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(Reworded from the Ontario Curriculum, 2020)



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Grade 1 Mathematics Curriculum

Strand A: Social-Emotional Learning (SEL) Skills in Math

Overall Expectation:

Students will develop social-emotional learning skills to support their ability to engage with mathematical concepts effectively and with confidence.

Specific Expectations:

- Use strategies such as self-talk and perseverance to manage stress and overcome challenges in solving math problems.
- Demonstrate a willingness to learn from mistakes and try multiple approaches when faced with difficult tasks.
- Show appreciation for the ideas and strategies of others and work collaboratively in problem-solving contexts.



Strand B: Number Sense and Operations

Overall Expectation:

Students will demonstrate an understanding of numbers and their relationships, and develop skills in counting, comparing, adding, and subtracting.

Specific Expectations:

- Count forward and backward by 1s, 2s, 5s, and 10s, starting from various numbers up to 50.
- Read and write whole numbers to 50 using numerals and words.
- Compare and order numbers using terms like "greater than," "less than," and "equal to."
- Use models and drawings to understand and represent place value (tens and ones).
- Add and subtract numbers within 20 using multiple strategies (e.g., doubles, number lines, decomposing numbers).
- Solve real-life problems involving addition and subtraction with one- or two-digit numbers.



Strand C: Algebra

Overall Expectation:

Students will explore and describe patterns and relationships, and apply simple algebraic reasoning in problem-solving.

Specific Expectations:

- Identify and extend repeating patterns involving shapes, colors, or numbers.
- Create and describe patterns using everyday materials or drawings.
- Recognize equal quantities in number sentences (e.g., 4 + 1 = 3 + 2).
- Represent unknown values using symbols (e.g., □ + 2 = 5).
- Use balance models to explore the idea of equality and simple equations.



Strand D: Measurement

Overall Expectation:

Students will develop an understanding of measurable attributes, such as length, time, and mass, and use tools to estimate and measure.

Specific Expectations:

- Estimate, measure, and compare length, height, and mass using standard and non-standard units.
- Read time to the hour and half-hour on analog and digital clocks.
- Use a calendar to identify and sequence days, weeks, and months.
- Identify tools appropriate for specific measurements (e.g., ruler, scale, clock).



Strand E: Geometry and Spatial Sense

Overall Expectation:

Students will explore and describe shapes and their attributes, and understand the concepts of location and movement.

Specific Expectations:

- Identify and name basic 2D shapes (circle, triangle, square, rectangle) and 3D figures (cube, sphere, cone, cylinder).
- Compare shapes based on size, sides, corners, and faces.
- Use terms like "above," "below," "between," and "next to" to describe position and direction.
- Explore symmetry by folding or drawing lines of symmetry in shapes.



Strand F: Data and Probability

Overall Expectation:

Students will collect, organize, and interpret data, and begin to explore concepts of probability.

Specific Expectations:

- Collect simple data using tally marks or checklists.
- Organize data in bar graphs or pictographs with appropriate labels.
- Interpret data by answering questions about "most," "least," and "same as."
- Use basic probability terms (likely, unlikely, certain, impossible) to describe everyday events.



Strand G: Financial Literacy

Overall Expectation:

Students will demonstrate awareness of the role of money in daily life and develop skills to manage simple financial decisions.

Specific Expectations:

- Identify Canadian coins and their values (penny to toonie).
- Represent amounts of money up to 50 cents using various combinations of coins.
- Distinguish between needs and wants in daily life.
- Recognize ways people earn, save, and spend money.



Grade 2 Mathematics Curriculum

Strand A: Social-Emotional Learning Skills in Mathematics

Overall Expectation:

Students will build social-emotional learning skills to enhance their understanding of mathematics and to support perseverance, collaboration, and confidence in mathematical tasks.

Specific Expectations:

- Apply self-awareness and coping strategies when encountering difficulties in math.
- Demonstrate perseverance in solving unfamiliar or multi-step problems.
- Communicate with peers respectfully and listen to diverse mathematical ideas and strategies.
- Use reflection to evaluate their own mathematical thinking and growth.



Strand B: Number Sense and Operations

Overall Expectation:

Students will deepen their understanding of numbers, relationships, and operations, and use various strategies to solve numerical problems.

