GRADE 1 - MATH CURRICULUM CHECKLIST

STRAND A - SEL & MATHEMATICAL PROCESSES

A1 Overall: apply, to the best of their ability, a variety of social-emotional learning skills to support their use of the mathematical processes and their learning in connection with the expectations in the other five strands of the mathematics curriculum

MATHEMATICAL PROCESSES	P	T1	T2	Notes and Assessments
problem solving: develop, select, and apply problem-solving strategies				
reasoning and proving: develop and apply reasoning skills (e.g., classification, recognition of relationships, use of counter-examples) to justify thinking, make and investigate conjectures, and construct and defend arguments				
reflecting: demonstrate that as they solve problems, they are pausing, looking back, and monitoring their thinking to help clarify their understanding (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)				
connecting: make connections among mathematical concepts, procedures, and representations, and relate mathematical ideas to other contexts (e.g., other curriculum areas, daily life, sports)				
communicating: express and understand mathematical thinking, and engage in mathematical arguments using everyday language, language resources as necessary, appropriate mathematical terminology, a variety of representations, and mathematical conventions				
representing: select from and create a variety of representations of mathematical ideas (e.g., representations involving physical models, pictures, numbers, variables, graphs), and apply them to solve problems				
selecting tools and strategies: select and use a variety of concrete, visual, and electronic learning tools and appropriate strategies to investigate mathematical ideas and to solve problems				

GRADE 1 - STRAND A - SEL & MATHEMATICAL PROCESSES

CRITERIA	P	T1	T2	Notes and Assessments
1. express and manage their feelings, and show understanding of the feelings of others, as they engage positively in mathematics activities				
2. work through challenging math problems, understanding that their resourcefulness in using various strategies to respond to stress is helping them build personal resilience				
3. recognize that testing out different approaches to problems and learning from mistakes is an important part of the learning process, and is aided by a sense of optimism and hope				
4. work collaboratively on math problems – expressing their thinking, listening to the thinking of others, and practising inclusivity – and in that way fostering healthy relationships				
5. see themselves as capable math learners, and strengthen their sense of ownership of their learning, as part of their emerging sense of identity and belonging				
6. make connections between math and everyday contexts to help them make informed judgements and decisions				

GRADE 1 - STRAND B - NUMBER

B1. Number Sense - demonstrate an understanding of numbers and make connections to the way numbers are used in everyday life

SPECIFIC EXPECTATION GRADE 1	P	T1	T2	Notes and Assessments
Whole Numbers **B1.1** read and represent whole numbers up to and including 50, and describe various ways they are used in everyday life				
B1.2 compose and decompose whole numbers up to and including 50, using a variety of tools and strategies, in various contexts				
B1.3 compare and order whole numbers up to and including 50, in various contexts				
B1.4 estimate the number of objects in collections of up to 50, and verify their estimates by counting				
B1.5 count to 50 by 1s, 2s, 5s, and 10s, using a variety of tools and strategies				
Fractions **B1.6** use drawings to represent and solve fair-share problems that involve 2 and 4 sharers, respectively, and have remainders of 1 or 2				
B1.7 recognize that one half and two fourths of the same whole are equal, in fair-sharing contexts				
B1.8 use drawings to compare and order unit fractions representing the individual portions that result when a whole is shared by different numbers of sharers, up to a maximum of 10				

GRADE 1 - STRAND B - NUMBER

B2. Operations - use knowledge of numbers and operations to solve mathematical problems encountered in everyday life

SPECIFIC EXPECTATION GRADE 1	P	T1	T2	Notes and Assessments
Properties and Relationships **B2.1** use the properties of addition and subtraction, and the relationship between addition and subtraction, to solve problems and check calculations				
Math Facts **B2.2** recall and demonstrate addition facts for numbers up to 10, and related subtraction facts				
Mental Math **B2.3** use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 20, and explain the strategies used				
Addition and Subtraction **B2.4** use objects, diagrams, and equations to represent, describe, and solve situations involving addition and subtraction of whole numbers that add up to no more than 50				
Multiplication and Division **B2.5** represent and solve equal-group problems where the total number of items is no more than 10, including problems in which each group is a half, using tools and drawings				

