Ontario

Ministry of Education

Curriculum Expectations
GRADE 6

for

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

2007

Oral Communication

Overall Expectations

6e1 1. listen in order to understand and respond appropriately in a variety of situations for a variety of purposes;

6e2 2. use speaking skills and strategies appropriately to communicate with different audiences for a variety of purposes;

6e3 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

6e4 Purpose

1.1 identify a range of purposes for listening in a variety of situations, formal and informal, and set goals related to specific listening tasks *(e.g., to identify the perspective in an oral presentation; to identify the strategies and devices used to enhance the impact of a speech; to describe stated and implied ideas in the lyrics of a song)*

6e5 Active Listening Strategies

1.2 demonstrate an understanding of appropriate listening behaviour by adapting active listening strategies to suit a variety of situations, including work in groups *(e.g., ask questions to deepen understanding and make connections to the ideas of others; summarize or paraphrase information and ideas to focus or clarify understanding; use vocal prompts in dialogues or conversations to express empathy, interest, and personal regard:* That's really interesting. You must have been excited*.)*

6e6 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 oral texts *(e.g., use self-questioning to monitor understanding; visualize different elements of an oral text; use note-taking strategies to record important ideas, key words, questions, and predictions)*

6e7 Demonstrating Understanding

1.4 demonstrate an understanding of the information and ideas in increasingly complex oral texts in a variety of ways *(e.g., summarize and explain information and ideas from an oral text, citing important details; ask questions to confirm inferences and value judgements during discussions after listening)*

6e8 Making Inferences/Interpreting Texts

1.5 interpret oral texts by using stated and implied ideas from the texts

Teacher prompts: "What messages did you get from the speaker's tone of voice/body language/facial expressions?" "How does paying attention to a speaker's body language help you interpret what is being said?"

6e9 Extending Understanding

1.6 extend understanding of oral 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., use dialogue or drama to explore similarities and differences between ideas in oral texts and their own ideas)*

6e10 Analysing Texts

1.7 analyse oral texts in order to evaluate how well they communicate ideas, opinions, themes, and information *(e.g., compare their own response to an oral text with a partner's response, citing details from the text to support their own view; explain what makes a war veteran's Remembrance Day speech effective)*

6e11 Point of View

1.8 identify the point of view presented in oral texts, determine whether they agree with the point of view, and suggest other possible perspectives *(e.g., ask questions about the values that are stated and implied by the perspective taken and those that are ignored; use role play or drama to express alternative views)*

Teacher prompts: "Whose point of view is being explored in this text?" "Whose voice do we not hear? Is this fair?"

6e12 Presentation Strategies

1.9 identify a variety of presentation strategies used in oral texts and analyse their effect on the audience *(e.g., the unexpected use of humour or of changes in pace)*

Teacher prompt: "Why do you think the speaker paused for so long at that point in the story?"

2. Speaking to Communicate

6e13 Purpose

2.1 identify a variety of purposes for speaking and explain how the purpose and intended audience influence the choice of form *(e.g., to clarify thinking through dialogue; to explore different points of view through drama and role playing; to present information to a group)*

6e14 Interactive Strategies

2.2 demonstrate an increasingly sophisticated understanding of appropriate speaking behaviour in a variety of situations, including paired sharing, dialogue, and small- and large-group discussions *(e.g., acknowledge different points of view; paraphrase to clarify meaning; adjust the level of formality to suit the audience and purpose for speaking)*

6e15 Clarity and Coherence

2.3 communicate orally in a clear, coherent manner, using appropriate organizing strategies and formats to link and sequence ideas and information *(e.g., present an argument in favour of one point of view on an issue, with an opening statement, sequence of points with supporting evidence, and summary/conclusion)*

6e16 Appropriate Language

2.4 use appropriate words and phrases from the full range of their vocabulary including inclusive and non-discriminatory language, and stylistic devices appropriate to the purpose and context, to communicate their meaning accurately and engage the interest of their intended audience *(e.g., use similes, personification, and comparative adjectives and adverbs to achieve a desired effect)*

6e17 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 help communicate their meaning *(e.g., create different-sounding "voices" for the characters in a dramatization of a story)*

6e18 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., count off on their fingers as they present each point in an argument)*

6e19 Visual Aids
2.7 use a variety of appropriate visual aids, *(e.g., video images, maps, posters, charts, costumes)* to support or enhance oral presentations *(e.g., wear a costume to help portray the speaker in a monologue; create a slide show to accompany a report)*

3. Reflecting on Oral Communication Skills and Strategies

6e20 Metacognition
3.1 identify, in conversation with the teacher and peers, what strategies they found most helpful before, during, and after listening and speaking and what steps they can take to improve their oral communication skills
Teacher prompts: "What strategies do you use to help you understand and follow a discussion among several people?" "What strategies do you use to recall important information after listening?" "What factors do you consider when deciding whether to use an informal or a formal approach when speaking?"

6e21 Interconnected Skills
3.2 identify, in conversation with the teacher and peers, how their skills as viewers, representers, readers, and writers help them improve their oral communication skills
Teacher prompt: "What strategies that you use when preparing to write help you organize your ideas before speaking?"

Reading

Overall Expectations

6e22 1. read and demonstrate an understanding of a variety of literary, graphic, and informational texts, using a range of strategies to construct meaning;

6e23 2. recognize a variety of text forms, text features, and stylistic elements and demonstrate understanding of how they help communicate meaning;

6e24 3. use knowledge of words and cueing systems to read fluently;

6e25 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

6e26 Variety of Texts
1.1 read a wide variety of texts from diverse cultures, including literary texts *(e.g., short stories, poetry, myths, legends, fantasies, novels, plays)*, graphic texts *(e.g., graphic novels, advertisements, atlases, graphic organizers, charts and tables)*, and informational texts *(e.g., biographies, textbooks, and other non-fiction materials; articles and reports; print and online editorials, various electronic texts, webquest texts)*

6e27 Purpose
1.2 identify a variety of purposes for reading and choose reading materials appropriate for those purposes *(e.g., online and print sources to compare different approaches to the same topic; webquest texts for information on a historical topic; graphic organizers, charts, and tables for specific information; a novel or a nonfiction book on a favourite topic for personal enjoyment)*

6e28 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 brainstorming and developing concept maps; use visualization and comparisons with images from other media to clarify details of characters, scenes, or concepts in a text; make predictions about a text based on knowledge of similar texts; reread or read on to confirm or clarify understanding)*

6e29 Demonstrating Understanding

1.4 demonstrate understanding of increasingly complex texts by summarizing and explaining important ideas and citing relevant supporting details *(e.g., general idea and related facts in chapters, reports, tables and charts, concept maps, online and print magazine articles, editorials, brochures or pamphlets, websites; main theme and important details in short stories, poems, plays, legends)*

6e30 Making Inferences/Interpreting Texts

1.5 develop interpretations about texts using stated and implied ideas to support their interpretations

Teacher prompt: "What is the story between the lines… beyond the lines? What clues did the author give that led to your conclusion? Why do you think the author doesn't state these ideas directly?"

6e31 Extending Understanding

1.6 extend understanding of texts by connecting, comparing, and contrasting the ideas in them to their own knowledge, experience, and insights, to other familiar texts, and to the world around them

Teacher prompt: "How does the author's treatment of this topic compare with treatments of the topic in other sources?"

6e32 Analysing Texts

1.7 analyse increasingly complex texts and explain how the different elements in them contribute to meaning *(e.g., narrative:* contribution of characters, setting, and plot to the theme; *persuasive argument:* the role of the summing-up paragraph in highlighting the most compelling points in the argument*)*

6e33 Responding to and Evaluating Texts

1.8 make judgements and draw conclusions about ideas in texts and cite stated or implied evidence from the text to support their views

Teacher prompts: "What conclusions can you draw from the events or information presented in the text?" "Has the author chosen the most convincing facts to support his or her opinion?"

6e34 Point of View

1.9 identify the point of view presented in texts; determine whether they can agree with the view, in whole or in part; and suggest some other possible perspectives *(e.g., ask questions to identify any biases that are stated or implied in the view presented)*

Teacher prompts: "Who would be most likely to share this point of view? Who would not?" "How would you revise the text to appeal to a different or a wider audience?" "Why do you think stereotypes are used in certain texts?"

2. Understanding Form and Style

6e35 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 myth *(e.g., the use of imaginary/supernatural characters tells the reader not to interpret the story literally)*, graphic texts such as an advertisement *(e.g., colour and layout are used to emphasize the appeal and importance of the product)*, and informational texts such as an editorial *(e.g., the formal, logical structure of thesis, development, and summary/conclusion helps create an authoritative impression)*

6e36 Text Patterns

2.2 identify a variety of organizational patterns in a range of texts and explain how they help readers understand the texts (*e.g., order of importance in a persuasive letter or news report, a grid and coordinates in a map, columns and rows in a table, time order in a biography)*

6e37 Text Features

2.3 identify a variety of text features and explain how they help readers understand texts *(e.g., indexes, headings/subheadings, captions and labels, and drop-down menus help the reader locate key words, phrases, or ideas when skimming or scanning a text before reading)*

6e38 Elements of Style

2.4 identify various elements of style – including voice, word choice, and the use of hyperbole, strong verbs, dialogue, and complex sentences – and explain how they help communicate meaning *(e.g., hyperbole provides drama and emphasis in a persuasive article; a complex sentence allows the author to combine ideas for succinctness and improved flow)*

3. Reading With Fluency

6e39 Reading Familiar Words

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

6e40 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., words within larger words, syllables within longer words, similarities between words with known spelling patterns and unknown words)*

6e41 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 a radio drama or radio editorial in role with suitable emphasis and phrasing)*

4. Reflecting on Reading Skills and Strategies

6e42 Metacognition

4.1 identify the strategies they found most 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 questions do you ask yourself to check that you understand what you are reading?" "How do you know if you need to reread a section of a text?" "What else can you do if reading on or rereading does not clarify the meaning?" "In what way do you use your reader's notebook to help you as a reader?"

6e43 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 *(e.g., using a particular form when writing enhances understanding when reading texts of a similar form)*

Teacher prompt: "Think about the conventions you used when creating a class newspaper. How will that information help you when you read the community newspaper?"