Specific Expectations:

- Count by 1s, 2s, 5s, 10s, and 25s to 200, and skip count forward and backward starting at various numbers.
- Read, write, compare, and order numbers up to 200.
- Represent numbers using base-ten models and place value concepts (hundreds, tens, ones).
- Compose and decompose numbers in multiple ways (e.g., 146 = 100 + 40 + 6).
- Add and subtract 2-digit numbers with and without regrouping using models and algorithms.
- Solve one- and two-step real-world problems involving addition and subtraction.
- Begin to develop fluency with multiplication facts related to 2s, 5s, and 10s through repeated addition and arrays.



Strand C: Algebra

Overall Expectation:

Students will explore patterns, equality, and algebraic reasoning using symbols, expressions, and visual representations.

Specific Expectations:

- Identify, extend, and create repeating and growing patterns.
- Represent relationships using number sentences (e.g., 3 + 4 = 7).
- Use symbols to represent unknowns in equations (e.g., $\Box + 6 = 10$).
- Apply equality and inequality symbols (<, >, =) in numerical expressions.
- Solve problems involving simple equations using concrete and visual models.



Strand D: Measurement

Overall Expectation:

Students will develop an understanding of measurable attributes, including time, length, mass, capacity, and temperature, and use appropriate tools and units.

Specific Expectations:

- Estimate, measure, and compare length, height, and distance using centimetres and metres.
- Measure and compare mass (grams, kilograms) and capacity (millilitres, litres) using standard units.
- Read and represent time to the nearest quarter-hour on digital and analog clocks.
- Identify relationships among units (e.g., 100 cm = 1 m).
- Use calendars to identify and describe days, weeks, and months.



Strand E: Geometry and Spatial Sense

Overall Expectation:

Students will explore the properties and relationships of 2D shapes and 3D figures, and describe position and movement in space.

Specific Expectations:

- Identify and describe 2D shapes (e.g., parallelogram, trapezoid) and 3D figures (e.g., prism, pyramid).
- Sort and classify shapes based on attributes such as number of sides or faces.
- Identify lines of symmetry in 2D shapes using folding or mirrors.
- Describe and interpret the position of objects using directional language (e.g., between, left of).
- Explore transformations such as slides (translations), flips (reflections), and turns (rotations).



Strand F: Data and Probability

Overall Expectation:

Students will collect, organize, and analyze data to make predictions and informed decisions, and explore basic probability.

Specific Expectations:

- Pose questions, collect data, and represent it using tally charts, bar graphs, and pictographs.
- Interpret data to answer questions and draw conclusions.
- Compare different data sets to analyze trends and differences.
- Describe probability using terms such as "likely," "unlikely," "certain," and "impossible."
- Conduct simple probability experiments (e.g., spinner or dice) and record outcomes.



Strand G: Financial Literacy

Overall Expectation:

Students will develop a foundational understanding of money concepts and financial decision-making.

Specific Expectations:

- Identify Canadian coins and bills up to \$20 and represent money amounts using various combinations.
- Count and make change for money amounts up to \$1.
- Compare prices and make simple financial decisions (e.g., saving vs. spending).
- Explore the concept of budgeting in familiar contexts (e.g., buying items at a class store).



Grade 3 Mathematics Curriculum

Strand A: Social-Emotional Learning Skills in Mathematics

Overall Expectation:

Students will continue to develop social-emotional learning competencies that support mathematical thinking, communication, and collaboration.

Specific Expectations:

- Demonstrate perseverance and self-regulation when solving increasingly complex mathematical problems.
- Reflect on their learning, identify strengths and areas for growth, and adjust strategies as needed.
- Show openness to different perspectives when engaging in mathematical discussions with peers.
- Use positive self-talk to manage frustration and approach math tasks with confidence.



Strand B: Number Sense and Operations

Overall Expectation:

Students will strengthen their understanding of numbers up to 1,000 and apply various strategies for operations involving whole numbers.

