the art of M.C. Escher].);

7m57 – determine, through investigation using a variety of tools (e.g., pattern blocks, Polydrons, grid paper, tiling software, dynamic geometry software, concrete materials), polygons or combinations of polygons that tile a plane, and describe the transformation(s) involved.

Patterning and Algebra

Overall Expectations

7m58 • represent linear growing patterns (where the terms are whole numbers) using concrete materials, graphs, and algebraic expressions;

7m59 • model real-life linear relationships graphically and algebraically, and solve simple algebraic equations using a variety of strategies, including inspection and guess and check.

Patterns and Relationships

7m60 – represent linear growing patterns, using a variety of tools (e.g., concrete materials, paper and pencil, calculators, spreadsheets) and strategies (e.g., make a table of values using the term number and the term; plot the coordinates on a graph; write a pattern rule using words);

7m61 – make predictions about linear growing patterns, through investigation with concrete materials (Sample problem: Investigate the surface area of towers made from a single column of connecting cubes, and predict the surface area of a tower that is 50 cubes high. Explain your reasoning.);

7m62 – develop and represent the general term of a linear growing pattern, using algebraic expressions involving one operation (e.g., the general term for the sequence 4, 5, 6, 7, … can be written algebraically as n + 3, where n represents the term number; the general term for the sequence 5, 10, 15, 20, … can be written algebraically as 5n, where n represents the term number);

7m63 – compare pattern rules that generate a pattern by adding or subtracting a constant, or multiplying or dividing by a constant, to get the next term (e.g., for 1, 3, 5, 7, 9, …, the pattern rule is "start at 1 and add 2 to each term to get the next term") with pattern rules that use the term number to describe the general term (e.g., for 1, 3, 5, 7, 9, …, the pattern rule is "double the term number and subtract 1", which can be written algebraically as 2 x n – 1) (Sample problem: For the pattern 1, 3, 5, 7, 9, …, investigate and compare different ways of finding the 50th term.).

Variables, Expressions, and Equations

7m64 – model real-life relationships involving constant rates where the initial condition starts at 0 (e.g., speed, heart rate, billing rate), through investigation using tables of values and graphs (Sample problem: Create a table of values and graph the relationship between distance and time for a car travelling at a constant speed of 40 km/h. At that speed, how far would the car travel in 3.5 h? How many hours would it take to travel 220 km?);

7m65 – model real-life relationships involving constant rates (e.g., speed, heart rate, billing rate), using algebraic equations with variables to represent the changing quantities in the relationship (e.g., the equation p = 4t represents the relationship between the total number of people that can be seated (p) and the number of tables (t), given that each table can seat 4 people [4 people per table is the constant rate]);

7m66 – translate phrases describing simple mathematical relationships into algebraic expressions (e.g., one more than three times a number can be written algebraically as 1 + 3x or 3x + 1), using concrete materials (e.g., algebra tiles, pattern blocks, counters);

7m67 – evaluate algebraic expressions by substituting natural numbers for the variables;

7m68 – make connections between evaluating algebraic expressions and determining the term in a pattern using the general term (e.g., for 3, 5, 7, 9, …, the general term is the algebraic expression 2n + 1; evaluating this expression when n = 12 tells you that the 12th term is 2(12) + 1, which equals 25);

7m69 – solve linear equations of the form ax = c or c = ax and ax + b = c or variations such as b + ax = c and c = bx + a (where a, b, and c are natural numbers) by modelling with concrete materials, by inspection, or by guess and check, with and without the aid of a calculator (e.g., "I solved x + 7 = 15 by using guess and check. First I tried 6 for x. Since I knew that 6 plus 7 equals 13 and 13, is less than 15, then I knew that x must be greater than 6.").

Data Management and Probability

Overall Expectations

7m70 • collect and organize categorical, discrete, or continuous primary data and secondary data and display the data using charts and graphs, including relative frequency tables and circle graphs;

7m71 • make and evaluate convincing arguments, based on the analysis of data;

7m72 • compare experimental probabilities with the theoretical probability of an outcome involving two independent events.

Collection and Organization of Data

7m73 – collect data by conducting a survey or an experiment to do with themselves, their environment, issues in their school or community, or content from another subject and record observations or measurements;

7m74 – collect and organize categorical, discrete, or continuous primary data and secondary data (e.g., electronic data from websites such as E-Stat or Census At Schools) and display the data in charts, tables, and graphs (including relative frequency tables and circle graphs) that have appropriate titles, labels (e.g., appropriate units marked on the axes), and scales (e.g., with appropriate increments) that suit the range and distribution of the data, using a variety of tools (e.g., graph paper, spreadsheets, dynamic statistical software);

7m75 – select an appropriate type of graph to represent a set of data, graph the data using technology, and justify the choice of graph (i.e., from types of graphs already studied);

7m76 – distinguish between a census and a sample from a population;

7m77 – identify bias in data collection methods (Sample problem: How reliable are your results if you only sample girls to determine the favourite type of book read by students in your grade?).

Data Relationships

7m78 – read, interpret, and draw conclusions from primary data (e.g., survey results, measurements, observations) and from secondary data (e.g., temperature data or community data in the newspaper, data from the Internet about populations) presented in charts, tables, and graphs (including relative frequency tables and circle graphs);

7m79 – identify, through investigation, graphs that present data in misleading ways (e.g., line graphs that exaggerate change by starting the vertical axis at a point greater than zero);

7m80 – determine, through investigation, the effect on a measure of central tendency (i.e., mean, median, and mode) of adding or removing a value or values (e.g., changing the value of an outlier may have a significant effect on the mean but no effect on the median) (Sample problem: Use a set of data whose distribution across its range looks symmetrical, and change some of the values so that the distribution no longer looks symmetrical. Does the change affect the median more than the mean? Explain your thinking.);

7m81 – identify and describe trends, based on the distribution of the data presented in tables and graphs, using informal language;

7m82 – make inferences and convincing arguments that are based on the analysis of charts, tables, and graphs (Sample problem: Use census information to predict whether Canada's population is likely to increase.).

Probability

7m83 – research and report on real-world applications of probabilities expressed in fraction, decimal, and percent form (e.g., lotteries, batting averages, weather forecasts, elections);

7m84 – make predictions about a population when given a probability (Sample problem: The probability that a fish caught in Lake Goodfish is a bass is 29%. Predict how many bass will be caught in a fishing derby there, if 500 fish are caught.);

7m85 – represent in a variety of ways (e.g., tree diagrams, tables, models, systematic lists) all the possible outcomes of a probability experiment involving two independent events (i.e., one event does not affect the other event), and determine the theoretical probability of a specific outcome involving two independent events (Sample problem: What is the probability of rolling a 4 and spinning red, when you roll a number cube and spin a spinner that is equally divided into four different colours?);

7m86 – perform a simple probability experiment involving two independent events, and compare the experimental probability with the theoretical probability of a specific outcome (Sample problem: Place 1 red counter and 1 blue counter in an opaque bag. Draw a counter, replace it, shake the bag, and draw again. Compare the theoretical and experimental probabilities of drawing a red counter 2 times in a row.).

Science and Technology Expectations (2007) Grade 7

UNDERSTANDING LIFE SYSTEMS: Interactions in the Environment

Overall Expectations

7s1 **CR2007**	1. assess the impacts of human activities and technologies on the environment, and evaluate ways of controlling these impacts;
7s2 **CR2007**	2. investigate interactions within the environment, and identify factors that affect the balance between different components of an ecosystem;
7s3 **CR2007**	3. demonstrate an understanding of interactions between and among biotic and abiotic elements in the environment.