Writing

Overall Expectations

6e44 1. generate, gather, and organize ideas and information to write for an intended purpose and audience;

6e45 2. draft and revise their writing, using a variety of informational, literary, and graphic forms and stylistic elements appropriate for the purpose and audience;

6e46 3. use editing, proofreading, and publishing skills and strategies, and knowledge of language conventions, to correct errors, refine expression, and present their work effectively;

6e47 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

6e48 Purpose and Audience

1.1 identify the topic, purpose, and audience for a variety of writing forms *(e.g., an original poem, with an invented structure or based on a model such as a haiku, about a topic of personal interest, to share with the class; a persuasive letter asking the school principal to look at a specific issue from a new point of view; a description of the procedure for constructing a three-dimensional model, to share with Grade 3 students; a script on a topic of current interest for a mock television broadcast for a general audience)*

6e49 Developing Ideas

1.2 generate ideas about a potential topic and identify those most appropriate for the purpose

6e50 Research

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

6e51 Classifying Ideas

1.4 sort and classify information for their writing in a variety of ways that allow them to view information from different perspectives and make connections between ideas *(e.g., by underlining or highlighting key words or phrases; by using a graphic organizer such as a fishbone chart, a T-chart, or an "Agree/Disagree" chart)*

6e52 Organizing Ideas

1.5 identify and order main ideas and supporting details and group them into units that could be used to develop a structured, multi-paragraph piece of writing, using a variety of strategies *(e.g., making outlines, writing notes, filling in a ranking grid)* and organizational patterns *(e.g., order of importance)*

6e53 Review

1.6 determine whether the ideas and information they have gathered are relevant, appropriate, and adequate for the purpose, and do more research if necessary *(e.g., review information critically with a friend using a concept map, checklist, or flowchart)*

2. Using Knowledge of Form and Style in Writing

6e54 Form

2.1 write longer and more complex texts using a wide range of forms *(e.g., an "autobiography" in the role of a historical or contemporary person, based on research; a journalist's report on a real or imagined event for a newspaper or a television news broadcast; an explanation of the principles of flight; an argument in support of one point of view on a current global issue affecting Canadians; a made-up legend or fantasy, based on themes from their reading, to entertain younger children)*

6e55 Voice

2.2 establish a distinctive voice in their writing appropriate to the subject and audience *(e.g., use punctuation, dialogue, and vivid language to create a particular mood or tone)*

6e56 Word Choice

2.3 use some vivid and/or figurative language and innovative expressions to enhance interest *(e.g., strong verbs; concrete, specific nouns; unusual adjectives; unexpected word order)*

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

6e57 Sentence Fluency

2.4 create complex sentences by combining phrases, clauses, and/or simple sentences *(e.g., combine several simple sentences* – "Nora left the house. She was heading for the market. She didn't want to be late." – *to create a complex sentence* – "Not wanting to be late, Nora left the house and headed for the market.")

6e58 Point of View

2.5 identify their point of view and other possible points of view; determine, when appropriate, if their own view is balanced and supported by the evidence; and adjust their thinking and expression if appropriate (*e.g., revise writing focusing on the use of inclusive language, such as* police officer *instead of* policeman*)*

6e59 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 supporting details and precise language *(e.g., identify one main idea that is poorly supported; identify three sentences that would be clarified by adding an adjective or adverb)*

Teacher prompt: "How can you determine which parts of your work need further clarification?"

6e60 Revision

2.7 make revisions to improve the content, clarity, and interest of their written work, using a variety of strategies *(e.g., use arrows or make notes to identify text that needs to be moved; use sticky notes to indicate insertions; use underlining to focus on overworked words; add or substitute words and phrases that would make their writing more vivid; use figurative language such as similes and personification and rhetorical devices such as exaggeration to achieve particular effects; adjust sentence length, type, and complexity to suit the audience and purpose; check that language is inclusive and non-discriminatory)*

Teacher prompt: "Can you use short, abrupt sentences to add drama to your writing?"

6e61 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

6e62 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)*

6e63 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., orally emphasize hard-to-hear sounds in difficult, complex words:* Feb-ru-ar-y*; leave unknown letters/letter clusters blank to solve after having spelled the familiar parts of a word; visualize a known word that is like the "problem"word; apply rules for forming plurals to unfamiliar words)*

6e64 Vocabulary

3.3 confirm spellings and word meanings or word choice using a variety of resources appropriate for the purpose *(e.g., locate entry words, multiple meanings, pronunciation guides, charts of spellings of sounds, inflected forms, suffixes and prefixes, primary and secondary stresses, different pronunciations, idioms, and homographs in online and print dictionaries; use thematic dictionaries such as a word game dictionary or a homonym dictionary; use a thesaurus to explore alternative word choices)*

6e65 Punctuation

3.4 use punctuation appropriately to communicate their intended meaning in longer and more complex sentences, with a focus on the use of: commas to separate words in a list or after an introductory word or phrase; quotation marks in dialogue; and some uses of the colon, semi-colon, and brackets

6e66 Grammar

3.5 use parts of speech correctly to communicate their meaning clearly, with a focus on the use of: personal subject and object pronouns *(e.g., I, me)* indefinite pronouns *(e.g., someone, nobody)*; conjunctions; subordinate clauses; adverb phrases; and present, past, and future verb tenses

6e67 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)*

6e68 Publishing

3.7 use a 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; include photographs or magazine pictures and a map in a travel brochure; include an index to help the reader find specific information in a report; supply a table of contents)*

6e69 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

6e70 Metacognition

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

Teacher prompts: "How did the sources you used allow you to generate a balanced selection of ideas?" "How do you use your writer's notebook to help you during the writing process?"

6e71 Interconnected Skills
4.2 describe how their skills in listening, speaking, reading, viewing, and representing help in their development as writers
Teacher prompts: "What do you know about different media texts that might help when you are writing?" "In what way do you think that the reading you do helps you as a writer? Can you give an example?"

6e72 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

6e73 1. demonstrate an understanding of a variety of media texts;

6e74 2. identify some media forms and explain how the conventions and techniques associated with them are used to create meaning;

6e75 3. create a variety of media texts for different purposes and audiences, using appropriate forms, conventions, and techniques;

6e76 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

6e77 Purpose and Audience
1.1 explain how a variety of media texts address their intended purpose and audience *(e.g., T-shirts intended for supporters of particular institutions, groups, or causes are decorated with related images, logos, colours, and slogans; CD and DVD covers designed to appeal to young children have colourful images of their favourite characters; advertisements geared to parents of infants are broadcast during the daytime whereas those geared to single adults run during late-night programming)*

6e78 Making Inferences/Interpreting Messages
1.2 interpret media texts, using overt and implied messages as evidence for their interpretations *(e.g., explain why the advertisements used in a particular magazine are appropriate for that magazine, identifying the messages that would appeal to the magazine's audience; explain how advertisements for healthy food and those for fast food differ)* ***Teacher prompt:*** "Is there a connection between the articles and the advertisements used in a magazine?"

6e79 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., evaluate the coverage of the same news item in a newspaper article, a segment of a news program, a website, and/or a blog; evaluate the effectiveness with which themes are developed, supported, and illustrated in a movie or music video)*
Teacher prompt: "You've told me that you think this advertisement is very effective, but that the other one is weak. Explain what accounts for the success or failure of each."

6e80 Audience Responses

1.4 explain why different audiences *(e.g., boys, girls, adults, seniors, various cultural groups)* might have different responses to media texts *(e.g., movies, songs, websites, video games, items of clothing)*

Teacher prompts: "Why might many teenagers respond differently from their parents to an election debate?" "Who do you think would be the most likely audience for a car magazine? An advertisement for a retirement residence? An investment brochure? An action-oriented video game? A fashion magazine? A television science special? A quiz show? Action figures? Explain your answers."

6e81 Point of View

1.5 identify whose point of view is presented in a media text, identify missing or alternative points of view, and, where appropriate, determine whether the chosen view achieves a particular goal *(e.g., identify biases in two different media texts that focus on the same topic or event; evaluate the portrayal of Aboriginal people in the media) Teacher prompts:* "What bias or stereotypes can you detect in this advertisement? Can you think of reasons why this view of the subject is used? What does this advertisement achieve?" "Are there different portrayals of Aboriginal people in the media? How are they different? Why are they different? Which ones are most accurate?"

6e82 Production Perspectives

1.6 identify who produces various media texts, the reason for their production, how they are produced, and how they are funded *(e.g., political parties create advertisements to win voter support, using funds raised by their members and supporters; producers develop television dramas to entertain and make money by selling their products to television conglomerates, which then broadcast the programs to make money by selling advertising spots in the programs' time slots)*

Teacher prompt: "What are the different professions that would be involved in producing a television commercial? How much would it cost to produce? How could we find out?"

2. Understanding Media Forms, Conventions, and Techniques

6e83 Form

2.1 describe in detail the main elements of some media forms *(e.g., drama scripts:* cast of characters, description of setting, acts, scenes, stage directions; *television quiz shows:* host/hostess, contestants, prizes; *magazines:* cover images and text, table of contents, regular columns, feature articles, advertisements*)*

6e84 Conventions and Techniques

2.2 identify the conventions and techniques used in some familiar media forms and explain how they help convey meaning and influence or engage the audience *(e.g., movie conventions:* in old-fashioned westerns, white and black cowboy hats were used to identify "good" and "bad" characters; *movie techniques:* freezeframe images, slow motion, theme music in movies are used to communicate information non-verbally, emphasize or prolong important or appealing scenes, and maintain interest by keeping the viewer wondering "what next?"*)*

Teacher prompt: "What visual clues are used to identify 'good' and 'bad' characters in movies and video games you have seen recently?"

3. Creating Media Texts

6e85 Purpose and Audience

3.1 describe in specific detail the topic, purpose, and audience for media texts they plan to create, and identify challenges they may face in achieving their purpose *(e.g., a review of a television program, film, piece of art, or artistic performance to encourage children or adults to see it)*

*Teacher prompt: ''*Why do you think it is important for people to know about this topic? Why might you need to be especially persuasive to interest them in the topic?"