Specific Expectations:

- Count forward and backward by 1s, 2s, 5s, 10s, and 100s within 1,000.
- Represent, compare, and order numbers up to 1,000 using standard and expanded form.
- Decompose numbers in different ways using place value (hundreds, tens, ones).
- Add and subtract 2- and 3-digit numbers with and without regrouping using multiple strategies.
- Solve real-world problems involving addition and subtraction.
- Begin to recall multiplication facts to 10 x 10 and related division facts using arrays, skip counting, and grouping.
- Apply number relationships (e.g., doubles, making tens) to support mental math strategies.



Strand C: Algebra

Overall Expectation:

Students will explore relationships among quantities and use algebraic reasoning to represent and solve problems.

Specific Expectations:

- Identify, extend, and create increasing and decreasing patterns using numbers and shapes.
- Represent relationships using equations with unknowns (e.g., $\Box + 27 = 63$).
- Use the equal sign appropriately to express equality and balance.
- Solve simple equations involving one operation with a missing number.
- Use patterns to make predictions and solve problems.



Strand D: Measurement

Overall Expectation:

Students will measure length, mass, capacity, area, time, and temperature using appropriate tools and units.

Specific Expectations:

- Measure and estimate length in centimetres and metres.
- Measure and compare mass (grams, kilograms) and capacity (millilitres, litres).
- Tell time to the nearest 5 minutes using digital and analog clocks.
- Use elapsed time to solve problems (e.g., start/end time).
- Estimate and measure area using square units.
- Read temperature using thermometers and relate to real-life contexts.



Strand E: Geometry and Spatial Sense

Overall Expectation:

Students will analyze properties of geometric figures and describe location, movement, and transformations.

Specific Expectations:

- Identify and classify polygons (e.g., triangles, quadrilaterals, pentagons) and describe their attributes.
- Construct 3D figures using nets and describe faces, edges, and vertices.
- Identify lines of symmetry in 2D shapes and create symmetrical designs.
- Describe translations, reflections, and rotations using language and visuals.
- Use grid coordinates to describe and locate positions on maps and graphs.



Strand F: Data and Probability

Overall Expectation:

Students will collect, organize, display, and interpret data, and use probability to describe and predict events.

Specific Expectations:

- Gather data through surveys and experiments.
- Create bar graphs and pictographs with appropriate titles, scales, and labels.
- Interpret data to answer questions and draw conclusions.
- Compare different sets of data using mean, mode, and range (introduced conceptually).
- Describe and predict outcomes using probability language (e.g., more likely, less likely, equally likely).



Strand G: Financial Literacy

Overall Expectation:

Students will develop money sense and apply it to make informed financial decisions.

Specific Expectations:

- Identify Canadian coins and bills up to \$100 and represent given amounts using different combinations.
- Add and subtract money values to \$10 and make change.
- Compare prices of items and calculate total costs.
- Understand the importance of saving, budgeting, and prioritizing needs and wants.
- Explore how financial decisions impact individuals and families.



Grade 4 Mathematics Curriculum

Strand A: Social-Emotional Learning Skills in Mathematics

Overall Expectation:

Students will strengthen their social-emotional learning skills to support a positive mindset, resilience, and effective collaboration when engaging in mathematical thinking.

Specific Expectations:

- Use self-monitoring strategies and persistence when tackling multi-step problems.
- Collaborate respectfully with peers and consider different problem-solving strategies.
- Reflect on successes and setbacks in math tasks and adjust strategies accordingly.
- Express confidence and curiosity in learning new math concepts.



Strand B: Number Sense and Operations

Overall Expectation:

Students will understand and apply relationships between numbers and use operations with whole numbers and simple fractions to solve problems.

Specific Expectations:

- Count by multiples and skip count using numbers up to 10,000.
- Read, write, compare, and order whole numbers up to 10,000.
- Use place value to compose and decompose numbers (e.g., 4,208 = 4,000 + 200 + 8).
- Add and subtract 4-digit numbers accurately using standard algorithms and mental strategies.
- Multiply 2-digit numbers by 1-digit numbers using visual models and strategies.
- Divide up to 2-digit numbers by 1-digit numbers using sharing and grouping strategies.
- Represent and compare fractions (halves, thirds, fourths, fifths, tenths) using area models and number lines.
- Relate fractions to decimals using money and base-10 blocks.



Strand C: Algebra

Overall Expectation:

Students will explore patterns and relationships, represent unknown values, and solve equations involving one or two operations.

