Grade 5 Overall Curriculum Expectations

Language Arts

Writing

• communicate ideas and information for a variety of purposes (e.g., to present and support a viewpoint) and to specific audiences (e.g., write a letter to a newspaper stating and justifying their position on an issue in the news);
• use writing for various purposes and in a range of contexts, including school work (e.g., to summarize information from materials they have read, to reflect on their thoughts, feelings, and imaginings);
• organize information to convey a central idea, using well-developed paragraphs that focus on a main idea and give some relevant supporting details;
• use simple, compound, and complex sentences;
• produce pieces of writing using a variety of forms (e.g., stories, poems, reports), narrative techniques (e.g., first- and third-person points of view, dialogue), and materials from other media (e.g., illustrations);
• produce media texts using writing and materials from other media (e.g., an advertisement for radio or television);
• revise and edit their work, seeking feedback from others and focusing on content, organization, and appropriateness of vocabulary for audience;
• proofread and correct their final drafts, focusing on grammar, punctuation, and spelling;
• use and spell correctly the vocabulary appropriate for this grade level;
• use correctly the conventions (spelling, grammar, punctuation, etc.) specified for this grade level.

Reading

• read a variety of fiction and non-fiction materials (e.g., novels, short stories, biographies, editorials) for different purposes;
• read aloud, adjusting speed according to purpose and audience;
• read independently, selecting appropriate reading strategies;
• explain their interpretation of a written work, supporting it with evidence from the work and from their own knowledge and experience;
• decide on a specific purpose for reading, and select the material that they need from a variety of appropriate sources;
• understand the vocabulary and language structures appropriate for this grade level;
• use conventions of written materials to help them understand and use the materials.

Oral and Visual Communication

• communicate information, explain a variety of ideas and procedures, and follow the teacher’s instructions;
• ask and answer questions on a variety of topics to acquire and clarify information;
• communicate a main idea about a topic and describe a sequence of events;
• express and respond to ideas and opinions concisely, clearly, and appropriately;
• contribute and work constructively in groups;
• demonstrate the ability to concentrate by identifying main points and staying on topic;
• identify various types of media works and some of the techniques used in them;
• analyse media works;
• create a variety of media works;
• use the conventions (e.g., sentence structure) of oral language, and of the various media, that are appropriate to the grade.
Mathematics

Number Sense and Numeration
- represent, and explore relationships between, decimals, mixed numbers, and fractions using concrete materials and drawings;
- compare, order, and represent whole numbers, decimals, and fractions using concrete materials and drawings;
- understand and explain basic operations (multiplication and division) of decimals by modeling and discussing a variety of problem situations;
- develop proficiency in multiplying by tenths and hundredths and dividing by tenths;
- understand the significance of numbers within the surrounding environment;
- compare and order, and represent the relationship between, fractions, improper fractions, and mixed numbers using concrete materials and drawings;
- select and perform computation techniques appropriate to specific problems involving whole numbers, decimals, and equivalent fractions, and determine whether the results are reasonable;
- solve problems involving decimals and fractions, and describe and explain the variety of strategies used;
- justify in oral and written expression the method chosen for calculations: estimation, mental computation, concrete materials, algorithms, or calculators.

For the following operations, students will be proficient at pencil-and-paper calculations. For computations that are more complex, students may use calculators and/or estimation.

*Addition*: 3 four-digit numbers  
*Subtraction*: 2 four-digit numbers  
*Multiplication*: a two-digit number by a two-digit number  
*Division*: a four-digit number by a one-digit number

Measurement
- demonstrate an understanding of and ability to apply appropriate metric prefixes in measurement and estimation activities;
- identify relationships between and among measurement concepts (linear, temporal, monetary);
- solve problems related to the calculation of the perimeter and the area of regular and irregular two-dimensional shapes;
- estimate, measure, and record the capacity of containers, the mass of familiar objects, and the volume of irregular three-dimensional figures, and compare the measures.

Geometry and Spatial Sense
- identify, describe, compare, and classify geometric figures;
- draw and build three-dimensional objects and models;
- explore transformations of geometric figures;
- understand key concepts in transformational geometry using concrete materials and drawings;
- identify congruent and similar figures using transformations;
- use mathematical language effectively to describe geometric concepts, reasoning, and investigations, and coordinate systems.
Patterning and Algebra
- recognize and discuss the mathematical relationships between and among patterns;
- identify, extend, and create patterns in a variety of contexts;
- analyse and discuss patterning rules;
- create tables to display patterns;
- apply patterning strategies to problem-solving situations.

Data Management
- use computer applications to record the results of data collected;
- predict the validity of the results of data collected;
- interpret displays of data and present the information using mathematical terms;
- evaluate and use data from graphic organizers;
- demonstrate an understanding of probability concepts and use mathematical symbols;
- pose and solve simple problems involving the concept of probability.