6e86 Form

3.2 identify an appropriate form to suit the specific purpose and audience for a media text they plan to create, and explain why it is an appropriate choice *(e.g., a mock television, radio, or newspaper announcement to inform students about a school-related issue)*

Teacher prompt: "Which form do you think would be most likely to help you reach your audience? Why?"

6e87 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., a scene for a television drama adapted from a novel or play: the camera can focus on one character, object, or gesture at a time, allowing different kinds of emphasis; camera angles and distances can vary to create different effects and perspectives; scenes can be edited to change the pace of the action; background music can be used to enhance the mood)

Teacher prompt: "How do the conventions and techniques of this form make it easier or harder

6e88 Producing Media Texts

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

- a review of a television program, film, piece of art, or artistic performance that includes commentary on the effects created through the use of various conventions and techniques
- a mock television broadcast of an announcement about a school-related issue
- a soundtrack to accompany the reading of a section of a graphic novel or comic book
- a computer-generated cover design, including special fonts, to enhance a published piece of writing
- a multimedia presentation to inform younger students about how to use a website to research a topic related to a unit of study
- a pamphlet outlining the researched or imagined biography of a writer
- a travelogue illustrating the journey of an early Canadian explorer, including contacts with First Nations peoples
- a storyboard indicating the images to be used in a scene for a television drama adapted from a novel or play
- a movie poster to advertise a movie based on a narrative they have studied)

4. Reflecting on Media Literacy Skills and Strategies

6e89 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 skills and knowledge have you needed to interpret and create the variety of media forms you have studied?"

6e90 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 prompt: "Which reading and listening comprehension strategies help you most in developing interpretations of media texts such as movies and advertisements?"

French as a Second Language Expectations Grade 06

Oral Communication, Reading, and Writing

Overall Expectations

6f1	• participate in dialogues about familiar topics, and listen to and talk about short oral texts;
6f2	• read a variety of classroom and simple authentic materials, 150 to 200 words long, containing familiar and new vocabulary, and demonstrate understanding;
6f3	• communicate ideas and facts in writing for specific purposes;
6f4	• identify and use the vocabulary and the grammar and language conventions appropriate for this grade level.

Oral Communication

6f5	– ask and answer simple questions using complete sentences (e.g., Quelle est ton adresse?);
6f6	– use appropriate pronunciation, liaison (e.g., nous avons), intonation, and language in familiar contexts;
6f7	– respond to oral texts (e.g., answer questions from a tape);
6f8	– give an oral presentation of ten to fifteen sentences in length (e.g., the results of a survey);
6f9	– make revisions to oral language in form, content, and organization (e.g., add details, change the order of words), using appropriate resources and feedback from the teacher and their peers.

Reading

6f10	– read at least nine simple passages or stories (e.g., pamphlets, booklets);
6f11	– participate in a variety of reading situations, such as guided, shared, and choral reading, using expression, correct pronunciation, and intonation;
6f12	– read and produce simple, structured responses that convey understanding of written text (e.g., arrange sentences in proper sequence, illustrate a few sentences);
6f13	– identify the main idea and a few supporting details;
6f14	– use various reading strategies to determine meaning (e.g., the glossary at the back of a book, various dictionaries).

Writing

6f15	– write sentences and questions that contain learned vocabulary and familiar language structures;
6f16	– write in different forms (e.g., paragraphs, dialogues, directions);
6f17	– write, using a model, a first draft and corrected version in guided and cooperative writing tasks (e.g., pamphlets, booklets);
6f18	– use and spell the vocabulary appropriate for this grade level.

Mathematical Process Expectations

Problem Solving

6m1 • develop, select, and apply problem-solving strategies as they pose and solve problems and conduct investigations, to help deepen their mathematical understanding;

Reasoning And Proving

6m2 • develop and apply reasoning skills (e.g., classification, recognition of relationships, use of counter-examples) to make and investigate conjectures and construct and defend arguments;

Reflecting

6m3 • 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 comparing and adjusting strategies used, by explaining why they think their results are reasonable, by recording their thinking in a math journal);

Selecting Tools and Computational Strategies

6m4 • 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

6m5 • 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, sports);

Representing

6m6 • create a variety of representations of mathematical ideas (e.g., by using physical models, pictures, numbers, variables, diagrams, graphs, onscreen dynamic representations), make connections among them, and apply them to solve problems;

Communicating

6m7 • communicate mathematical thinking orally, visually, and in writing, using everyday language, a basic mathematical vocabulary, and a variety of representations, and observing basic mathematical conventions.

Number Sense and Numeration

Overall Expectations

6m8 • read, represent, compare, and order whole numbers to 1 000 000, decimal numbers to thousandths, proper and improper fractions, and mixed numbers;

6m9 • solve problems involving the multiplication and division of whole numbers, and the addition and subtraction of decimal numbers to thousandths, using a variety of strategies;

6m10 • demonstrate an understanding of relationships involving percent, ratio, and unit rate.

Quantity Relationships

6m11 – represent, compare, and order whole numbers and decimal numbers from 0.001 to 1 000 000, using a variety of tools (e.g., number lines with appropriate increments, base ten materials for decimals);

6m12 – demonstrate an understanding of place value in whole numbers and decimal numbers from 0.001 to 1 000 000, using a variety of tools and strategies (e.g. use base ten materials to represent the relationship between 1, 0.1, 0.01, and 0.001) (Sample problem: How many thousands cubes would be needed to make a base ten block for 1 000 000?);

6m13 – read and print in words whole numbers to one hundred thousand, using meaningful contexts (e.g., the Internet, reference books);

6m14 – represent, compare, and order fractional amounts with unlike denominators, including proper and improper fractions and mixed numbers, using a variety of tools (e.g., fraction circles, Cuisenaire rods, drawings, number lines, calculators) and using standard fractional notation (Sample problem: Use fraction strips to show that 1 1/2 is greater than 5/4.);

6m15 – estimate quantities using benchmarks of 10%, 25%, 50%, 75%, and 100% (e.g., the container is about 75% full; approximately 50% of our students walk to school);

6m16 – solve problems that arise from real-life situations and that relate to the magnitude of whole numbers up to 1 000 000 (Sample problem: How would you determine if a person could live to be 1 000 000 hours old? Show your work.);

6m17 – identify composite numbers and prime numbers, and explain the relationship between them (i.e., any composite number can be factored into prime factors) (e.g., 42 = 2 x 3 x 7).

Operational Sense

6m18 – use a variety of mental strategies to solve addition, subtraction, multiplication, and division problems involving whole numbers (e.g., use the commutative property: 4 x 16 x 5 = 4 x 5 x 16, which gives 20 x 16 = 320; use the distributive property: (500 + 15) ÷ 5 = 500 ÷ 5 + 15 ÷ 5, which gives 100 + 3 = 103);

6m19 – solve problems involving the multiplication and division of whole numbers (four-digit by two-digit), using a variety of tools (e.g., concrete materials, drawings, calculators) and strategies (e.g., estimation, algorithms);

6m20 – add and subtract decimal numbers to thousandths, using concrete materials, estimation, algorithms, and calculators;

6m21 – multiply and divide decimal numbers to tenths by whole numbers, using concrete materials, estimation, algorithms, and calculators (e.g., calculate 4 x 1.4 using base ten materials; calculate 5.6 ÷ 4 using base ten materials);

6m22 – multiply whole numbers by 0.1, 0.01, and 0.001 using mental strategies (e.g., use a calculator to look for patterns and generalize to develop a rule);

6m23 – multiply and divide decimal numbers by 10, 100, 1000, and 10 000 using mental strategies (e.g., "To convert 0.6 m2 to square centimetres, I calculated in my head 0.6 x 10 000 and got 6000 cm2.") (Sample problem: Use a calculator to help you generalize a rule for multiplying numbers by 10 000.);

6m24 – use estimation when solving problems involving the addition and subtraction of whole numbers and decimals, to help judge the reasonableness of a solution;

6m25 – explain the need for a standard order for performing operations, by investigating the impact that changing the order has when performing a series of operations (Sample problem: Calculate and compare the answers to 3 + 2 x 5 using a basic four-function calculator and using a scientific calculator.).

Proportional Relationships

6m26 – represent ratios found in real-life contexts, using concrete materials, drawings, and standard fractional notation (Sample problem: In a classroom of 28 students, 12 are female. What is the ratio of male students to female students?);

6m27 – determine and explain, through investigation using concrete materials, drawings, and calculators, the relationships among fractions (i.e., with denominators of 2, 4, 5, 10, 20, 25, 50, and 100), decimal numbers, and percents (e.g., use a 10 x 10 grid to show that 1/4 = 0.25 or 25%);

6m28 – represent relationships using unit rates (Sample problem: If 5 batteries cost $4.75, what is the cost of 1 battery?).

Measurement

Overall Expectations

6m29 • estimate, measure, and record quantities, using the metric measurement system;

6m30 • determine the relationships among units and measurable attributes, including the area of a parallelogram, the area of a triangle, and the volume of a triangular prism.

Attributes, Units, and Measurement Sense

6m31 – demonstrate an understanding of the relationship between estimated and precise measurements, and determine and justify when each kind is appropriate (Sample problem:You are asked how long it takes you to travel a given distance. How is the method you use to determine the time related to the precision of the measurement?);

6m32 – estimate, measure, and record length, area, mass, capacity, and volume, using the metric measurement system.