1. Relating Science and Technology to Society and the Environment

7s4 **CR2007**	1.1 assess the impact of selected technologies on the environment Sample issue: The use of technologies such as cars and computers has many impacts on the environment. What are some of these impacts and how do they affect the ability of the environment to support life?
7s5 **CR2007**	1.2 analyse the costs and benefits of selected strategies for protecting the environment Sample issues: (a) Many people recycle because it makes them feel that they are doing something good for the environment. But the focus on recycling takes the emphasis away from strategies like reducing or reusing. (b) Integrated Pest Management (IPM) is a pest management strategy that uses a variety of methods to prevent or control pest problems. But some of the methods can be as much of a problem as the pests themselves. (c) Some groups consider widening highways to reduce traffic congestion to be preferable to improving public transit systems. In some cases, however, highway expansion increases the problems that already existed, and other unexpected problems also arise. (d) Controlling the water flow in natural systems has a domino effect on the environmental integrity of the water system.

2. Developing Investigation and Communication Skills

7s6 **CR2007**	2.1 follow established safety procedures for investigating ecosystems (e.g., stay with a partner, wash hands after investigating an ecosystem)
7s7 **CR2007**	2.2 design and construct a model ecosystem (e.g., a composter, a classroom terrarium, a greenhouse), and use it to investigate interactions between the biotic and abiotic components in an ecosystem Sample guiding questions: What are some biotic components of this ecosystem? What are some abiotic components? How do these components affect each other (abiotic and abiotic; biotic and biotic; abiotic and biotic)? What are some of the interactions that are occurring in the model ecosystem?
7s8 **CR2007**	2.3 use scientific inquiry/research skills (see page 15) to investigate occurrences (e.g., a forest fire, a drought, an infestation of invasive species such as zebra mussels in a local lake or purple loosestrife in a wetland habitat) that affect the balance within a local ecosystem Sample guiding questions: Should naturally caused fires in national parks be allowed to burn to their natural end? How do human activities and natural occurrences contribute to droughts? What happens in a drought? What is the impact of invasive species such as zebra mussels, spiny water fleas, round gobies, and sea lampreys on Ontario lakes, and what can be done to lessen the impact?
7s9 **CR2007**	2.4 use appropriate science and technology vocabulary, including sustainability, biotic, ecosystem, community, population, and producer, in oral and written communication
7s10 **CR2007**	2.5 use a variety of forms (e.g., oral, written, graphic, multimedia) to communicate with different audiences and for a variety of purposes (e.g., design a multimedia presentation explaining the interrelationships between biotic and abiotic components in a specific ecosystem)

3. Understanding Basic Concepts

7s11 **CR2007**	3.1 demonstrate an understanding of an ecosystem (e.g., a log, a pond, a forest) as a system of interactions between living organisms and their environment
7s12 **CR2007**	3.2 identify biotic and abiotic elements in an ecosystem, and describe the interactions between them (e.g., between hours of sunlight and the growth of plants in a pond; between a termite colony and a decaying log; between the soil, plants, and animals in a forest)

7s13 **CR2007**	3.3 describe the roles and interactions of producers, consumers, and decomposers within an ecosystem (e.g., Plants are producers in ponds. They take energy from the sun and produce food, oxygen, and shelter for the other pond life. Black bears are consumers in forests. They eat fruits, berries, and other consumers. By eating other consumers, they help to keep a balance in the forest community. Bacteria and fungi are decomposers. They help to maintain healthy soil by breaking down organic materials such as manure, bone, spider silk, and bark. Earthworms then ingest the decaying matter, take needed nutrients from it, and return those nutrients to the soil through their castings.)
7s14 **CR2007**	3.4 describe the transfer of energy in a food chain and explain the effects of the elimination of any part of the chain
7s15 **CR2007**	3.5 describe how matter is cycled within the environment and explain how it promotes sustainability (e.g., bears carry salmon into the forest, where the remains decompose and add nutrients to the soil, thus supporting plant growth; through crop rotation, nutrients for future crops are created from the decomposition of the waste matter of previous crops)
7s16 **CR2007**	3.6 distinguish between primary succession (e.g., the growth of native grasses on a sand dune) and secondary succession (e.g., the growth of grasses and shrubs in a ploughed field) within an ecosystem
7s17 **CR2007**	3.7 explain why an ecosystem is limited in the number of living things (e.g., plants and animals, including humans) that it can support
7s18 **CR2007**	3.8 describe ways in which human activities and technologies alter balances and interactions in the environment (e.g., clear-cutting a forest, overusing motorized water vehicles, managing wolf-killings in Yukon)
7s19 **CR2007**	3.9 describe Aboriginal perspectives on sustainability and describe ways in which they can be used in habitat and wildlife management (e.g., the partnership between the Anishinabek Nation and the Ministry of Natural Resources for managing natural resources in Ontario)

UNDERSTANDING STRUCTURES AND MECHANISMS: Form and Function

Overall Expectations

7s20 **CR2007**	1. analyse personal, social, economic, and environmental factors that need to be considered in designing and building structures and devices;
7s21 **CR2007**	2. design and construct a variety of structures, and investigate the relationship between the design and function of these structures and the forces that act on them;
7s22 **CR2007**	3. demonstrate an understanding of the relationship between structural forms and the forces that act on and within them.

1. Relating Science and Technology to Society and the Environment

7s23 **CR2007**	1.1 evaluate the importance for individuals, society, the economy, and the environment of factors that should be considered in designing and building structures and devices to meet specific needs (e.g., function; efficiency; ease of use; user preferences; aesthetics; cost; intended lifespan; effect on the environment; safety, health, legal requirements) Sample guiding questions: Why is it important for companies to find out what consumers want now and what they might want and/or need in the future? How might this information influence the design and appearance of a structure, the materials it is made from, and so on? What things might a company need to take into account when considering the construction of a new structure that consumers might not consider (e.g., the environmental impact of using certain resources to make the structure, the eventual disposal of the structure)?
7s24 **CR2007**	1.2 evaluate the impact of ergonomic design on the safety and efficiency of workplaces, tools, and everyday objects (e.g., furniture, computer equipment, home tools and equipment), and describe changes that could be made in personal spaces and activities on the basis of this information (e.g., use computer keyboards and mice that are ergonomically designed; use kitchen tools such as knives with ergonomic handles; use equipment for household jobs that is designed to ease strain on the body, such as ergonomically designed snow shovels and garden tools) Sample guiding questions: What is ergonomics? Why is it important that tools, equipment, and furniture be ergonomically designed? What are some ways in which traditional designs of tools, equipment, and furniture can be changed to be more ergonomic? How might different populations benefit from ergonomic designs (e.g., the elderly, people with physical challenges, students, etc.)?