Specific Expectations:

- Identify, extend, and create numerical and geometric patterns.
- Describe pattern rules using words and tables.
- Represent number relationships using expressions with variables (e.g., n + 3).
- Solve equations with one unknown using mental math and reasoning.
- Use inequality symbols (<, >) to compare values in number sentences.



Strand D: Measurement

Overall Expectation:

Students will estimate, measure, and convert between units to solve real-life measurement problems.

Specific Expectations:

- Measure and record length, mass, and capacity using metric units.
- Estimate and measure perimeter and area of rectangles and irregular shapes.
- Tell time to the nearest minute and calculate elapsed time.
- Understand relationships among units (e.g., 100 cm = 1 m, 1,000 g = 1 kg).
- Read thermometers and relate temperature to weather and daily life.



Strand E: Geometry and Spatial Sense

Overall Expectation:

Students will classify and analyze 2D shapes and 3D figures, explore angles, and describe transformations.

Specific Expectations:

- Identify and sort polygons based on sides and angles (e.g., triangles, quadrilaterals).
- Measure and compare angles using a protractor.
- Identify right, acute, and obtuse angles.
- Construct and describe 3D figures using nets and attributes (faces, edges, vertices).
- Use transformations (translations, reflections, rotations) and describe resulting changes.
- Plot points and describe movement on coordinate grids.



Strand F: Data and Probability

Overall Expectation:

Students will gather, organize, and analyze data to draw conclusions and make predictions using basic probability models.

Specific Expectations:

- Collect and display data using bar graphs, line plots, and stem-and-leaf plots.
- Interpret data and describe trends or patterns.
- Identify the mode, median, and range of a data set.
- Conduct probability experiments and predict outcomes based on theoretical likelihood.
- Use vocabulary such as "certain," "unlikely," "equally likely" to describe chances of events.



Strand G: Financial Literacy

Overall Expectation:

Students will apply financial decision-making skills to manage money responsibly and understand real-world financial contexts.

Specific Expectations:

- Add and subtract money amounts up to \$100 and make change.
- Solve problems involving spending, saving, and budgeting.
- Compare prices and calculate total cost of items including tax.
- Understand financial goals and the importance of prioritizing needs over wants.
- Explore simple interest and charitable giving through classroom discussions or activities.



Grade 5 Mathematics Curriculum

Strand A: Social-Emotional Learning Skills in Mathematics

Overall Expectation:

Students will further strengthen their ability to manage emotions, set goals, and collaborate effectively as they engage with increasingly complex mathematical ideas.

Specific Expectations:

- Apply growth mindset strategies when faced with mathematical challenges.
- Reflect on mathematical successes and setbacks to improve learning strategies.
- Demonstrate responsibility and respect when working in group problemsolving tasks.
- Show resilience by revisiting and refining solutions based on feedback.



Strand B: Number Sense and Operations

Overall Expectation:

Students will extend their understanding of whole numbers, decimals, and fractions, and develop fluency with multiplication and division.

Specific Expectations:

- Read, write, compare, and order numbers up to 100,000.
- Add and subtract large numbers accurately using mental and written methods.
- Multiply 2-digit numbers by 2-digit numbers, and divide 3-digit numbers by 1-digit divisors using models and algorithms.
- Estimate to check the reasonableness of answers in problem-solving.
- Represent and compare fractions with like and unlike denominators using models.
- Add and subtract simple fractions and decimals to hundredths in real-life contexts.
- Represent decimals in various forms and relate them to fractions and money.



Strand C: Algebra

Overall Expectation:

Students will explore algebraic reasoning through patterns, expressions, equations, and relationships among quantities.

Specific Expectations:

- Identify, describe, and extend numeric and geometric patterns.
- Use tables and graphs to describe pattern rules.
- Use letters or symbols to represent variables in equations.
- Solve one- and two-step equations with unknowns using balance models and logic.
- Apply the order of operations in expressions involving addition, subtraction, multiplication, and division.



Strand D: Measurement

Overall Expectation:

Students will estimate and measure various attributes, and apply their understanding of measurement to solve meaningful problems.

- Estimate and measure length, mass, and capacity using metric units.
- Calculate and compare perimeter and area of regular and irregular polygons.
- Understand and convert between units (e.g., cm to m, mL to L).
- Solve time-related problems involving schedules and elapsed time.
- Relate temperature readings to real-world situations.