Measurement Relationships

6m33 – select and justify the appropriate metric unit (i.e., millimetre, centimetre, decimetre, metre, decametre, kilometre) to measure length or distance in a given real-life situation (Sample problem: Select and justify the unit that should be used to measure the perimeter of the school.);

6m34 – solve problems requiring conversion from larger to smaller metric units (e.g., metres to centimetres, kilograms to grams, litres to millilitres) (Sample problem: How many grams are in one serving if 1.5 kg will serve six people?);

6m35 – construct a rectangle, a square, a triangle, and a parallelogram, using a variety of tools (e.g., concrete materials, geoboard, dynamic geometry software, grid paper), given the area and/or perimeter (Sample problem: Create two different triangles with an area of 12 square units, using a geoboard.);

6m36 – determine, through investigation using a variety of tools (e.g., pattern blocks, Power Polygons, dynamic geometry software, grid paper) and strategies (e.g., paper folding, cutting, and rearranging), the relationship between the area of a rectangle and the areas of parallelograms and triangles, by decomposing (e.g., cutting up a parallelogram into a rectangle and two congruent triangles) and composing (e.g., combining two congruent triangles to form a parallelogram) (Sample problem: Decompose a rectangle and rearrange the parts to compose a parallelogram with the same area. Decompose a parallelogram into two congruent triangles, and compare the area of one of the triangles with the area of the parallelogram.);

6m37 – develop the formulas for the area of a parallelogram (i.e., Area of parallelogram = base x height) and the area of a triangle [i.e., Area of triangle = (base x height) ÷ 2], using the area relationships among rectangles, parallelograms, and triangles (Sample problem: Use dynamic geometry software to show that parallelograms with the same height and the same base all have the same area.);

6m38 – solve problems involving the estimation and calculation of the areas of triangles and the areas of parallelograms (Sample problem: Calculate the areas of parallelograms that share the same base and the same height, including the special case where the parallelogram is a rectangle.);

6m39 – determine, using concrete materials, the relationship between units used to measure area (i.e., square centimetre, square metre), and apply the relationship to solve problems that involve conversions from square metres to square centimetres (Sample problem: Describe the multiplicative relationship between the number of square centimetres and the number of square metres that represent an area. Use this relationship to determine how many square centimetres fit into half a square metre.);

6m40 – determine, through investigation using a variety of tools and strategies (e.g., decomposing rectangular prisms into triangular prisms; stacking congruent triangular layers of concrete materials to form a triangular prism), the relationship between the height, the area of the base, and the volume of a triangular prism, and generalize to develop the formula (i.e., Volume = area of base x height) (Sample problem: Create triangular prisms by splitting rectangular prisms in half. For each prism, record the area of the base, the height, and the volume on a chart. Identify relationships.);

6m41 – determine, through investigation using a variety of tools (e.g., nets, concrete materials, dynamic geometry software, Polydrons) and strategies, the surface area of rectangular and triangular prisms;

6m42 – solve problems involving the estimation and calculation of the surface area and volume of triangular and rectangular prisms (Sample problem: How many square centimetres of wrapping paper are required to wrap a box that is 10 cm long, 8 cm wide, and 12 cm high?).

Geometry and Spatial Sense

Overall Expectations

6m43 • classify and construct polygons and angles;

6m44 • sketch three-dimensional figures, and construct three-dimensional figures from drawings;

6m45 • describe location in the first quadrant of a coordinate system, and rotate two-dimensional shapes.

Geometric Properties

6m46 – sort and classify 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);

6m47 – sort polygons according to the number of lines of symmetry and the order of rotational symmetry, through investigation using a variety of tools (e.g., tracing paper, dynamic geometry software, Mira);

6m48 – measure and construct angles up to 180° using a protractor, and classify them as acute, right, obtuse, or straight angles;

6m49 – construct polygons using a variety of tools, given angle and side measurements (Sample problem: Use dynamic geometry software to construct trapezoids with a 45° angle and a side measuring 11 cm.).

Geometric Relationships

6m50 – build three-dimensional models using connecting cubes, given isometric sketches or different views (i.e., top, side, front) of the structure (Sample problem: Given the top, side, and front views of a structure, build it using the smallest number of cubes possible.);

6m51 – sketch, using a variety of tools (e.g., isometric dot paper, dynamic geometry software), isometric perspectives and different views (i.e., top, side, front) of three-dimensional figures built with interlocking cubes.

Location and Movement

6m52 – explain how a coordinate system represents location, and plot points in the first quadrant of a Cartesian coordinate plane;

6m53 – identify, perform, and describe, through investigation using a variety of tools (e.g., grid paper, tissue paper, protractor, computer technology), rotations of 180º and clockwise and counterclockwise rotations of 90°, with the centre of rotation inside or outside the shape;

6m54 – create and analyse designs made by reflecting, translating, and/or rotating a shape, or shapes, by 90º or 180º (Sample problem: Identify rotations of 90° or 180° that map congruent shapes, in a given design, onto each other.).

Patterning and Algebra

Overall Expectations

6m55 • describe and represent relationships in growing and shrinking patterns (where the terms are whole numbers), and investigate repeating patterns involving rotations;

6m56 • use variables in simple algebraic expressions and equations to describe relationships.

Patterns and Relationships

6m57 – identify geometric patterns, through investigation using concrete materials or drawings, and represent them numerically;

6m58 – make tables of values, for growing patterns given pattern rules, in words (e.g., start with 3, then double each term and add 1 to get the next term), then list the ordered pairs (with the first coordinate representing the term number and the second coordinate representing the term) and plot the points in the first quadrant, using a variety of tools (e.g., graph paper, calculators, dynamic statistical software);

6m59 – determine the term number of a given term in a growing pattern that is represented by a pattern rule in words, a table of values, or a graph (Sample problem: For the pattern rule "start with 1 and add 3 to each term to get the next term", use graphing to find the term number when the term is 19.);

6m60 – describe pattern rules (in words) that generate patterns 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 with 1 and add 2 to each term to get the next term"), then distinguish such pattern rules from pattern rules, given in words, that describe the general term by referring to the term number (e.g., for 2, 4, 6, 8, …, the pattern rule for the general term is "double the term number");

6m61 – determine a term, given its term number, by extending growing and shrinking patterns that are generated by adding or subtracting a constant, or multiplying or dividing by a constant, to get the next term (Sample problem: For the pattern 5000, 4750, 4500, 4250, 4000, 3750, …, find the 15th term. Explain your reasoning.);

6m62 – extend and create repeating patterns that result from rotations, through investigation using a variety of tools (e.g., pattern blocks, dynamic geometry software, geoboards, dot paper).

Variables, Expressions, and Equations

6m63 – demonstrate an understanding of different ways in which variables are used (e.g., variable as an unknown quantity; variable as a changing quantity);

6m64 – identify, through investigation, the quantities in an equation that vary and those that remain constant (e.g., in the formula for the area of a triangle, A = (bxh)/2, the number 2 is a constant, whereas b and h can vary and may change the value of A);

6m65 – solve problems that use two or three symbols or letters as variables to represent different unknown quantities (Sample problem: If n + l = 15 and n + l + s = 19, what value does the s represent?);

6m66 – determine the solution to a simple equation with one variable, through investigation using a variety of tools and strategies (e.g., modelling with concrete materials, using guess and check with and without the aid of a calculator) (Sample problem: Use the method of your choice to determine the value of the variable in the equation 2 x n + 3 = 11. Is there more than one possible solution? Explain your reasoning.).

Data Management and Probability

Overall Expectations

6m67 • collect and organize discrete or continuous primary data and secondary data and display the data using charts and graphs, including continuous line graphs;

6m68 • read, describe, and interpret data, and explain relationships between sets of data;

6m69 • determine the theoretical probability of an outcome in a probability experiment, and use it to predict the frequency of the outcome.

Collection and Organization of Data

6m70 – collect data by conducting a survey (e.g., use an Internet survey tool) 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;

6m71 – collect and organize 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 continuous line 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);

6m72 – 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, such as pictographs, horizontal or vertical bar graphs, stem-and-leaf plots, double bar graphs, broken-line graphs, and continuous line graphs);

6m73 – determine, through investigation, how well a set of data represents a population, on the basis of the method that was used to collect the data (Sample problem:Would the results of a survey of primary students about their favourite television shows represent the favourite shows of students in the entire school? Why or why not?).

Data Relationships

6m74 – read, interpret, and draw conclusions from primary data (e.g., survey results, measurements, observations) and from secondary data (e.g., sports data in the newspaper, data from the Internet about movies), presented in charts, tables, and graphs (including continuous line graphs);

6m75 – compare, through investigation, different graphical representations of the same data (Sample problem: Use technology to help you compare the different types of graphs that can be created to represent a set of data about the number of runs or goals scored against each team in a tournament. Describe the similarities and differences that you observe.);

6m76 – explain how different scales used on graphs can influence conclusions drawn from the data;

6m77 – demonstrate an understanding of mean (e.g., mean differs from median and mode because it is a value that "balances" a set of data – like the centre point or fulcrum in a lever), and use the mean to compare two sets of related data, with and without the use of technology (Sample problem: Use the mean to compare the masses of backpacks of students from two or more Grade 6 classes.);

6m78 – demonstrate, through investigation, an understanding of how data from charts, tables, and graphs can be used to make inferences and convincing arguments (e.g., describe examples found in newspapers and magazines).

Probability

6m79 – express theoretical probability as a ratio of the number of favourable outcomes to the total number of possible outcomes, where all outcomes are equally likely (e.g., the theoretical probability of rolling an odd number on a six-sided number cube is 3/6 because, of six equally likely outcomes, only three are favourable – that is, the odd numbers 1, 3, 5);

6m80 – represent the probability of an event (i.e., the likelihood that the event will occur), using a value from the range of 0 (never happens or impossible) to 1 (always happens or certain);

6m81 – predict the frequency of an outcome of a simple probability experiment or game, by calculating and using the theoretical probability of that outcome (e.g., "The theoretical probability of spinning red is 1/4 since there are four different-coloured areas that are equal. If I spin my spinner 100 times, I predict that red should come up about 25 times."). (Sample problem: Create a spinner that has rotational symmetry. Predict how often the spinner will land on the same sector after 25 spins. Perform the experiment and compare the prediction to the results.).

Science and Technology Expectations (2007) Grade 6

UNDERSTANDING LIFE SYSTEMS: Biodiversity

Overall Expectations

6s1 **CR2007**	1. assess human impacts on biodiversity, and identify ways of preserving biodiversity;
6s2 **CR2007**	2. investigate the characteristics of living things, and classify diverse organisms according to specific characteristics;
6s3 **CR2007**	3. demonstrate an understanding of biodiversity, its contributions to the stability of natural systems, and its benefits to humans.