2. Developing Investigation and Communication Skills

7s25 **CR2007**	2.1 follow established safety procedures for using tools and handling materials (e.g., wear safety glasses when cutting or drilling)
7s26 **CR2007**	2.2 design, construct, and use physical models to investigate the effects of various forces on structures (e.g., the struts of a roof experience compression forces from shingles; the support cables of a suspension bridge are in tension; a twisted ruler has torsion forces; the pin that holds the two parts of a pair of scissors together has shear forces acting on it)
7s27 **CR2007**	2.3 investigate the factors that determine the ability of a structure to support a load (e.g., the weight of the structure itself; the magnitude of the external loads it will need to support; the strength of the materials used to build it)
7s28 **CR2007**	2.4 use technological problem-solving skills (see page 16) to determine the most efficient way for a structure (e.g., a chair, a shelf, a bridge) to support a given load Sample problem: Using the least amount of material (by mass), construct a bridge to support a specific load (e.g., minimum of 4 kilograms).
7s29 **CR2007**	2.5 investigate methods used by engineers to ensure structural safety (e.g., incorporating sensors in structures to detect unusual stresses and give early warning of failure; designing structures to carry much heavier loads than they will actually have to bear)
7s30 **CR2007**	2.6 use appropriate science and technology vocabulary, including truss, beam, ergonomics, shear, and torsion), in oral and written communication 2.7 use a variety of forms (e.g., oral, written, graphic, multimedia) to communicate with different audiences and for a variety of purposes (e.g., use a graphic organizer to show the steps taken in designing and making a product)

3. Understanding Basic Concepts

7s31 **CR2007**	3.1 classify structures as solid structures (e.g., dams), frame structures (e.g., goal posts), or shell structures (e.g., airplane wings)
7s32 **CR2007**	3.2 describe ways in which the centre of gravity of a structure (e.g., a child's high chair, a tower) affects the structure's stability
7s33 **CR2007**	3.3 identify the magnitude, direction, point of application, and plane of application of the forces applied to a structure
7s34 **CR2007**	3.4 distinguish between external forces (e.g., wind, gravity, earthquakes) and internal forces (tension, compression, shear, and torsion) acting on a structure
7s35 **CR2007**	3.5 describe the role of symmetry in structures (e.g., aesthetic appeal, structural stability)
7s36 **CR2007**	3.6 identify and describe factors that can cause a structure to fail (e.g., bad design, faulty construction, foundation failure, extraordinary loads)
7s37 **CR2007**	3.7 identify the factors (e.g., properties of the material as they relate to the product, availability, costs of shipping, aesthetic appeal, disposal) that determine the suitability of materials for use in manufacturing a product (e.g., a running shoe)

UNDERSTANDING MATTER AND ENERGY: Pure Substances and Mixtures

Overall Expectations

7s38 **CR2007**	1. evaluate the social and environmental impacts of the use and disposal of pure substances and mixtures;
7s39 **CR2007**	2. investigate the properties and applications of pure substances and mixtures;

7s40 **CR2007**	3. demonstrate an understanding of the properties of pure substances and mixtures, and describe these characteristics using the particle theory.

1. Relating Science and Technology to Society and the Environment

7s41 **CR2007**	1.1 assess positive and negative environmental impacts related to the disposal of pure substances (e.g., uranium) and mixtures (e.g., paint, sewage) Sample issues: (a) Pure substances that are harmful to people or the environment must be disposed of very carefully. That usually means burying them in special landfills or underground chambers that will keep them from getting back into the environment or, if possible, recycling them or converting them into a substance that is not harmful. If these solutions are not possible, then we have to reduce our use of the substance or not use it all. (b) Mixtures that have harmful components must be treated in the same way. Lead-based paint is a mixture that has to be disposed of in special landfills because the lead in it is harmful. Latex paint, which has no harmful components, does not require special treatment. Sometimes, harmful components can be separated from the rest of the mixture, leaving less material for special disposal. Sewage is an example. Solid materials can be removed and decomposed by bacteria, leaving water that can be returned to lakes and rivers. The leftover sludge can be buried or, if it does not contain toxic materials, converted into fertilizer. (c) Nuclear power stations produce no air pollutants, but the used uranium fuel rods remain dangerously radioactive for thousands of years. What options have been proposed for disposing of this waste? How safe are they? How would these concerns affect your decision about whether to heat your home by using electricity that is provided by nuclear energy?
7s42 **CR2007**	1.2 assess the impact on society and the environment of different industrial methods of separating mixtures and solutions Sample guiding questions: Why might oil refineries be located away from populated areas? How do air purification systems make air healthier for people to breathe? What are the impacts on the environment of the evaporation process used in making maple syrup?

2. Developing Investigation and Communication Skills

7s43 **CR2007**	2.1 follow established safety procedures for handling chemicals and apparatus (e.g., wash hands after handling chemicals, take note of universal warning symbols)
7s44 **CR2007**	2.2 use scientific inquiry/experimentation skills (see page 12) to investigate factors (e.g., temperature, type of solute or solvent, particle size, stirring) that affect the solubility of a substance and the rate at which substances dissolve
7s45 **CR2007**	2.3 investigate processes (e.g., filtration, distillation, settling, magnetism) used for separating different mixtures Sample problem: Use filtration and magnetism to separate a mixture of water, sand, and paperclips. Use filtration to separate marbles of different sizes. Use evaporation to separate dissolved salt from water.
7s46 **CR2007**	2.4 use scientific inquiry/experimentation skills (see page 12) to investigate the properties of mixtures and solutions (e.g., the amount of solute required to form a saturated solution; differences between pure substances and mixtures) Sample guiding questions: How does changing the amount of solute or solvent affect the solution? What factors affect the amount of solute that can dissolve in a solvent? What factors affect the speed at which a solute dissolves?
7s47 **CR2007**	2.5 use appropriate science and technology vocabulary, including mechanical mixture, solution, solute, insoluble, saturated, unsaturated, and dilute, in oral and written communication
7s48 **CR2007**	2.6 use a variety of forms (e.g., oral, written, graphic, multimedia) to communicate with different audiences and for a variety of purposes (e.g., using appropriate mathematical conventions, make a scatter plot to show the relationship between solute, solvent, and temperature)

3. Understanding Basic Concepts

7s49 **CR2007**	3.1 distinguish between pure substances (e.g., distilled water, salt, copper pipe) and mixtures (e.g., salad dressing, chocolate chip cookies)
7s50 **CR2007**	3.2 state the postulates of the particle theory of matter (all matter is made up of particles; all particles are in constant motion; all particles of one substance are identical; temperature affects the speed at which particles move; in a gas, there are spaces between the particles; in liquids and solids, the particles are close together and have strong forces of attraction between them)
7s51 **CR2007**	3.3 use the particle theory to describe the difference between pure substances (which have identical particles) and mixtures (which have different particles)

7s52 **CR2007**	3.4 distinguish between solutions and mechanical mixtures
7s53 **CR2007**	3.5 describe the processes (e.g., evaporation, sifting, filtration, distillation, magnetism) used to separate mixtures or solutions into their components, and identify some industrial applications of these processes (e.g., use of cheesecloth to separate seeds and skins from juice and pulp to make fruit jellies; use of evaporation in maple syrup production; use of different sizes of sieves to separate wheat grains in white bread production; use of strainers in industries to separate slurry into solids and liquids)
7s54 **CR2007**	3.6 identify the components of a solution (e.g., solvent, solute)
7s55 **CR2007**	3.7 identify solutes and solvents in various kinds of solutions (e.g., copper and tin in bronze; iodine and alcohol in iodine solution)
7s56 **CR2007**	3.8 describe the concentration of a solution in qualitative terms (e.g., dilute, concentrated) and in quantitative terms (e.g., 5 grams of salt in 1000 ml of water)
7s57 **CR2007**	3.9 describe the difference between saturated and unsaturated solutions
7s58 **CR2007**	3.10 explain why water is referred to as the universal solvent

UNDERSTANDING EARTH AND SPACE SYSTEMS: Heat in the Environment

Overall Expectations

7s59 **CR2007**	1. assess the costs and benefits of technologies that reduce heat loss or heat-related impacts on the environment;
7s60 **CR2007**	2. investigate ways in which heat changes substances, and describe how heat is transferred;
7s61 **CR2007**	3. demonstrate an understanding of heat as a form of energy that is associated with the movement of particles and is essential to many processes within the earth's systems.