Strand E: Geometry and Spatial Sense

Overall Expectation:

Students will analyze geometric properties, construct figures, and describe movement and location in space.

Specific Expectations:

- Identify, classify, and compare triangles and quadrilaterals using side length and angle properties.
- Construct 2D shapes using protractors and rulers.
- Measure and draw angles using a protractor.
- Identify, describe, and perform transformations on shapes in the coordinate plane.
- Describe location and movement using grid systems and ordered pairs.



Strand F: Data and Probability

Overall Expectation:

Students will collect, organize, analyze, and interpret data, and describe probability using experimental and theoretical models.

Specific Expectations:

- Design surveys and experiments to collect data.
- Organize and display data using double bar graphs and stem-and-leaf plots.
- Analyze data using mean, median, mode, and range.
- Interpret data and draw conclusions relevant to real-world contexts.
- Perform probability experiments and compare experimental and theoretical outcomes.
- Use probability terms to describe and justify predictions.



Strand G: Financial Literacy

Overall Expectation:

Students will develop practical financial skills by exploring earning, saving, spending, and budgeting in everyday life.

- Solve problems involving earning and spending money in real-life contexts.
- Understand concepts of income, savings, and budgeting.
- Make financial decisions based on needs, wants, and available funds.
- Explore different ways of saving and their benefits.
- Recognize the impact of financial choices on short- and long-term goals.



Grade 6 Mathematics Curriculum

Strand A: Social-Emotional Learning Skills in Mathematics

Overall Expectation:

Students will enhance their ability to manage emotions, build confidence, and develop responsible decision-making as they engage in increasingly complex mathematical reasoning and collaborative problem-solving.

Specific Expectations:

- Demonstrate perseverance and self-regulation when solving multi-step or unfamiliar problems.
- Use reflection and self-assessment to improve mathematical thinking.
- Engage respectfully with peers, considering multiple strategies and perspectives.
- Develop strategies to overcome frustration and improve focus during challenging tasks.



Strand B: Number Sense and Operations

Overall Expectation:

Students will deepen their understanding of large numbers, fractions, decimals, and percentages, and perform operations with increasing efficiency and accuracy.

Specific Expectations:

- Read, write, and compare numbers up to 1,000,000.
- Add and subtract multi-digit whole numbers and decimals with fluency.
- Multiply and divide multi-digit numbers using standard and mental algorithms.
- Represent, compare, and order proper and improper fractions and mixed numbers.
- Add and subtract fractions and mixed numbers with like and unlike denominators.
- Multiply and divide decimals by whole numbers.
- Understand and calculate percentages, including finding the percentage of a number.



Strand C: Algebra

Overall Expectation:

Students will explore patterns and relationships, and use equations, expressions, and variables to represent and solve problems.

Specific Expectations:

- Identify and extend numeric and geometric patterns, and describe pattern rules.
- Create tables and graphs to represent growing and shrinking patterns.
- Use variables to write expressions and equations.
- Solve equations involving more than one operation using reasoning and models.
- Apply order of operations to evaluate expressions with multiple operations.



Strand D: Measurement

Overall Expectation:

Students will measure and convert units of length, mass, capacity, and volume, and use formulas to solve real-world measurement problems.

Specific Expectations:

- Estimate, measure, and convert between metric units (mm, cm, m, km; g, kg; mL, L).
- Solve problems involving perimeter, area, and volume of regular and composite shapes.
- Use appropriate formulas to calculate area of triangles and parallelograms.
- Measure and construct angles accurately using a protractor.
- Solve problems involving elapsed time in real-world contexts.



Strand E: Geometry and Spatial Sense

Overall Expectation:

Students will analyze geometric properties, construct and transform shapes, and describe location and movement in space.

Specific Expectations:

- Classify and compare 2D shapes and 3D figures using sides, angles, edges, and faces.
- Construct polygons and angles using precise tools and techniques.
- Perform transformations (translations, reflections, rotations) and describe their effects.
- Use coordinate grids and ordered pairs to locate and describe points.
- Identify congruent figures and describe the transformations used to create them.