1. Relating Science and Technology to Society and the Environment

6s4 **CR2007**	1.1 analyse a local issue related to biodiversity (e.g., the effects of human activities on urban biodiversity, flooding of traditional Aboriginal hunting and gathering areas as a result of dam construction), taking different points of view into consideration (e.g., the points of view of members of the local community, business owners, people concerned about the environment, mine owners, local First Nations, Métis, Inuit), propose action that can be taken to preserve biodiversity, and act on the proposal Sample issue: A local forest is slated to be cut down to make room for a new shopping plaza. Sample guiding questions: What are the positive and negative aspects of the issue (e.g., a community will have access to goods and services in the new shopping plaza that were not there before; getting the land for the shopping plaza means losing a local forest)? Who might have differing opinions on this issue? Why? What are some things that you might do as an individual, or that we might do as a class, to make others aware of the issues and concerns (e.g., write a letter to the local newspaper, the mayor, or the Member of Parliament; design and hang awareness posters in the community)?
6s5 **CR2007**	1.2 assess the benefits that human societies derive from biodiversity (e.g., thousands of products such as food, clothing, medicine, and building materials come from plants and animals) and the problems that occur when biodiversity is diminished (e.g., monocultures are more vulnerable to pests and diseases) Sample issue: Monoculture systems on farms allow crops to be grown in the soil that is best for them. But monoculture systems reduce diversity, and so more soil and pest problems result. In turn, farmers apply more chemical fertilizers and pesticides, which pollute the land, the water, and the food they are producing.

2. Developing Investigation and Communication Skills

6s6 **CR2007**	2.1 follow established safety procedures for outdoor activities and field work (e.g., stay with a partner when exploring habitats; wash hands after exploring a habitat)
6s7 **CR2007**	2.2 investigate the organisms found in a specific habitat and classify them according to a classification system
6s8 **CR2007**	2.3 use scientific inquiry/research skills (see page 15) to compare the characteristics of organisms within the plant or animal kingdoms (e.g., compare the characteristics of a fish and a mammal, of coniferous and deciduous trees, of ferns and flowering plants) Sample guiding questions: What are the criteria you will use to compare organisms? Why are these good criteria to use to compare the organisms? How might the criteria change if you picked two different organisms? Why is it important to be able to compare organisms in some organized way?
6s9 **CR2007**	2.4 use appropriate science and technology vocabulary, including classification, biodiversity, natural community, interrelationships, vertebrate, invertebrate, stability, characteristics, and organism, in oral and written communication
6s10 **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., use a graphic organizer to show comparisons between organisms in various communities)

3. Understanding Basic Concepts

6s11 **CR2007**	3.1 identify and describe the distinguishing characteristics of different groups of plants and animals (e.g., invertebrates have no spinal column; insects have three basic body parts; flowering plants produce flowers and fruits), and use these characteristics to further classify various kinds of plants and animals (e.g., invertebrates – arthropods – insects; vertebrates – mammals – primates; seed plants – flowering plants – grasses)

6s12 **CR2007**	3.2 demonstrate an understanding of biodiversity as the variety of life on earth, including variety within each species of plant and animal, among species of plants and animals in communities, and among communities and the physical landscapes that support them
6s13 **CR2007**	3.3 describe ways in which biodiversity within species is important for maintaining the resilience of those species (e.g., because of genetic differences, not all squirrels are affected equally by infectious diseases such as mange; some species of bacteria have become resistant to antibiotics because resistant individuals have survived and reproduced)
6s14 **CR2007**	3.4 describe ways in which biodiversity within and among communities is important for maintaining the resilience of these communities (e.g., having a variety of species of wheat allows for some part of the crop to survive adverse
6s15 **CR2007**	3.5 describe interrelationships within species (e.g., wolves travel in packs to defend their territory, raise their cubs, and hunt large prey), between species (e.g., the brightly-coloured anemone fish protects its eggs by laying them among the poisonous tentacles of the sea anemone, and in return the fish's bright colours attract prey for the anemone to eat; birds and bees take sustenance from plants and carry pollen between plants), and between species and their environment (e.g., algae and water lilies compete for sunlight in a pond), and explain how these interrelationships sustain biodiversity
6s16 **CR2007**	3.6 identify everyday products that come from a diversity of organisms (e.g., traditional pain relievers are derived from the bark of the white willow tree; tofu is made from soybeans; silk is made from silkworm cocoons; nutritional supplements, shampoos, toothpastes, and deodorants contain pollen collected by bees)
6s17 **CR2007**	3.7 explain how invasive species (e.g., zebra mussel, Asian longhorned beetle, purple loosestrife) reduce biodiversity in local environments

UNDERSTANDING STRUCTURES AND MECHANISMS: Flight

Overall Expectations

6s18 **CR2007**	1. assess the societal and environmental impacts of flying devices that make use of properties of air;
6s19 **CR2007**	2. investigate ways in which flying devices make use of properties of air;
6s20 **CR2007**	3. explain ways in which properties of air can be applied to the principles of flight and flying devices.

1. Relating Science and Technology to Society and the Environment

6s21 **CR2007**	1.1 assess the benefits and costs of aviation technology for society and the environment, taking different social and economic perspectives into account (e.g., the perspectives of farmers, airline workers, doctors, home owners, tour operators) Sample issues: (a) Crop dusting from planes allows the chemicals to spread quickly over large crop areas, which is critical to pest control and crop protection. However, the planes cannot direct the chemicals onto the target crop with precision, so the chemicals spread where they are not wanted. (b) The speed and ease of air travel allow quick transportation of organs for lifesaving transplants, quick transportation of injured patients to hospitals, and trips for business and pleasure. However, air travel also increases the risk of spreading infectious diseases and creates noise and air pollution.

2. Developing Investigation and Communication Skills

6s22 **CR2007**	2.1 follow established safety procedures for using tools and materials and operating flying devices (e.g., aim flying devices away from each other when launching them; fly kites and airplanes a safe distance from overhead hydro wires)
6s23 **CR2007**	2.2 use scientific inquiry/experimentation skills (see page 12) to investigate the properties of air (e.g., air takes up space, has mass, can be compressed) Sample guiding questions: How do we know that air is there? When have you felt the force or pressure of air? Where might you see some of these principles applied in daily life?

6s24 **CR2007**	2.3 investigate characteristics and adaptations that enable living things to fly (e.g., a bat's wings are made up of long, thin bones covered with a very light membrane that forms an airfoil surface; insects can twist and turn their wings, which helps them to hover in the air or even fly backwards; some seeds, such as the keys of a maple tree or dandelion seeds, have parachutes or wings like a glider that allow them to be carried by the wind)
6s25 **CR2007**	2.4 use technological problem-solving skills (see page 16) to design, build, and test a flying device (e.g., a kite, a paper airplane, a hot air balloon) Sample guiding questions: How does your device use the principles of flight? What were some challenges in getting your device off the ground? How might you change your device to make it fly better?
6s26 **CR2007**	2.5 use appropriate science and technology vocabulary, including aerodynamics, compress, flight, glide, propel,
6s27 **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 technological conventions, make a drawing of the flying device they constructed)

3. Understanding Basic Concepts

6s28 **CR2007**	3.1 identify the properties of air that make flight possible (e.g., air takes up space, has mass, expands, can exert a force when compressed)
6s29 **CR2007**	3.2 identify common applications of the properties of air, such as its compressibility and insulating qualities (e.g., home insulation, tires, sleeping bags, layered clothing)
6s30 **CR2007**	3.3 identify and describe the four forces of flight – lift, weight, drag, and thrust
6s31 **CR2007**	3.4 describe, in qualitative terms, the relationships between the forces of lift, weight, thrust, and drag that are required for flight (e.g., lift must be greater than weight for a plane to take off; thrust must be greater than drag for a plane to take off; lift must be less than weight for a plane to land; thrust must be less than drag for a plane to land)
6s32 **CR2007**	3.5 describe ways in which flying devices or living things use unbalanced forces to control their flight (e.g., a plane can be steered up or down by tilting the elevators on the tail; when a bird flaps its wings, the wings develop lift as well as forward and upward force, thus causing it to take off)
6s33 **CR2007**	3.6 describe ways in which the four forces of flight can be altered (e.g., increasing the angle of attack increases the lift; lightweight materials help to keep the overall mass of the plane down, so that it can fly with smaller lift force; jet engines can vary the amount of thrust, which enables the plane to move forward; using the flaps on airplane wings changes the amount of drag, which reduces the speed of the plane)

UNDERSTANDING MATTER AND ENERGY: Electricity and Electrical Devices

Overall Expectations

6s34 **CR2007**	1. evaluate the impact of the use of electricity on both the way we live and the environment;
6s35 **CR2007**	2. investigate the characteristics of static and current electricity, and construct simple circuits;
6s36 **CR2007**	3. demonstrate an understanding of the principles of electrical energy and its transformation into and from other forms of energy.

Science and Technology Expectations Grade 6

1. Relating Science and Technology to Society and the Environment

6s37 **CR2007**	1.1 assess the short- and long-term environmental effects of the different ways in which electricity is generated in Canada (e.g., hydro, thermal, nuclear, wind, solar), including the effect of each method on natural resources and living things in the environment Sample problems: (a) Electricity in Ontario is generated by nuclear plants, hydroelectric plants, coal-fired plants, and natural gas plants, and a small percentage is obtained through alternative energy sources. Choose an electricity-generating plant that supplies electricity in your community, and compare the environmental effects of the generating method it uses with a method used in another part of the province. (b) The James Bay Hydroelectric Project was one of the biggest hydroelectric developments of the past century, but it has also had a serious impact on the environment and the James Bay Cree people. Investigate both sides of this issue, and suggest how things might be approached differently today.
6s38 **CR2007**	1.2 assess opportunities for reducing electricity consumption at home or at school that could affect the use of non-renewable resources in a positive way or reduce the impact of electricity generation on the environment Sample issue: Peak demand times for electricity are morning and early evening. Because electricity cannot be stored in a cost-effective way, it must be supplied as it is being used. This means that almost all of a utility's available power plants must run to meet the demand and prevent system outages. Some utility companies are considering a plan to pay consumers to reduce their electricity consumption, especially during peak hours. This plan would not only reduce demand but would also reduce the cost of electricity for all customers and the impact of electricity production on the environment.