1. Relating Science and Technology to Society and the Environment

7s62 **CR2007**	1.1 assess the social and environmental benefits of technologies that reduce heat loss or transfer (e.g., insulated clothing, building insulation, green roofs, energy-efficient buildings) Sample guiding questions: (a) Insulated clothing protects our bodies and increases our ability to enjoy outdoor activities in winter. What science and technology concepts are at work in coats designed for use in cold weather? Who might be interested in such designs? (b) A wellinsulated home is more comfortable and costs less to heat. Reducing heat loss saves energy, and saving energy reduces the environmental impact of energy production. What are some areas of your home where heat might be lost? How can this heat loss be counteracted? What are the benefits of doing so? (c) Green roofs save on heating and cooling costs and reduce the amount of insulation that is needed. But they have not gained wide acceptance in Ontario. What might be some deterrents to having a green roof? How might these deterrents be overcome? (d) Energy-efficient buildings are extremely airtight compared to conventionally constructed buildings. This minimizes the amount of warm (or cool) air that can pass through the structure. What are some of the disadvantages to having airtight buildings (e.g., lack of fresh air, moisture buildup)? How can these problems be solved (e.g., through mechanical ventilation systems with heat recovery and humidity control), and how effective are the solutions?
7s63 **CR2007**	1.2 assess the environmental and economic impacts of using conventional (e.g., fossil fuel, nuclear) and alternative forms of energy (e.g., geothermal, solar, wind, wave, biofuel) Sample issues: (a) Your family is building a new home. Present a case for installing a geothermal heat pump. In your discussion, be sure to include the benefits and costs from both an environmental perspective and an economic perspective. (b) Make a case for (or against) using rural land or marginal land-use areas for wind turbine farms.

2. Developing Investigation and Communication Skills

7s64 **CR2007**	2.1 follow established safety procedures for using heating appliances and handling hot materials (e.g., use protective gloves when removing items from hot plates)
7s65 **CR2007**	2.2 investigate the effects of heating and cooling on the volume of a solid, a liquid, and a gas
7s66 **CR2007**	2.3 use technological problem-solving skills (see page 16) to identify ways to minimize heat loss Sample problem: Use the materials provided to create a product (e.g., a model of a piece of winter clothing, a model of a wet suit, a model travel mug for a hot beverage or food item) that will minimize heat loss
7s67 **CR2007**	2.4 use scientific inquiry/experimentation skills (see page 12) to investigate heat transfer through conduction, convection, and radiation Sample problem (conduction): After letting spoons made of different materials sit partially submerged in a container of hot water, measure the temperature of the parts sticking out of the water. What conclusions can you draw from your findings?
7s68 **CR2007**	2.5 use appropriate science and technology vocabulary, including heat, temperature, conduction, convection, and radiation, in oral and written communication
7s69 **CR2007**	2.6 use a variety of forms (e.g., oral, written, graphic, multimedia) to communicate with different audiences and for a variety of purposes (e.g., using the conventions of science, create a labelled diagram to illustrate convection in a liquid or a gas)

3. Understanding Basic Concepts

7s70 **CR2007**	3.1 use the particle theory to compare how heat affects the motion of particles in a solid, a liquid, and a gas
7s71 **CR2007**	3.2 identify ways in which heat is produced (e.g., burning fossil and renewable fuels, electrical resistance, physical activity)
7s72 **CR2007**	3.3 use the particle theory to explain the effects of heat on volume in solids (e.g., rails, sidewalks, and bridge segments expand in hot weather), liquids (e.g., sea levels are rising partly because global warming is making the oceans warmer and the water in them is expanding), and gases (e.g., the air in car tires expands on hot pavement)
7s73 **CR2007**	3.4 explain how heat is transmitted through conduction (e.g., the transmission of heat from a stove burner to a pot and from the pot to the pot handle), and describe natural processes that are affected by conduction (e.g., the formation of igneous and metamorphic rocks and diamonds)
7s74 **CR2007**	3.5 explain how heat is transmitted through convection, and describe natural processes that depend on convection (e.g., thunderstorms, land and sea breezes)
7s75 **CR2007**	3.6 explain how heat is transmitted through radiation, and describe the effects of radiation from the sun on different kinds of surfaces (e.g., an ice-covered lake, a forest, an ocean, an asphalt road)
7s76 **CR2007**	3.7 describe the role of radiation in heating and cooling the earth, and explain how greenhouse gases affect the transmission of radiated heat through the atmosphere (e.g.,The earth is warmed by absorbing radiation from the sun. It cools by radiating thermal energy back to space. Greenhouse gases absorb some of the radiation that the earth emits to space and reradiate it back to the earth's surface. If the quantity of greenhouse gases in the atmosphere increases, they absorb more outgoing radiation, and the earth becomes warmer.)
7s77 **CR2007**	3.8 identify common sources of greenhouse gases (e.g., carbon dioxide comes from plant and animal respiration and the burning of fossil fuels; methane comes from wetlands, grazing livestock, termites, fossil fuel extraction, and landfills; nitrous oxide comes from soils and nitrogen fertilizers), and describe ways of reducing emissions of these gases

New France

Overall Expectations

7h1 • outline the reasons why settlers came to New France; identify the social, political, religious, and economic factors that shaped the colony; and describe how settlers and fur traders interacted with the First Nation peoples;

7h2 • use a variety of resources and tools to gather, process, and communicate information about how settlers in New France met the physical, social, and economic challenges of the new land;

7h3 • identify and explain similarities and differences in the goals and interests of various groups in New France, including French settlers, First Nation peoples, and both French and English fur traders.

Knowledge and Understanding

7h4 – explain why people came to live in New France (e.g., for land, for military reasons, for the fur trade, for religious reasons) and describe the impact of European immigration on First Nation settlements;

7h5 – identify key characteristics of economic, political, and social life in New France (e.g., the seigneurial system; the roles of governor, bishop, and intendant);

7h6 – identify and explain examples of conflict and cooperation between the French and First Nation peoples (e.g., with respect to the fur trade, religion and culture, military alliances/conflicts), and between the French and English fur traders (e.g., competition between the North West Company and the Hudson's Bay Company);

7h7 – outline the background and causes of key events of the period (e.g., the expulsion of the Acadians, the Seven Years'War, the Battle of the Plains of Abraham) and describe their effects.

Inquiry/Research and Communication Skills

7h8 – formulate questions to aid in gathering and clarifying information (e.g., How did the Catholic Church influence the life of First Nation peoples and French settlers in New France?);

7h9 – use a variety of primary and secondary sources to locate relevant information about how early settlers met the challenges of the new land (e.g., *primary sources*: artefacts, journals, letters, statistics, field trips, interviews, period documents and maps; *secondary sources*: maps, illustrations, print materials, videos, CD-ROMs, Internet sites);

7h10 – analyse, synthesize, and evaluate historical information from different points of view (e.g., First Nation peoples' ideas about spirituality and Jesuit ideas about religion);

7h11 – analyse and describe conflicting points of view about a historical event (e.g., the expulsion of the Acadians), giving examples of fact and opinion;

7h12 – construct and interpret a wide variety of graphs, charts, diagrams, maps, and models to organize and interpret information (e.g., create a diagram illustrating the structure of the government in New France);

7h13 – communicate the results of inquiries for specific purposes and audiences, using media works, oral presentations, written notes and reports, drawings, tables, charts, and graphs (e.g., create a chart illustrating the organization of the seigneury);

7h14 – use appropriate vocabulary (e.g., seigneurial system, rivalry, expulsion, Acadian) to describe their inquiries and observations.