Strand F: Data and Probability

Overall Expectation:

Students will collect, organize, and interpret data using a variety of tools, and analyze likelihood using probability models.

Specific Expectations:

- Design and conduct surveys and experiments to collect meaningful data.
- Create and interpret bar graphs, line graphs, and circle graphs.
- Calculate and compare mean, median, mode, and range.
- Make inferences and justify conclusions based on data.
- Represent probabilities as fractions, decimals, and percentages.
- Conduct probability experiments and compare theoretical and experimental results.



Strand G: Financial Literacy

Overall Expectation:

Students will develop practical money management skills by analyzing budgets, expenses, and financial planning strategies.

- Solve problems involving earning, saving, and spending in everyday scenarios.
- Compare financial products such as savings accounts and investments.
- Interpret a simple budget and suggest ways to adjust for savings goals.
- Analyze costs associated with long-term purchases and financial planning.
- Recognize the impact of financial decisions on personal and family wellbeing.



Grade 7 Mathematics Curriculum

Strand A: Social-Emotional Learning Skills in Mathematics

Overall Expectation:

Students will build on self-awareness and collaboration skills to engage deeply with mathematical challenges, think critically, and demonstrate resilience in problem-solving.

Specific Expectations:

- Persevere through multi-step and open-ended problems using a growth mindset.
- Reflect on personal strategies, set goals, and adjust methods when needed.
- Respectfully collaborate with peers by listening, questioning, and contributing ideas.
- Recognize emotional responses to math and apply self-regulation techniques to stay focused.



Strand B: Number Sense and Operations

Overall Expectation:

Students will extend their knowledge of rational numbers, operations, and number properties, and apply them to solve real-world and abstract problems.

Specific Expectations:

- Represent, compare, and order whole numbers, decimals, and integers.
- Add and subtract integers using models and symbolic notation.
- Multiply and divide whole numbers and decimals with precision.
- Solve problems involving operations with fractions, including mixed numbers.
- Understand and apply ratios, rates, and proportional reasoning in familiar contexts.
- Convert between fractions, decimals, and percentages, and solve percent problems (e.g., discounts, tax).



Strand C: Algebra

Overall Expectation:

Students will explore and describe mathematical relationships using algebraic expressions, equations, and patterns.

Specific Expectations:

- Identify and describe linear growing and shrinking patterns using tables and graphs.
- Write and evaluate algebraic expressions involving whole numbers and variables.
- Solve one- and two-step equations using inverse operations and balance models.
- Apply the order of operations to simplify numerical and algebraic expressions.
- Use algebraic reasoning to model real-world relationships and solve problems.



Strand D: Measurement

Overall Expectation:

Students will measure and calculate perimeter, area, volume, and convert between metric units, applying this knowledge in a variety of problem-solving contexts.

Specific Expectations:

- Convert between metric units of length, mass, and capacity (e.g., mm to m, g to kg).
- Solve problems involving the area and perimeter of composite shapes.
- Calculate the surface area and volume of rectangular prisms and cylinders.
- Use appropriate formulas for measurement involving triangles and parallelograms.
- Solve multi-step problems involving elapsed time and scheduling.



Strand E: Geometry and Spatial Sense

Overall Expectation:

Students will analyze geometric figures, measure and construct angles, and describe transformations and symmetry using precise mathematical language.

Specific Expectations:

- Classify triangles and quadrilaterals based on sides and angles.
- Construct and measure angles using protractors and compasses.
- Identify and describe congruent and similar figures.
- Perform transformations (translation, reflection, rotation, dilation) and describe image properties.
- Plot and identify points in all four quadrants of the Cartesian plane.



Strand F: Data and Probability

Overall Expectation:

Students will collect, organize, and analyze data, and explore concepts of probability using experimental and theoretical models.

Specific Expectations:

- Design and conduct surveys, collect data, and present results using multiple graph types (e.g., bar, circle, line).
- Analyze data using central tendency (mean, median, mode) and draw conclusions.
- Represent events using probability as a fraction, decimal, and percent.
- Predict outcomes and compare theoretical and experimental probabilities.
- Apply data management skills to real-life situations and justify findings.



Strand G: Financial Literacy

Overall Expectation:

Students will build financial awareness by exploring earning, spending, saving, and borrowing, and make informed financial decisions.