2. Developing Investigation and Communication Skills

6s39 **CR2007**	2.1 follow established safety procedures for working with electricity (e.g., ensure hands are completely dry when working with electricity; be aware of electrical hazards at home, at school, and in the community)
6s40 **CR2007**	2.2 design and build series and parallel circuits, draw labelled diagrams identifying the components used in each, and describe the role of each component in the circuit
6s41 **CR2007**	2.3 use scientific inquiry/experimentation skills (see page 12) to investigate the characteristics of static electricity Sample guiding questions: Is static electricity really static? Explain. What causes static electricity? Is it easier to generate static electricity in a dry room or a humid room? Why? Which materials accept a charge better than others? Where would you find static electricity in action?
6s42 **CR2007**	2.4 design, build, and test a device that produces electricity (e.g., a battery built from a lemon or potato; a wind turbine) Sample guiding questions: How can you find the positive and negative ends of your battery? How much voltage does your battery produce? How can you increase the voltage? What would happen if you exchanged the lemon for an apple? For a potato or a carrot? For other fruits or vegetables? How does a wind turbine produce electricity? Is this a good method of producing electricity? Why? Why not?
6s43 **CR2007**	2.5 use technological problem-solving skills (see page 16) to design, build, and test a device that transforms electrical energy into another form of energy in order to perform a function (e.g., a device that makes a sound, that moves, that lights up) Sample guiding questions: What function will your device perform? What does your device transform the electrical energy into? How does your device work?
6s44 **CR2007**	2.6 use appropriate science and technology vocabulary, including current, battery, circuit, transform, static, electrostatic, and energy, in oral and written communication
6s45 **CR2007**	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., using scientific and technological conventions, create a labelled diagram showing the component parts of the device they created to transform electrical energy into another form of energy and perform a function)

3. Understanding Basic Concepts

6s46 **CR2007**	3.1 distinguish between current and static electricity
6s47 **CR2007**	3.2 use the principles of static electricity to explain common electrostatic phenomena (e.g., the attraction of hairs to a comb that has been rubbed on a piece of wool; the attraction of small pieces of paper to a plastic ruler that has been rubbed with a rag; the attraction of pieces of clothing to each other when they come out of a clothes dryer)
6s48 **CR2007**	3.3 identify materials that are good conductors of electricity (e.g., copper, gold, silver, aluminum, water [when it has a high mineral content]) and good insulators (e.g., glass, plastic, rubber, ceramics)

6s49 **CR2007**	3.4 describe how various forms of energy can be transformed into electrical energy (e.g., batteries use chemical energy; hydroelectric plants use water power; nuclear generating stations use nuclear energy; wind turbines use wind power; solar panels use energy from the sun; wave power stations use energy from ocean waves)
6s50 **CR2007**	3.5 identify ways in which electrical energy is transformed into other forms of energy (e.g., electrical energy is transformed into heat energy in a toaster, light and sound energy in a television, mechanical energy in a blender)
6s51 **CR2007**	3.6 explain the functions of the components of a simple electrical circuit (e.g., a battery is the power source; a length of wire is the conductor that carries the electrical current to the load; a light bulb or motor is the load)
6s52 **CR2007**	3.7 describe series circuits (components connected in a daisy chain) and parallel circuits (components connected side by side like the rungs of a ladder), and identify where each is used (e.g., some strings of patio lights are in series circuits – when one light burns out, the whole string goes out; parallel circuits are used for wiring lighting and electrical outlets in your house – when one light burns out, the others keep burning)
6s53 **CR2007**	3.8 describe ways in which the use of electricity by society, including the amount of electrical energy used, has changed over time (e.g., drying clothes in a dryer instead of using a clothesline; playing video games instead of playing board games; using electric lights instead of candles)

UNDERSTANDING EARTH AND SPACE SYSTEMS: Space

Overall Expectations

6s54 **CR2007**	1. assess the impact of space exploration on society and the environment;
6s55 **CR2007**	2. investigate characteristics of the systems of which the earth is a part and the relationship between the earth, the sun, and the moon;
6s56 **CR2007**	3. demonstrate an understanding of components of the systems of which the earth is a part, and explain the phenomena that result from the movement of different bodies in space.

1. Relating Science and Technology to Society and the Environment

6s57 **CR2007**	1.1 assess the contributions of Canadians (e.g., astronauts Marc Garneau and Roberta Bondar; astronomers Richard Bond, David Levy, and Helen Hogg; Spar Aerospace Limited's development of the Canadarm; the University of British Columbia's development of the "Humble"space telescope) to the exploration and scientific understanding of space
6s58 **CR2007**	1.2 evaluate the social and environmental costs and benefits of space exploration, taking different points of view into account (e.g., the point of view of health care workers and workers in other agencies that compete with space programs for public money; astronauts and their families; the general public; scientists) Sample issue: Space exploration has brought many benefits to society. High-quality radio and television signals are now relayed around the globe by satellite. Biological experiments in space, such as the growing of insulin crystals, are contributing to our ability to fight disease. The technology used for space shuttle fuel pumps is now being used to make better artificial hearts. Geographical data obtained by satellites have improved the quality of maps and made navigation safer. But space exploration is also very expensive, involves risks to the lives of astronauts and others, produces pollution, and creates space junk that may eventually fall back to Earth. Are the benefits worth the costs and risks?

2. Developing Investigation and Communication Skills

6s59 **CR2007**	2.1 follow established safety procedures for handling tools and materials and observing the sun (e.g., use appropriate eye protection when testing a sundial)
6s60 **CR2007**	2.2 use technological problem-solving skills (see page 16) to design, build, and test devices (e.g., a sundial, a model of the earth's rotation around the sun) for investigating the motions of different bodies in the solar system Sample guiding questions: In what direction does your sundial fin need to point? Why? In what direction might you expect the shadow to move? How would daylight saving time affect the accuracy of your sundial? How might your model of the earth and sun best be used to explain the reason for day and night? What impact does the tilt of the earth's axis have on cycles on earth? What does the earth do to cause the day and night cycle?

6s61 **CR2007**	2.3 use scientific inquiry/research skills (see page 15) to investigate scientific and technological advances that allow humans to adapt to life in space Sample guiding questions: Why is life in space a challenge for humans? How might some of those challenges be overcome? What technologies exist now to allow us to overcome the challenges? In what ways does the International Space Station mimic conditions on Earth? What technologies create conditions similar to Earth's on the space station, and what differences remain? How might robotics play a role in human adaptation to space life? Under what circumstances might robots replace humans in space exploration?
6s62 **CR2007**	2.4 use appropriate science and technology vocabulary, including axis, tilt, rotation, revolution, planets, moons, comets, and asteroids, in oral and written communication
6s63 **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., use a graphic organizer to identify and order main ideas and supporting details for a

3. Understanding Basic Concepts

6s64 **CR2007**	3.1 identify components of the solar system, including the sun, the earth, and other planets, natural satellites, comets, asteroids, and meteoroids, and describe their physical characteristics in qualitative terms (e.g., The earth's surface is very young; much of it is covered with water. The moon is the earth's only natural satellite. Comets are the largest objects in our solar system; their centres contain rock particles trapped in frozen liquid; their tails are made up of gas and dust.)
6s65 **CR2007**	3.2 identify the bodies in space that emit light (e.g., stars) and those that reflect light (e.g., moons and planets)
6s66 **CR2007**	3.3 explain how humans meet their basic biological needs in space (e.g., obtaining air, water, and food and managing bodily functions)
6s67 **CR2007**	3.4 identify the technological tools and devices needed for space exploration (e.g., telescopes, spectroscopes, spacecraft, life-support systems)
6s68 **CR2007**	3.5 describe the effects of the relative positions and motions of the earth, moon, and sun (e.g., use models or simulations to show solar and lunar eclipses, phases of the moon, tides)

HC: First Nation Peoples and European Explorers

Overall Expectations

6z1 • describe characteristics of pre-contact First Nation cultures across Canada, including their close relationships with the natural environment; the motivations and attitudes of the European explorers; and the effects of contact on both the receiving and the incoming groups;

6z2 • use a variety of resources and tools to investigate different historical points of view about the positive and negative effects of early contact between First Nation peoples and European explorers;

6z3 • analyse examples of interaction between First Nation peoples and European explorers to identify and report on the effects of cooperation and the reasons for disagreements between the two groups.

Knowledge and Understanding

6z4 – examine various theories about the origins of First Nation and Inuit peoples in North America (e.g., that they crossed the Bering land bridge, had always been indigenous to North America, travelled by water from South America);

6z5 – describe the attitude to the environment of various First Nation groups (e.g., Nisga'a, Mi'kmaq, James Bay Cree) and show how it affected their practices in daily life (e.g., with respect to food, shelter, clothes, transportation);

6z6 – compare key social and cultural characteristics of Algonquian and Iroquoian groups (e.g., language; agriculture and hunting; governance; matriarchal and patriarchal societies; arts; storytelling; trade; recreation; roles of men, women, and children);

6z7 – identify the Viking, French, and English explorers who first came to and explored Canada, and explain the reasons for their journeys (e.g., the early-fifteenth-century blockade of overland trade routes and the resulting search for new routes to the Far East; the fishing industry; the fur trade; the search for gold; population growth in Europe leading to the search for new areas for settlement);

6z8 – identify technological developments and cultural factors that assisted and promoted the exploration of North America (e.g., caravel ships, improved navigational instruments, the quest for new lands);

6z9 – describe the expansion of European influence through the founding of the first trading posts (e.g., Île Ste Croix, Port Royal, Québec, Mont Royal, Fort William) and explain how the fur trade served the interests of both the Europeans and the First Nation peoples;

6z10 – identify the results of contact for both the Europeans and the First Nation peoples (e.g., sharing of beliefs, knowledge, and skills; intermarriage; trading alliances and conflicts; impact of European diseases on First Nation peoples; impact of fur trade on natural resources such as beaver populations).