Application

7h15 – compare and contrast past and present attitudes to the fur industry (e.g., ideas about trapping, fashion);

7h16	– compare the attractions and drawbacks for French Canadians in choosing life on a farm versus life in the church or in the woods (e.g., as an *habitant,* a Jesuit priest, an Ursuline nun, a *coureur de bois*,a *fille du roi*).

British North America

Overall Expectations

7h17	• explain the origins of English settlement in British North America after the fall of New France, describe the migration and settlement experiences of the various groups of settlers, and outline the causes, events, and results of the War of 1812;
7h18	• use a variety of resources and tools to gather, process, and communicate information about the beginnings and development of the new British colonies;
7h19	• identify some themes and personalities from the period, and explain their relevance to contemporary Canada.

Knowledge and Understanding

7h20	– explain the historical impact of key events on the settlement of British North America (e.g., the Treaty of Paris, the Quebec Act, the American Revolution);
7h21	– describe the different groups of people (e.g., Black Loyalists, slaves, indentured servants, Iroquois allied nations, Maritime Loyalists) who took part in the Loyalists' migration and identify their areas of settlement;
7h22	– outline the reasons for the early settlement of English Canada (e.g., as an outcome of the American Revolution);
7h23	– explain key characteristics of life in English Canada from a variety of perspectives (e.g., family life, economic and social life, the growth and development of early institutions, transportation, relationships with First Nation peoples and French settlers);
7h24	– describe the major causes and personalities of the War of 1812;
7h25	– describe the impact of the War of 1812 on the development of Canada (e.g., defence-related construction, as in Fort Henry and the Rideau Canal; the movement of the capital to Bytown [Ottawa]; the emergence of national pride; the building of roads such as Kingston Road and Yonge Street; the shipping industry in the Maritimes);
7h26	– identify the achievements and contributions of significant people (e.g., Sir John Graves Simcoe, Lady Elizabeth Simcoe, Joseph Brant/Thayendanegea).

Inquiry/Research and Communication Skills

7h27	– formulate questions to facilitate research on specific topics (e.g.,Why were the Iroquois peoples allied with the British Crown? How were Indian reserves created in English Canada and French Canada and what were their impacts on First Nation peoples?);
7h28	– use a variety of primary and secondary sources to locate relevant information about how early settlers met the challenges of the new land (e.g., *primary sources*: artefacts, journals, letters, statistics, field trips, interviews, period documents and maps; *secondary sources*: maps, illustrations, print materials, videos, CD-ROMs, Internet sites);
7h29	– analyse, synthesize, and evaluate historical information (e.g., debate the question: Who won the War of 1812?);
7h30	– describe and analyse conflicting points of view about a series of historical events (e.g., the Royal Proclamation of 1763, the Quebec Act of 1774, the Declaration of Independence of 1776, the Indian Act of 1876);
7h31	– construct and use a wide variety of graphs, charts, diagrams, maps, and models to organize and interpret information (e.g., on a map of North America, trace the migration routes of the Loyalists and identify their areas of settlement);

7h32 – communicate the results of inquiries for specific purposes and audiences, using media works, oral presentations, written notes and reports, drawings, tables, charts, and graphs (e.g., conduct a historical demonstration of immigrants coming to the Canadas);

7h33 – use appropriate vocabulary (e.g., *institutions, revolution, Loyalists, Patriots, Upper Canada, Lower Canada*) to describe their inquiries and observations.

Application

7h34 – illustrate the historical development of their local community (e.g., its origins, key personalities, and the contributions of various cultural groups), using a variety of formats (e.g., a heritage display, posters, a drama skit or role play, a brochure, a Web page);

7h35 – prepare and present a biographical sketch of a historical person from the period 1759-1812 (e.g., Laura Secord, Isaac Brock,Tecumseh,Thomas Peters).

Conflict and Change

Overall Expectations

7h36 • describe the causes, personalities, and results of the rebellions of 1837–38 in Upper and Lower Canada in relation to themes of conflict and change;

7h37 • use a variety of resources and tools to gather, process, and communicate information about issues and conflicts in Upper and Lower Canada, and about the attempts to resolve them;

7h38 • compare methods of conflict resolution in both historical and contemporary situations.

Knowledge and Understanding

7h39 – identify types of conflict (e.g., war, rebellion, strike, protest), and describe strategies for conflict resolution;

7h40 – identify key issues and events of the rebellions of 1837–38 in Upper and Lower Canada (e.g., issues related to land, transportation, government; events such as Mackenzie's march down Yonge Street);

7h41 – describe the role of key personalities (e.g., Mackenzie, Papineau, Bond Head) involved in the rebellions, and the methods they used to bring about change;

7h42 – explain the major social, economic, political, and legal changes that resulted from the rebellions and their impact on the Canadas (e.g., the Durham Report, the union of the Canadas, the Rebellion Losses Bill).

Inquiry/Research and Communication Skills

7h43 – formulate questions to guide research on issues and problems (e.g.,Why is Mackenzie a hero to some Canadians and a traitor to others?);

7h44 – use a variety of primary and secondary sources to locate relevant information about key personalities involved in the rebellions (e.g., primary sources: artefacts, journals, letters, statistics, field trips, period documents and maps; secondary sources: maps, illustrations, print materials, videos, CD-ROMs, Internet sites);

7h45 – analyse, synthesize, and evaluate historical information (e.g., Papineau's Ninety-two Resolutions);

7h46 – describe and analyse conflicting points of view about a series of historical events (e.g., Should rebels be given amnesty? Should women have a role in governing councils?);

7h47 – construct and use a wide variety of graphs, charts, diagrams, maps, and models to organize and interpret information (e.g., label the transportation routes and location of skirmishes on a map of Upper and Lower Canada);

7h48 – investigate and report on methods of conflict resolution employed in everyday life at home, at school, and in the community;

7h49 – communicate the results of inquiries for specific purposes and audiences, using media works, oral presentations, written notes and descriptions, drawings, tables, charts, and graphs (e.g., label the original political divisions on a map of Upper and Lower Canada);

7h50 – use appropriate vocabulary (e.g., *rebellion, moderate, radical, conflict, responsible government, Family Compact, Château Clique, Patriote, Fils de la Liberté, Doric Club*) to describe their inquiries and observations.

Application

7h51 – compare the impact of political unrest and change in the Maritimes and in Upper and Lower Canada in the 1820s and 1830s;

7h52 – compare and contrast historical conflict-resolution strategies with those used today to resolve disputes at home, at school, and in the community.

The Themes of Geographic Inquiry

Overall Expectations

7g1 • identify and explain the themes of geographic inquiry: location/place, environment, region, interaction, and movement;

7g2 • use a variety of geographic resources and tools to gather, process, and communicate geographic information;

7g3 • analyse current environmental issues or events from the perspective of one or more of the themes of geographic inquiry.

Knowledge and Understanding

7g4 – explain the geographic concept of location/place (e.g., "location" means where a place is and where it is relative to other places; "place" is defined by unique physical and human characteristics);

7g5 – explain the geographic concept of environment (e.g., "environment" refers to physical surroundings and conditions, particularly as they affect people's lives);

7g6 – explain the geographic concept of region (e.g., a region is a part of the earth's surface that has similar characteristics throughout its extent; the concept of region helps to simplify complex ideas);

7g7 – explain the geographic concept of interaction (e.g., the environment provides opportunities and challenges; people change the environment as they use it);

7g8 – explain the geographic concept of movement (e.g., "movement" refers to the flow of people, goods, and information and the factors that affect this flow).