- Explore the impact of interest, borrowing, and saving on financial planning.
- Compare methods of payment (e.g., cash, credit, debit) and their implications.
- Analyze financial decisions involving budgeting, taxes, and long-term goals.
- Solve multi-step problems involving money, percentages, and unit pricing.
- Reflect on ethical and responsible financial habits in personal and community contexts.



Grade 8 Mathematics Curriculum

Strand A: Social-Emotional Learning Skills in Mathematics

Overall Expectation:

Students will refine their self-awareness, emotional regulation, and collaboration skills to enhance focus, resilience, and confidence when approaching complex mathematical tasks.

Specific Expectations:

- Apply strategies for staying focused and managing frustration during extended or challenging math problems.
- Use reflective thinking to monitor progress, set goals, and refine solutions.
- Respect and incorporate diverse strategies when working collaboratively on mathematical problems.
- Take initiative and maintain a positive mindset when exploring unfamiliar math concepts.



Strand B: Number Sense and Operations

Overall Expectation:

Students will deepen their understanding of rational numbers, powers, roots, and operations, and apply them fluently in real-world and abstract problems.

- Represent, compare, and order rational numbers, including integers, fractions, decimals, and percents.
- Add, subtract, multiply, and divide fractions and mixed numbers with fluency.
- Apply the rules for multiplying and dividing integers and decimal numbers.
- Evaluate numerical expressions involving exponents and square roots.
- Solve multi-step problems involving percentages, ratios, and rates.
- Use proportional reasoning in financial and measurement contexts.



Strand C: Algebra

Overall Expectation:

Students will investigate relationships using linear models, manipulate algebraic expressions, and solve equations involving variables.

- Generate and extend linear growing and shrinking patterns using tables and graphs.
- Write and evaluate algebraic expressions involving whole numbers, decimals, fractions, and integers.
- Use algebra tiles and inverse operations to solve equations with one or more steps.
- Apply the distributive property to simplify expressions.
- Model linear relationships and interpret their meaning in real-life contexts.
- Use substitution to verify solutions to algebraic equations.



Strand D: Measurement

Overall Expectation:

Students will solve problems involving measurement conversions, surface area, volume, and real-life applications using formulas and estimation strategies.

Specific Expectations:

- Convert units of measurement within the metric system (e.g., cm to m, mL to L).
- Calculate and compare surface area and volume of prisms and cylinders.
- Estimate and calculate measurements involving composite figures.
- Solve problems involving time, distance, and rate.
- Interpret measurements within real-world applications, such as construction, recipes, or travel.



Strand E: Geometry and Spatial Sense

Overall Expectation:

Students will explore the properties of geometric figures, perform transformations, and solve problems using coordinate geometry and geometric reasoning.

Specific Expectations:

- Classify quadrilaterals, triangles, and 3D solids using side lengths, angles, and symmetry.
- Construct angles and polygons using protractors, rulers, and compasses.
- Perform and describe dilations, rotations, reflections, and translations in the Cartesian plane.
- Plot and analyze relationships on coordinate grids in all four quadrants.
- Apply Pythagorean theorem to find side lengths in right-angled triangles.
- Solve geometry-based word problems with precision.



Strand F: Data and Probability

Overall Expectation:

Students will design and conduct experiments, analyze and interpret data using various statistical tools, and model probability scenarios.

Specific Expectations:

- Collect, organize, and display data using line graphs, scatter plots, and circle graphs.
- Analyze data using measures of central tendency (mean, median, mode) and range.
- Draw conclusions from data and justify interpretations.
- Represent probability as fractions, decimals, and percents.
- Compare theoretical and experimental probabilities using models and simulations.
- Analyze compound events and predict outcomes using organized strategies.



Strand G: Financial Literacy

Overall Expectation:

Students will apply financial knowledge to manage personal budgets, analyze income and expenses, and evaluate long-term planning decisions.

- Calculate discounts, taxes, interest, and fees in real-world purchasing and saving scenarios.
- Analyze and compare budgets and financial plans.
- Understand income sources and expenses, and how they affect personal savings.
- Investigate the long-term impact of loans, credit, and interest rates.
- Explore ethical considerations related to money, such as charitable giving and environmental responsibility.