Inquiry/Research and Communication Skills

6z11 – formulate questions with a statement of purpose to develop research plans (e.g., Why did Cartier kidnap Donnacona and his sons? What was the role of First Nation women in the fur trade?);

6z12 – select relevant resources and identify their point of view (e.g., recognize the historical context of Cartier's logbook; recognize bias in Champlain's drawing and descriptions of Mohawk villages);

6z13 – identify and explain differing opinions about the positive and negative effects of early contact between European and First Nation peoples (e.g., growth of First Nation peoples' dependency on trade goods; impact of the fur trade on the economy and environment; effect of attempts to convert the Huron Nation to Christianity);

6z14 – use and construct a variety of graphic organizers to clarify and interpret information (e.g., cause-and-effect diagrams linking the environment and First Nation cultures, mind maps to connect the results of early contact, diagrams and captions to illustrate technological advances that allowed exploration);

6z15 – read, interpret, and compare historical and modern maps of an area to determine accuracy (e.g., Champlain's maps versus present-day maps of North America; a map based on Magellan's journey versus modern projections of the world);

6z16 – build models or draw and label various forms of maps, using cartographic symbols and a legend (e.g., model of a Mohawk village, maps of explorers' routes, maps of waterways used for the fur trade);

6z17 – observing bibliographic conventions, use media works, oral presentations, written notes and reports, drawings, tables, charts, and graphs to communicate the results of inquiries about the effects of early contact between First Nation peoples and early European explorers (e.g., the causes of the disappearance of the Neutral Nation, the influence of French fashion on the expansion of the fur trade);

6z18 – use appropriate vocabulary (e.g., *Métis, clan, council, Anishinabek, consensus, social, Haudenosaunee, political, archaeological, caravel, astrolabe, bias, epidemic, alliance, monopoly*) to describe their inquiries and observations.

Application

6z19 – explain how cooperation between First Nation groups and early European explorers benefited both groups (e.g., Europeans gained medical knowledge, survival skills, and geographic knowledge from First Nation peoples; First Nation peoples acquired products of European technology such as cooking pots, metal tools, blankets, and clothing; military alliances helped both groups against a common enemy);

6z20 – explain how differences between First Nation peoples and early European explorers led to conflicts between the two groups (e.g., lack of common language, differing world views and spiritual beliefs, introduction of European diseases, differing views about property ownership);

6z21 – express their personal viewpoints, based on historical evidence, about the outcomes of early contact between First Nation peoples and early European explorers (e.g., report on the origins and challenges of the Métis Nation; use a storyboard to show the events leading to the establishment and destruction of Ste-Marie-Among-the-Hurons; present the results of an Internet search on a specific Hudson's Bay Company or North West Company trading post).

6z22 – identify some present-day issues concerning First Nation peoples that relate to results of early contact (e.g., the effect of new technologies on First Nation cultures; land claims);

6z23 – identify achievements and contributions of Aboriginal people in present-day Canada (e.g., James Bartleman, Jordin Tootoo, Douglas Cardinal, Susan Aglukark).

CWC: Canada 's Links to the World

Overall Expectations

6z24 • identify and describe Canada's economic, political, social, and physical links with the United States and other regions of the world;

6z25 • use a variety of resources and tools to gather, process, and communicate information about the domestic and international effects of Canada's links with the United States and other areas of the world;

6z26 • explain the relevance to Canada of current global issues and influences.

Knowledge and Understanding

6z27 – identify some countries with which Canada has links (e.g., in Europe, the Pacific Rim, the Americas, Asia, the Middle East, Africa);

6z28 – describe some of the connections Canada shares with the rest of the world (e.g., trade, history, geography, tourism, economic assistance, immigration, indigenous peoples, peacekeeping, media, culture);

6z29 – identify products that Canada imports and exports (e.g., *imports*: fruit, vegetables, chemicals, motor vehicles; *exports*: newsprint, grain, machinery, timber, telecommunications, natural gas);

6z30 – identify the countries to which Canada exports goods (e.g., the United States, Japan, the United Kingdom, China, Germany);

6z31 – identify the countries from which Canada imports goods (e.g., the United States, Japan, the United Kingdom, Germany, other European countries,Taiwan, South Korea, Mexico);

6z32 – identify some important international organizations/agreements in which Canada participates and describe their purpose (e.g., the United Nations, the World Trade Organization, the North American Free Trade Agreement, the World Health Orga-nization, the North Atlantic Treaty Organization, the Commonwealth of Nations, la Francophonie, the Asia-Pacific Economic Cooperation [APEC] association);

6z33 – identify Canada's connections with the United States through the media, trade, immigration, culture, technology, tourism, history, and geography (e.g., television programs, trade in vehicles, historical roots, common geographic features, shared waterways, common environmental initiatives);

6z34 – describe distinguishing characteristics of the United States (e.g., climate, physical features, political system, economic activities,international influence, celebrations);

6z35 – describe distinguishing characteristics of a country in another region with which Canada has links (e.g., climate, physical features, political system, economic activities, international influence, celebrations).

Inquiry/Research and Communication Skills

6z36 – formulate questions to develop research plans with a statement of purpose (e.g., How has Canada achieved its reputation as a leading peacekeeping country? How does tourism benefit Canadians? What are some current issues arising from Canadian/ U.S. trade relations? Why does the U.S. government recognize Jay's Treaty but the Canadian government does not? Why do some Canadian companies choose to manufacture goods outside of North America?);

6z37 – use a variety of primary and secondary sources to locate and process relevant information about Canada's links with the world (e.g., *primary sources*: statistics, field trips, interviews, original documents; *secondary sources*: maps, illustrations, print materials, videos, CD-ROMs, Internet sites);

6z38 – analyse, classify, and interpret information about the United States and at least one other country from another region of the world;

6z39 – use and construct a variety of graphic organizers and graphs to sort, classify, connect, and interpret information (e.g., tables to show countries and total trade; double bar graphs to compare imports to exports; circle graphs to show how tourist dollars are spent);

6z40 – observing bibliographic conventions, use media works, oral presentations, written descriptions, illustrations, tables, charts, maps, and graphs to communicate main ideas, with supporting evidence, about the various regions of the United States and about one other country from another region of the world;

6z41 – use appropriate vocabulary (e.g., *technology, culture, immigration, tourism, physical features, indigenous peoples, export, import, parallels, meridians, Pacific Rim, economics, media*) to describe their inquiries and observations.

Map, Globe, and Graphic Skills *

6z42 – use base maps and a variety of information sources to sketch the relative position of places (e.g., location of trading partners, popular tourist areas of the United States and Canada);

6z43 – create maps using shading/colour to show details of the physical characteristics of regions (e.g., resources, agriculture, climate, elevation);

6z44 – use information about time zones to identify time differences among regions of the world;

6z45 – use special-purpose maps (e.g., contour maps, climatic maps, physical-features maps) to find specific geographic information;

6z46 – use latitude and longitude coordinates to locate some major cities and countries of the world;

6z47 – compare various map projections of the world (e.g., Mercator, Peters, Mollweide, Atlantic-centred and Pacific-centred), and analyse their differences to determine the particular bias of each.

Application

6z48 – use an appropriate presentation format to show how the contributions of an out-standing Canadian are recognized in the global community as well as in Canada (e.g., in dance, sports, music, literature, art, science, technology);

6z49 describe some ways in which Canada has influenced other countries (e.g., through the arts, technology, sports, literature, media, telecommunications, satellites);

6z50 – describe some influences of other countries on contemporary Canadian society and the lifestyles of Canadians (e.g., technologies, diseases, heritage celebrations, foods, sports, entertainment);

6z51 – describe Canada's participation in international efforts to address current global issues (e.g., peacekeeping, environmental initiatives, world health initiatives, disaster relief, regulation of child labour, human rights violations, acceptance of refugees).

Healthy Living

Overall Expectations

6p1 • explain how body image and self-esteem influence eating practices;

6p2 • identify the major parts of the reproductive system and their functions and relate them to puberty;

6p3 • use basic prevention and treatment skills (e.g., basic first aid) to help themselves and others;

6p4 • identify the influences (e.g., the media, peers, family) affecting the use of cannabis and other drugs, as well as the effects and legalities of, as well as healthy alternatives to, cannabis and other drugs.

Healthy Eating

6p5 – determine the influence of various factors (e.g., the media, family traditions, allergies) on personal food choices, body image, and self-esteem;

6p6 – analyse personal eating habits in a variety of situations (e.g., at home, in school, in restaurants);

6p7 – describe the benefits of healthy eating for active living;

Growth and Development

6p8 – relate the changes at puberty to the reproductive organs and their functions;

6p9 – apply a problem-solving/decision-making process to address issues related to friends, peers, and family relationships;

Personal Safety / Injury Prevention

6p10 – identify and describe appropriate methods for preventing and treating ailments (e.g., sunburn, minor cuts);

6p11 – identify the responsibilities associated with caring for themselves and others (e.g., while babysitting);

6p12 – describe and respond appropriately to potentially violent situations relevant to themselves (e.g., threats, harassment, violence in the media);

Substance Use / Abuse

6p13 – describe the short- and long-term effects of cannabis and other illicit drugs;

6p14 – determine influences (e.g., interpersonal, personal, legal, economic) on the use and abuse of tobacco and other drugs (e.g., alcohol, cannabis, LSD) and consider them as part of a decision-making process to make healthy choices;

6p15 – identify people and community agencies that support making healthy choices regarding substance use and abuse.

Fundamental Movement Skills

Overall Expectations

6p16 • perform movement skills in the kind of combinations that are required in a variety of modified games, gymnastics, dance, and outdoor pursuits: locomotion/travelling (e.g., running, jumping, and hopping in combination, as performed in basketball or in a triple jump), manipulation (e.g., stepping sideways to get in position to bump or volley a ball, as performed in volleyball), and stability (e.g., running and jumping and landing, as in long jump);

6p17 • demonstrate the principles of movement while refining movement skills (e.g., combining body shapes and movements with changes in direction as in a dance or gymnastics routine).

Locomotion / Travelling Skills

6p18 – perform a combination of locomotion/ travelling skills using equipment (e.g., navigating through obstacle courses, skiing, skating);

6p19 – demonstrate a variety of running techniques (e.g., sprints, cross-country runs);

Manipulation Skills

6p20 – kick balls of various sizes and shapes for distance and accuracy (e.g., punt a football, kick a soccer ball);

6p21 – throw an object overhand or side arm, using the dominant hand, to a target or a partner for distance and accuracy;

6p22 – demonstrate goal-tending skills (e.g., blocking, trapping, catching, clearing) with or without a piece of equipment;

Stability Skills

6p23 – jump for height (e.g., vertical wall jump);

6p24 – perform locomotion/travelling and stability skills in combination (e.g., use a sprint approach and jump for distance, as in long jump);

6p25 – perform a variety of springing actions (e.g., spring into vertical rotations such as quarter-turns on the floor or springs to mounts on equipment).