Inquiry/Research and Communication Skills

7g9 – formulate questions to guide and synthesize research on an environmental issue (e.g.,What is the effect on various groups of the government moratorium on cod fishing? What role does an environmentalist play in the planning of an urban community?);

7g10 – locate and use relevant information from a variety of primary and secondary sources (e.g., primary sources: interviews, statistics, aerial photographs, satellite images, live telecasts; secondary sources: maps, diagrams, illustrations, print materials, videos, CD-ROMs, Internet sites);

7g11 – communicate the results of inquiries about different points of view on an issue, using computer slide shows, videos, web-sites, oral presentations, written notes and reports, drawings, tables, charts, diagrams, maps, models, and graphs (e.g., write and produce an interview presenting a perspective on government restrictions on fishing);

7g12 use appropriate vocabulary (e.g., *phenomena, issues, bias, fact, opinion, absolute location, relative location, interaction, region*) to describe their inquiries and observations.

Map, Globe, and Graphic Skills *

7g13 – create and use maps for a variety of purposes (e.g., a thematic map of hurricane regions that illustrates an environmental pattern, a thematic map of deforested areas).

Application

7g14 – apply the perspective of one or more themes of geographic inquiry to produce a report (e.g., newspaper, television, radio, website) on an actual or fictional environmental event (e.g., forest fires, illegal dumping, an oil spill, deforestation, an epidemic, drought, the development of a new mine, the depletion of fish stocks);

7g15 – choose an environmental issue that illustrates one of the themes of geographic inquiry and explain why various individuals and groups have different opinions on the issue (e.g., *theme of interaction*: wilderness conservationists versus loggers);

7g16 – create a visual presentation (e.g., computer slide show, storyboard, poster, video) to report on how conditions in and around the school illustrate the five themes of geographic inquiry.

Patterns in Physical Geography

Overall Expectations

7g17 • identify patterns in physical geography and explain the factors that produce them;

7g18 • use a variety of resources and tools to gather, process, and communicate geographic information about the earth's physical features and patterns;

7g19 • explain how patterns of physical geography affect human activity around the world.

Knowledge and Understanding

7g20 – identify various types of landforms and explain how they are used to describe regions;

7g21 – identify and describe world landform patterns (e.g., fold mountains along the west coast of North and South America, continental drainage basins and river systems);

7g22 – explain how world climate patterns result from the interaction of several factors (i.e., latitude, altitude, global wind systems, air masses, proximity to large bodies of water, ocean currents);

7g23 – identify the effects of natural phenomena (e.g., tornadoes, earthquakes, hurricanes) on people and the environment;

7g24 – explain how natural vegetation patterns result from the interaction of several factors, including climate, landforms, soil types, and competition for available nutrients (e.g., *landforms*: plains/grains; *climate*: tropics/fruit);

7g25 – identify major river systems of the world (e.g., the Amazon, the Nile, the St. Lawrence, the Mississippi, the Yangtze) and describe their drainage patterns as either dendritic or trellis;

7g26 – identify the characteristics of the three types of agriculture – subsistence, commercial, and specialized – and the differing climate, topography, and soil conditions that are favourable to each type;

7g27 – describe how the following major factors influence commercial agriculture: location, climate, raw materials, market, labour, transportation.

Inquiry/Research and Communication Skills

7g28 – formulate questions to guide research for a comparative study of physical patterns (e.g.,What features characterize different types of river drainage systems around the world? What are the similarities and differences between the Cascade Mountains and the Rocky Mountains? What effect does pollution of the Great Lakes have on the lives of Canadians? What effect does acid precipitation have on the forest industry?);

7g29 – locate relevant information using a variety of primary and secondary sources (e.g., *primary sources*: aerial photographs, satellite images, interviews, field studies; *secondary sources*: climate maps, illustrations, print materials, videos, CD-ROMs, Internet sites);

7g30 – communicate the results of inquiries and analyses for specific purposes and audiences, using computer slide shows, videos, websites, oral presentations, written notes and descriptions, drawings, tables, charts, diagrams, maps, models, and graphs (e.g., create a map showing the relationship between physical features of the country and recreational activities; create a model of different physical patterns; present a computer slide show of how the mountain ranges of the world were created);

7g31 – use appropriate vocabulary, including correct geographic terminology (e.g., *classify, climate graph, pattern, latitude, altitude, contour lines*), to describe their inquiries and observations.

Map, Globe, and Graphic Skills *

7g32 – use a variety of thematic and topographic maps to identify patterns in physical geography;

7g33 – construct, interpret, and compare climate graphs;

7g34 – use contour lines to represent elevation on maps (e.g., Mount Olympus, Mount Pelée, Fuji-san);

7g35 – draw cross-sectional diagrams from topographic maps (e.g., of landforms, river profiles).

Application

7g36 – investigate and report on world patterns of landforms, climate, and vegetation that are favourable to specialized types of commercial agriculture (e.g., tree farming, potatoes, cotton, rice, coffee, bananas, tobacco, sugar cane, sheep, beef, dairy farming);

7g37 – investigate the physical features and climate of a variety of popular tourist destinations and use a decision-making model to select an ideal travel destination.

Natural Resources

Overall Expectations

7g38 • describe how humans acquire, manage, and use natural resources, and identify factors that affect the importance of those resources;

7g39 • use a variety of resources and tools to gather, process, and communicate geographic information about the distribution, use, and importance of natural resources;

7g40 • describe positive and negative ways in which human activity can affect resource sustainability and the health of the environment.

Knowledge and Understanding

7g41 – describe a variety of ways in which people use and manage renewable, non-renewable, and flow resources to meet their needs;

7g42 – identify patterns in the distribution and use of natural resources throughout the world;

7g43 – describe ways in which technology has affected our use of natural resources (e.g., with respect to their discovery, management, extraction, processing, and marketing);

7g44 – explain the concept of sustainable development and its implications for the health of the environment;

7g45 – describe the economic importance of natural resources to a particular country (e.g., fish along Canada's coasts, diamonds in South Africa, oil in the Middle East).

Inquiry/Research and Communication Skills

7g46 – formulate questions to guide research into problems and points of view regarding the management and use of natural resources (e.g., How important are Canada's mineral deposits and extraction to the country's economy? What effect would the discovery of a new gold or diamond deposit have on its surrounding area? How can we ensure the sustainability of a resource? How might changes in technology affect natural resource extraction and use?);

7g47 – locate and record relevant information from a variety of primary and secondary sources (e.g., *primary sources*: eyewitness interviews, field studies; *secondary sources*: maps, illustrations, diagrams, print materials, videos, CD-ROMs, Internet sites);

7g48 – communicate the results of inquiries for specific purposes and audiences using computer slide shows, videos, websites, oral presentations, written notes and descriptions, drawings, tables, charts, diagrams, maps, models, and graphs (e.g., create a poster to promote the proper use of a natural resource; stage a debate on a proposal to extract a resource in an environmentally sensitive area such as the tundra or the ocean floor);

7g49 – use appropriate vocabulary, including correct geographic terminology (e.g., *flow resource, non-renewable, renewable, sustainable development*), to describe their inquiries and observations.

Map, Globe, and Graphic Skills *

7g50 – produce maps showing locations of Canada's natural resources;

7g51 – use thematic maps to identify patterns of natural resources (e.g., locations of valuable minerals).

Application

7g52 – produce a report (e.g., newspaper, television, website) on the factors that affect the future availability of natural resources (e.g., overfishing, clear-cut logging, urban sprawl, accessibility of resource deposits);

7g53 – present and defend a point of view on how a resource should be used.