Science and Technology

Properties of and Changes in Matter
- demonstrate an understanding of the three states of matter and of changes in state;
- investigate common changes of state (e.g., melting, freezing, condensing, evaporating) and make informed choices about materials when finding solutions to problems in designing and constructing objects;
- identify the properties that make different materials useful in everyday products and discuss the environmental impact of their use.

Human Organ Systems
- demonstrate an understanding of the structure and function of the respiratory, circulatory, digestive, excretory, and nervous systems, and the interactions of organs within each system;
- investigate the structure and function of the major organs of the respiratory, circulatory, digestive, excretory, and nervous systems;
- demonstrate understanding of factors that contribute to good health.

Forces Acting on Structures and Mechanisms
- demonstrate an understanding of the effect of forces acting on different structures and mechanisms;
- design and make load-bearing structures and different mechanisms, and investigate the forces acting on them;
- evaluate the design of systems that include structures and mechanisms, and identify modifications to improve their effectiveness.

Weather
- demonstrate an understanding of the major climatic factors and patterns associated with weather;
- investigate the major climatic factors associated with weather, and design, construct, and test a variety of instruments for recording various features of the weather;
- examine how weather forecasts influence decisions concerning human activity and how humans have adapted to a variety of weather conditions.
Conservation of Energy
• demonstrate an understanding of the importance of conservation of energy in relation to the wise use of renewable and non-renewable energy sources;
• design and construct devices that use a form of energy to meet a specific need or want, and investigate how the energy is transferred to a specified output;
• evaluate the reasons for conserving natural resources and identify possible ways of conserving energy.

Social Studies

Early Civilizations
• identify ways in which the natural environment shaped the cultures of various early civilizations;
• identify physical and social needs of people in early civilizations and compare the ways in which these needs were met;
• describe how the knowledge developed by early civilizations has affected modern society.

Aspects of Government in Canada
• describe the functions and interactions of different levels of government in Canada;
• identify and describe the electoral process;
• describe how immigrants become Canadian citizens.

Visual Arts
• produce two- and three-dimensional works of art that communicate a range of ideas (thoughts, feelings, experiences) for specific purposes and to specific audiences;
• define the elements of design (colour, line, shape, form, space, texture), and use them in ways appropriate for this grade when producing and responding to works of art;
• describe their interpretation of a variety of art works, basing their interpretation on evidence from the works (especially on ways in which an artist has used the elements of design to clarify meaning) and on their own knowledge and experience;
• use correctly vocabulary and art terminology associated with the specific expectations for this grade.

Music
• demonstrate an understanding of the basic elements of music specified for this grade through listening to, performing, and creating music;
• create and perform music, using a variety of sound sources;
• use correctly the musical terminology associated with the specific expectations for this grade;
• read simple musical notation;
• identify and perform music from various cultures and historical periods;
• communicate their response to music in ways appropriate for this grade (e.g., through language, visual arts, drama, and creative movement).
Drama and Dance
- demonstrate understanding of some of the principles (e.g., contrast, harmony) involved in the structuring of works in drama and dance;
- interpret and communicate the meaning of stories, films, plays, songs, and other material drawn from different sources and cultures, using a range of drama and dance techniques (e.g., using a “corridor of voices”);
- create dance pieces, using a variety of techniques;
- describe, orally and in writing, their response to their own and others’ work in drama and dance, gather others’ responses (e.g., through interviews, research), and compare the responses;
- solve problems presented through drama and dance, working in large and small groups and using various strategies;
- use different forms of available technology to enhance their work in drama and dance.

Health and Physical Education

Healthy Eating
- analyse information that has an impact on healthy eating practices (e.g., food labels, food guides, care-of-teeth brochures);
- describe physical, emotional, and interpersonal changes associated with puberty;
- apply strategies to deal with threats to personal safety (e.g., in response to harassment) and to prevent injury (e.g., from physical assault);
- identify the influences (e.g., the media, peers, family) affecting alcohol use, as well as the effects and legalities of, and healthy alternatives to, alcohol use.

 Fundamental Movement Skills
- perform the movement skills required to participate in games, gymnastics, dance, and outdoor pursuits alone and with others: locomotion/travelling (e.g., running in patterns in game activities), manipulation (e.g., catching, throwing), and stability (e.g., transferring their weight);
- demonstrate the principles of movement while refining their movement skills (e.g., matching the movements of a partner in a sequence).

Active Participation
- participate on a regular basis in physical activities that maintain or improve physical fitness (e.g., one-on-one or two-on-two soccer-type games);
- identify the components of physical fitness and describe physical activities that improve these components;
- apply living skills (e.g., goal setting, conflict-resolution techniques, and interpersonal skills that contribute to positive group interaction) to physical activities (e.g., games, gymnastics, dance, outdoor pursuits);
- follow safety procedures related to physical activity, equipment, and facilities.

French
- listen to and talk about short, simple oral texts dealing with familiar topics;
- read a variety of simple materials, 100 to 150 words long, and demonstrate understanding;
- write ideas and facts, or provide written responses to simple questions, using simple sentences;
- identify and use the vocabulary and the grammar and language conventions appropriate for this grade level.