Active Participation

Overall Expectations

6p26 • participate on a regular basis in physical activities that maintain or improve physical fitness (e.g., rope skipping to music);

6p27 • apply living skills, including interpersonal skills, in physical activities (e.g., games, gymnastics, dance, outdoor pursuits) and describe the benefits of using these skills in a variety of physical activities;

6p28 • follow safety procedures related to physical activity, equipment, and facilities, and begin to take responsibility for their own safety.

Physical Activity

6p29 – participate vigorously in all aspects of the program (e.g., cross-country running, co-operative games);

6p30 – describe the factors that motivate participation in daily physical activity (e.g., the influence of friends, enthusiasm for the outdoors) and begin to consider them when making their own choices of physical activities;

Physical Fitness

6p31 – improve their personal fitness levels by participating in sustained moderate to vigorous physical activity (e.g., Ultimate Frisbee) for a minimum of twenty minutes each day, including appropriate warm-up and cool-down procedures;

6p32 – assess their progress in fitness-enhancing activities at regular intervals (e.g., daily, weekly, or monthly monitoring of their pulses before and after active games, stretching, or push-ups);

Living Skills

6p33 – implement and revise as required plans of action to achieve personal fitness goals;

6p34 – follow the rules of fair play in games and activities, and support the efforts of peers to improve their skills.

The Arts Expectations — Grade 06

Music

Overall Expectations

6a1 • demonstrate an understanding of the basic elements of music specified for this grade (see below) through listening to, performing, and creating music;

6a2 • sing and play instruments with expression and proper technique (e.g., with correct breathing, posture, embouchure);

6a3 • use correctly the musical terminology associated with the specific expectations for this grade;

6a4 • read and perform from musical notation;

6a5 • identify and perform music from various cultures and historical periods;

6a6 • communicate their response to music in ways appropriate for this grade (e.g., through language, visual arts, drama, creative movement).

Knowledge of Elements

6a7 – read correctly familiar and unfamiliar music that contains whole notes, half-notes, quarter-notes, and eighth-notes, and their corresponding rests in 4/4 time;

6a8 – read correctly familiar and unfamiliar songs, using their knowledge of sharps, flats, naturals, and key signatures;

6a9 – sing and play the major scale in keys that they encounter in the music they perform;

6a10 – identify simple structural patterns in music that they sing, play, or hear (e.g., the pattern AABA in a simple four-lined folk song);

6a11 – identify music that consists of a single line as monophonic (e.g., a song);

6a12 – identify the type of texture in music from a variety of cultures and historical periods (homophonic, polyphonic);

6a13 – identify different kinds of tone colour in various performing ensembles (e.g., Inuit singing group, Mariachi band, string quartet);

6a14 – sing and play in tune.

Creative Work

6a15 – sing or play expressively, giving particular attention to using suitable dynamics, tempi, and phrasing;

6a16 – sing familiar songs and manipulate a musical element to change the overall effect (e.g., change tempo or rhythm in “Yellow Submarine”);

6a17 – create musical compositions that show appropriate use of various elements of music (e.g., tempo, dynamics, melody, rhythm, form, texture, tone colour), and perform them;

6a18 – create an accompaniment for a story, poem, or drama presentation;

6a19 – create and perform a song based on a scene from a story, poem, or play;

6a20 – conduct pieces in 4/4, 2/4, and 3/4 time, using standard conducting patterns.

Critical Thinking

6a21 – describe how the various elements of music are used to create mood in two pieces of music in different styles;

6a22 – describe, through listening, the main characteristics of pieces of music from the Baroque and Classical periods (e.g., Water Music by Handel, Clarinet Concerto in A, K.622, by Mozart);

6a23 – describe briefly the construction and use of an instrument (e.g., European flute, gong in a Javanese gamelan);

6a24 – communicate their thoughts and feelings about the music they hear, using language and a variety of art forms and media (e.g., painting, computer animation).

Visual Arts

Overall Expectations

6a25 • produce two- and three-dimensional works of art that communicate a range of ideas (thoughts, feelings, experiences) for specific purposes and to specific audiences, using a variety of familiar art tools, materials, and techniques;

6a26 • identify the elements of design (colour, line, shape, form, space, texture) and the principles of design (emphasis, balance, rhythm, unity, variety, proportion), and use them in ways appropriate for this grade when producing and responding to works of art;

6a27 • explain their interpretation of a variety of art works, supporting it with examples of how the elements and some of the principles of design are used in the work;

6a28 • use correctly vocabulary and art terminology associated with the specific expectations for this grade.

Knowledge of Elements

6a29 – identify colour relationships, using a basic colour wheel that they have made (e.g., the combination of a primary and a secondary colour will create a tertiary colour such as blue-green);

6a30 – describe how line can be used to direct the viewer's attention (e.g., the eye is drawn along the line of an outstretched arm to other areas of the work);

6a31 – describe how one-point perspective can be used to create the illusion of depth (e.g., the space between railway tracks appears to narrow, creating the illusion of distance);

6a32 – demonstrate understanding that shadows and shading create the illusion of a third dimension (e.g., explain that adding the appropriate shading to an object makes the object look three-dimensional);

6a33 – identify things to be considered when placing a sculpture in a specific location (e.g., the amount and type of light available);

6a34 – describe how artists may use texture to represent or to evoke an emotional response (e.g., a rough texture to represent strength, anger, or something unpleasant);

6a35 – describe how the strengths and limitations of both traditional and contemporary art tools, materials, and techniques affect artistic choices (e.g., strengths and limitations of pens, twigs, feathers, and brushes as tools for applying watercolours and ink in specific ways);

6a36 – identify the most appropriate tools, materials, and techniques for the size and scope of the work and use them correctly (e.g., select the appropriate tools to draw plants they have observed).

Creative Work

6a37 – solve artistic problems in their work, using the elements of design and at least one of the principles of design specified for this grade (e.g., create a work depicting a local historical event, using line and colour as means of emphasis to highlight the most important aspect of the picture);

6a38 – 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 ideas for specific purposes and to specific audiences (e.g., create a sculpture out of clay that shows a figure engaged in a typical pioneer activity);

6a39 – describe, in their plan for a work of art, how they will research their subject matter (e.g., by examining photographs and art works on the same theme), select their media, and use the elements and principles of design in solving the artistic problems in the work;

6a40 – identify strengths and areas for improvement in their own work and that of others.

Critical Thinking

6a41 – compare works from various periods and cultures, and describe how the artists have used the elements and principles of design (e.g., compare ceremonial headdresses and masks by traditional Haida artists with Thunderbird Man by Daphne Odjig, focusing on their use of balance);

6a42 – demonstrate awareness that an artist intentionally uses some of the elements and principles of design to convey meaning, and explain how the artist accomplishes his or her intentions (e.g., explain that, in a seascape, the artist emphasizes the size and power of an iceberg by placing it in the foreground and using bold, diagonal lines to define it);

6a43 – explain their preference for specific art works, with reference to the artist's intentional use of the elements and principles of design to communicate an idea or feeling (e.g., the brush strokes, the rhythmic, swirling lines, and the strong, bright colours in the stars in The Starry Night by van Gogh create a feeling of movement and excitement);

6a44 – identify the function of visual arts in their community and the contribution that the visual arts make to the economy.

Drama & Dance

Overall Expectations

6a45 • demonstrate an understanding of the principles involved in the structuring of works in drama and dance;

6a46 • interpret and communicate the meaning of novels, scripts, legends, fables, and other material drawn from a range of sources and cultures, using a variety of drama and dance techniques (e.g., "reader's theatre"), and evaluate the effectiveness of the techniques;

6a47 • evaluate, orally and in writing, their own and others' work in drama and dance (e.g., performances, multimedia presentations);

6a48 • create dance pieces, using a variety of techniques;

6a49 • solve problems presented through drama and dance in different ways, and evaluate the effectiveness of each solution;

6a50 • create different interpretations of their work in drama and dance, using available technology.

Knowledge of Elements

6a51 – demonstrate understanding of ways of sustaining the appropriate voice or character (e.g., through language, gestures, body movements) when speaking or writing in role for different purposes (e.g., to entertain, inform, persuade);

6a52 – describe the meaning and evaluate the effect of the work of others, using drama and dance vocabulary correctly (e.g., focus, energy, style, balance);

6a53 – identify and describe examples of balance, harmony, and contrast in drama and dance productions;

6a54 – identify the significance of symbols in dramatic explorations, and use various props appropriately;

6a55 – recognize when it is necessary to sustain concentration in drama and dance (e.g., when they are performing in a large-group improvisation over an extended period of time);

6a56 – explain and demonstrate the use of different patterns in creating effects in drama and dance (e.g., patterns of pace and direction; symmetry);

6a57 – recognize and name characteristics of drama and dance performances that incorporate technology, visual art, music, and popular media to create artistic effects;

6a58 – describe the skills needed to perform in public;

6a59 – distinguish between different dance forms and different theatrical genres.

The Arts Expectations Grade 06

Creative Work

6a60 – interpret and perform some types of dances and forms of drama (e.g., folk dances; mime, choral reading);

6a61 – create dances, using steps and positions borrowed from a variety of dance forms;

6a62 – explain the function of masks, and use masks in their drama and dance presentations;

6a63 – create, rehearse, and present drama and dance works to communicate the meaning of poems, stories,paintings, myths, and other source material drawn from a wide range of cultures;

6a64 – create drama and dance productions in which they make effective use of the principles of harmony, balance, and contrast;

6a65 – produce a short script that makes use of a variety of technologies to create different effects for different audiences (e.g., tape recorder, still camera, stage lighting).

Critical Thinking

6a66 – present and defend their analysis of a performance, focusing on assessment of the ways in which various elements of drama and dance are used together (e.g., structure, texture, harmony, contrast);

6a67 – evaluate drama and dance performances, with reference to their own experiences in daily life;

6a68 – solve artistic problems in drama and dance, individually and in groups, and evaluate the solutions;

6a69 – explain their preferences for specific drama and dance works;

6a70 – provide evidence for their interpretations of personal experiences and events of social significance, which they present through drama and dance, using a variety of research sources;

6a71 – identify the function of dance and drama in their community and the contribution that dance and drama make to the economy.