Healthy Living

Overall Expectations

7p1 • relate healthy eating practices and active living to body image and self-esteem;

7p2 • describe age-appropriate matters related to sexuality (e.g., the need to develop good interpersonal skills, such as the ability to communicate effectively with the opposite sex);

7p3 • explain how harassment relates to personal safety;

7p4 • apply living skills to deal with peer pressure related to substance use and abuse.

Healthy Eating

7p5 – examine the effects of healthy eating and regular physical activity on body size and shape, and on self-esteem;

7p6 – describe how our body image influences our food choices;

7p7 – identify factors affecting healthy body weight (e.g., food intake, growth spurts, physical activity/inactivity);

Growth and Development

7p8 – explain the male and female reproductive systems as they relate to fertilization;

7p9 – distinguish between the facts and myths associated with menstruation, spermatogenesis, and fertilization;

7p10 – identify the methods of transmission and the symptoms of sexually transmitted diseases (STDs), and ways to prevent them;

7p11 – use effective communication skills (e.g., refusal skills, active listening) to deal with various relationships and situations;

7p12 – explain the term abstinence as it applies to healthy sexuality;

7p13 – identify sources of support with regard to issues related to healthy sexuality (e.g., parents/guardians, doctors);

Personal Safety / Injury Prevention

7p14 – describe harassment and identify ways of dealing with it (e.g., by communicating feelings and reporting incidents of harassment);

7p15 – identify people and resources that can support someone experiencing harassment;

Substance Use / Abuse

7p16 – outline a variety of issues related to substance use and abuse (e.g., the effects of second-hand smoke; the impact of laws governing drug use, including the use of tobacco and alcohol);

7p17 – identify and categorize drugs as stimulants, depressants, and hallucinogens;

7p18 – apply a decision-making process to make informed choices regarding drug use;

7p19 – demonstrate strategies (e.g., saying no, walking away) that can be used to counter pressures to smoke, drink, and take drugs, and identify healthy alternatives to drug use.

Fundamental Movement Skills

Overall Expectations

7p20 • combine a variety of movement skills (locomotion/travelling, manipulation, and stability) in games, gymnastics, dance, and outdoor pursuits (e.g., basketball, flag football, gymnastics floor routines, novelty dances like the Alley Cat, orienteering);

7p21 • apply the principles of movement while refining movement skills (e.g., running into an open space to elude an opponent in soccer).

Locomotion / Travelling Skills

7p22 – perform locomotion/travelling, manipulation, and stability skills in combination (e.g., in high jump: approaching the bar, taking off, and landing);

7p23 – move to external stimuli, using a variety of steps, sequences, directions, and hand actions (e.g., square dancing, doing fitness routines);

Manipulation Skills

7p24 – send an object to a partner, to a target, or over a net, using a serve, an underhand throw or pass, or an overhand throw or pass (e.g., a volleyball underhand serve, underhand bump pass, or overhand volley pass);

7p25 – perform a variety of throws, passes, and shots after a faking motion;

7p26 – intercept objects (e.g., balls, Frisbees) while moving in various directions and at different speeds;

7p27 – pass an object to a moving partner (e.g., using a chest pass, bounce pass,two-hand overhead pass, one-hand overhead pass) for distance and accuracy;

Stability Skills

7p28 – balance while moving from one static position to another on the floor and on equipment (gymnastics, dance);

7p29 – dismount from equipment and land safely and in control;

7p30 – transfer their body weight to get over pieces of apparatus (e.g., vaulting).

Active Participation

Overall Expectations

7p31 • participate on a regular basis in physical activities that maintain or improve physical fitness (e.g., power walking, hiking);

7p32 • identify the benefits of each component of physical fitness (e.g., cardiorespiratory fitness – healthy heart and lungs);

7p33 • apply living skills (e.g., basic problem-solving, decision-making, goal-setting, and conflict-resolution techniques) in physical activities (e.g., games, gymnastics, dance, music, outdoor pursuits);

7p34 • transfer appropriate interpersonal skills (e.g., exhibiting etiquette, fair play, co-operation, and respectful behaviour) to new physical activities;

7p35 • follow safety procedures related to physical activity, equipment, and facilities, and continue to take responsibility for their own safety.

Physical Activity

7p36 – participate vigorously in all aspects of the program (e.g., three-on-three basketball, aerobics);

7p37 – apply the factors that motivate their daily activities (e.g., competing, attaining improved fitness levels) to their personal action plans;

Physical Fitness

7p38 – improve or maintain their personal fitness levels by participating in sustained moderate to vigorous fitness activity for a minimum of twenty minutes each day, including appropriate warm-up and cool-down procedures;

7p39 – identify the training principles that affect their fitness levels (e.g., frequency, intensity, time, and type – F.I.T.T.);

7p40 – assess their own levels of physical fitness on an ongoing basis, comparing with past performances, and apply the information to their personal goals;

Living Skills

7p41 – apply a goal-setting process (e.g., set a realistic goal, identify and address barriers, prepare an action plan, determine and access sources of support, and identify how to know when the goal has been reached) to short-term goals related to physical activity or personal fitness;

7p42 – participate fairly in games or activities (e.g., accepting and respecting decisions made by officials, whether they are students, teachers, or coaches).

Music

Overall Expectations

7a1	• demonstrate an understanding of the basic elements of music specified for this grade (see below) through listening to, performing, and creating music;
7a2	• sing and play instruments with expression and proper technique (e.g., with correct breathing, posture, embouchure, intonation);
7a3	• use correctly the musical terminology associated with the specific expectations for this grade;
7a4	• read, write, and perform from musical notation accurately and with some fluency;
7a5	• communicate their understanding and knowledge of music in appropriate ways (e.g., through an oral presentation of research, through creative movement);
7a6	• identify and perform music of a variety of cultures and historical periods.

Knowledge of Elements

7a7	– identify the names of the notes of the clef appropriate to their vocal range and/or instrument (e.g., treble clef, bass clef);
7a8	– recognize unisons, seconds, and thirds aurally and in written form;
7a9	– read music accurately from the staff, using their knowledge of notation (including sharps, flats, naturals, and key signatures) and intervals;
7a10	– sing and play the major scale in keys that they encounter in the music they perform;
7a11	– demonstrate the ability to produce the same pitch as others, vocally or instrumentally (e.g., while playing or singing in pairs, in sections, in a large group);
7a12	– identify the dotted half-note, the dotted quarter-note, and the corresponding rests in pieces studied, and explain the function of the dot;
7a13	– identify the dotted quarter-note and eighth-note combination and the eighth-quarter-eighth combination in pieces studied, and recognize the latter as a form of syncopation;
7a14	– demonstrate an understanding of appropriate articulation in singing or playing music;
7a15	– identify simple duple and triple metres and the corresponding time signatures (2/4 and 3/4) in music they sing or play;
7a16	– identify note and rest values in 4/4, 3/4, and 2/4 time in pieces studied;
7a17	– identify the upbeat and downbeat, as well as conducting patterns for 2/4, 3/4, and 4/4 metres, in pieces studied;
7a18	– identify pick-up notes, first and second endings, and D.C. al fine in pieces studied;
7a19	– demonstrate understanding of the markings and Italian terms for dynamics, tempo, articulation, and phrasing in the music they sing and play;
7a20	– identify the type of texture in music appropriate for the grade (homophonic, polyphonic);
7a21	– recognize binary form (AB) and ternary form (ABA) in music they perform and hear;
7a22	– identify tone colours in various performing ensembles (e.g., brass trio, string quartet, marching band);
7a23	– demonstrate understanding of correct breathing technique and posture when playing and/or singing.

Creative Work

7a24	– sing or play a variety of pieces expressively;

7a25 – sing familiar songs and manipulate a musical element to change the overall effect (e.g., change tempo or rhythm in “Ode to Joy” by Beethoven);

7a26 – create and perform musical compositions that make use of elements of music studied in pieces learned in this grade;

7a27 – create accompaniments for songs, using appropriate sounds and structures;

7a28 – create and perform two contrasting songs based on a scene from a story, poem, or play, and connect them with dialogue.

Critical Thinking

7a29 – describe how changes in texture alter the mood in a piece of music (e.g., “Hava Nagila”, Clair de lune by Debussy);

7a30 – describe, through listening, some characteristics of music of the Romantic period (e.g., Pictures at an Exhibition by Mussorgsky);

7a31 – communicate their thoughts and feelings about the music they hear, using language and a variety of art forms and media (e.g., a short essay, a dance drama);

7a32 – describe their response to a musical performance in their community;

7a33 – describe the history, construction, and use of an instrument (e.g., historical or period instrument such as the sackbut, or the instrument they play in class);

7a34 – identify ways in which the music industry affects various aspects of society and the economy (e.g., hair styles, clothing styles, values).

Visual Arts

Overall Expectations

7a35 • produce two- and three-dimensional works of art that communicate a variety of ideas (thoughts, feelings, experiences) for specific purposes and to specific audiences, using appropriate art forms;

7a36 • identify the principles of design (emphasis, rhythm, balance, unity, variety, proportion), and use them in ways appropriate for this grade when producing and responding to works of art;

7a37 • explain how artistic choices affect the viewer, and support their conclusions with evidence from the work;

7a38 • use correctly vocabulary and art terminology associated with the specific expectations for this grade.

Knowledge of Elements

7a39 – describe how the repetition of elements is used to create rhythm (e.g., the use of red both in the flowers and in the tablecloth causes the eye to move from one location in the picture to the other);

7a40 – identify the area of emphasis (or focal point) in a work of art;

7a41 – describe how two-point perspective is used to create the illusion of depth (e.g., in a drawing of a building that appears to have three dimensions);

7a42 – distinguish between formal (symmetrical) and informal (asymmetrical) balance in compositions;

7a43 – explain how the intent, character, and size of a work determine which tools, materials, and techniques the artist will use (e.g., fine detail may best be produced with pen and ink);

7a44 – use the appropriate tools, materials, and techniques correctly, selecting those that will create the desired effect (e.g., use splatter painting or dry brush technique to represent the rhythms, melody, and dynamics in a piece of music).

Creative Work

7a45 – organize their art works to communicate ideas, using at least one of the principles of design specified for this grade (e.g., use informal balance in an art work to aid in the depiction of two sides of an issue);

7a46 – produce two- and three-dimensional works of art (i.e., works involving media and techniques used in drawing, painting, sculpting, printmaking) that communicate a range of thoughts, feelings, and experiences for specific purposes and to specific audiences (e.g., create a mask from "found" materials to celebrate the coming of spring);

7a47 – describe, in their plan for a work of art, how they will research their subject matter, select the appropriate form and media, and use the elements and principles of design to solve the artistic problems in the work (e.g., before making a sculpture of an animal, they might examine the work of Robert Bateman and Henry Moore, make sketches of the animal in different poses, and experiment with a variety of tools on clay samples to create the desired textures);

7a48 – identify strengths and areas for improvement in their own work and that of others (e.g., by analysing the decisions they made, the methods they used, and the ways in which they dealt with unexpected problems).

Critical Thinking

7a49 – describe how artists representing a variety of historical periods, styles, and cultures have used the elements and principles of design to create a specific effect (e.g., colour, line, or texture for emphasis in works by people of various cultural backgrounds in Canada, such as Lyra by Aiko Suzuki, Royal Crown by Xenobia Bailey, and Sleigh Race Across the Ice by Cornelius Krieghoff);

7a50 – explain how the principles of design are used to organize a work, communicate feelings, and convey ideas, using appropriate vocabulary and terminology (e.g., the repetition of small squares arranged in vertical and horizontal lines in a work by Mondrian creates pathways through the work and, therefore, a feeling of movement);

7a51 – explain their preference for specific art works, with reference to the artist's intentional use of the elements and principles of design (e.g., the smooth texture and balanced forms of Inuit soapstone carvings effectively communicate the artists' harmonious relationship with the natural world);

7a52 – identify ways in which the visual arts affect various aspects of society and the economy.

Drama & Dance

Overall Expectations

7a53 • describe the overall effects of various aspects of drama and dance (i.e., elements, principles, techniques);

7a54 • interpret and communicate the meaning of novels, scripts, historical fiction, and other material drawn from a wide variety of sources and cultures, using a variety of drama and dance techniques (e.g., drama anthologies);

7a55 • create dance pieces, using a variety of techniques;

7a56 • evaluate, orally and in writing, their own and others' work in drama and dance, using criteria developed by the class;

7a57 • solve, in various ways, a problem that is presented through drama and dance, and explain ways in which each solution is effective;

7a58 • create different interpretations of a single drama or dance work, using available technology for performance.

Knowledge of Elements

7a59 – demonstrate understanding of the motives of the characters they interpret through drama and dance (e.g., explain the motives and accurately represent the attitudes of a character through voice quality, gestures, body movements);

7a60 – write in role in various forms (e.g., reports, speeches, interviews), showing their understanding of the complexity of a dramatic situation, and using appropriate vocabulary, tone, and voice for the character portrayed;

7a61 – use drama and dance vocabulary correctly (e.g., crisis, space, symbol, drama anthology, texture) in analysing the meaning and effect of their own and others' work;

7a62 – explain the significance of the materials, props, costumes, and symbols used in drama and dance;

7a63 – identify ways of sustaining concentration in drama and dance (e.g., remaining in role when playing a character being interviewed);

7a64 – recognize and use criteria for evaluating the quality of drama and dance performances;

7a65 – choose specific kinds of technology to enhance their drama and dance work, and explain their choices (e.g., slide projectors, microphones);

7a66 – identify different theatrical venues and their effect on modes of presentation (e.g., outdoor spaces, theatre in the round).

Creative Work

7a67 – interpret and present scripts, paying attention to the subtext, characters, and setting;

7a68 – create and present drama anthologies, independently and in a group, manipulating various techniques of drama and dance and incorporating multimedia technology;

7a69 – develop a routine of warm-up exercises and use it regularly before engaging in dance activities;

7a70 – assemble, rehearse, and perform a collection of drama and dance works based on themes and issues drawn from a variety of sources from diverse cultures;

7a71 – communicate abstract ideas through drama and dance (e.g., create a movement composition that is inspired by a set of symbols).

Critical Thinking

7a72 – evaluate the quality of a drama and a dance performance by writing a review that refers to what was seen, heard, and experienced;

7a73 – identify performance techniques that have an effect on the audience's emotions and senses (e.g., senses of hearing and sight), and evaluate their use in a performance;

7a74 – describe the significance of drama and dance in their lives (e.g., write reflections on their aesthetic experiences in a journal);

7a75 – describe the economic and social impact of drama and dance in our society (e.g., research the role of drama and dance in films and videos, and in television programming);

7a76 – research and dramatize material from various sources (e.g., material from autobiographies, history books);

7a77 – describe how different cultures use drama and dance;

7a78 – describe attitudes and skills needed to organize and perform a group theatrical work.