GRADE 1 - STRAND C - ALGEBRA

C1. Patterns and Relationships - identify, describe, extend, create, and make predictions about a variety of patterns, including those found in real-life contexts

SPECIFIC EXPECTATION GRADE 1	P	T1	T2	Notes and Assessments
Patterns **C1.1** identify and describe the regularities in a variety of patterns, including patterns found in real-life contexts				
C1.2 create and translate patterns using movements, sounds, objects, shapes, letters, and numbers				
C1.3 determine pattern rules and use them to extend patterns, make and justify predictions, and identify missing elements in patterns				
C1.4 create and describe patterns to illustrate relationships among whole numbers up to 50				

C2. Equations and Inequalities - demonstrate an understanding of variables, expressions, equations, and inequalities, and apply this understanding in various contexts

SPECIFIC EXPECTATION GRADE 1	P	T1	T2	Notes and Assessments
Variables **C2.1** identify quantities that can change and quantities that always remain the same in real-life contexts				
Equalities and Inequalities **C2.2** determine whether given pairs of addition and subtraction expressions are equivalent or not				
C2.3 identify and use equivalent relationships for whole numbers up to 50, in various contexts				

GRADE 1 - STRAND C - ALGEBRA

C3. Coding - solve problems and create computational representations of mathematical situations using coding concepts and skills

SPECIFIC EXPECTATION GRADE 1	P	T1	T2	Notes and Assessments
Coding Skills **C3.1** solve problems and create computational representations of mathematical situations by writing and executing code, including code that involves sequential events				
C3.2 read and alter existing code, including code that involves sequential events, and describe how changes to the code affect the outcomes				

C4. Mathematical Modelling - apply the process of mathematical modelling to represent, analyse, make predictions, and provide insight into real-life situations

This overall expectation has no specific expectations. Mathematical modelling is an iterative and interconnected process that is applied to various contexts, allowing students to bring in learning from other strands. Students' demonstration of the process of mathematical modelling, as they apply concepts and skills learned in other strands, is assessed and evaluated.

OVERALL EXPECTATION	P	T1	T2	Notes and Assessments
apply the process of mathematical modelling to represent, analyse, make predictions, and provide insight into real-life situations				

GRADE 1 - STRAND D - DATA

D1. Data Literacy - manage, analyse, and use data to make convincing arguments and informed decisions, in various contexts drawn from real life

SPECIFIC EXPECTATION GRADE 1	P	T1	T2	Notes and Assessments
Data Collection and Organization **D1.1** sort sets of data about people or things according to one attribute, and describe rules used for sorting				
D1.2 collect data through observations, experiments, and interviews to answer questions of interest that focus on a single piece of information; record the data using methods of their choice; and organize the data in tally tables				
Data Visualization **D1.3** display sets of data, using one-to-one correspondence, in concrete graphs and pictographs with proper sources, titles, and labels				
Data Analysis **D1.4** order categories of data from greatest to least frequency for various data sets displayed in tally tables, concrete graphs, and pictographs				
D1.5 analyse different sets of data presented in various ways, including in tally tables, concrete graphs, and pictographs, by asking and answering questions about the data and drawing conclusions, then make convincing arguments and informed decisions				

GRADE 1 - STRAND D - DATA

D2. Probability - describe the likelihood that events will happen, and use that information to make predictions

SPECIFIC EXPECTATION GRADE 1	P	T1	T2	Notes and Assessments
Probability **D2.1** use mathematical language, including the terms “impossible”, “possible”, and “certain”, to describe the likelihood of events happening, and use that likelihood to make predictions and informed decisions				
D2.2 make and test predictions about the likelihood that the categories in a data set from one population will have the same frequencies in data collected from a different population of the same size				

GRADE 1 - STRAND E - SPATIAL SENSE

E1. Geometric and Spatial Reasoning - describe and represent shape, location, and movement by applying geometric properties and spatial relationships in order to navigate the world around them

SPECIFIC EXPECTATION GRADE 1	P	T1	T2	Notes and Assessments
Geometric Reasoning **E1.1** sort three-dimensional objects and two-dimensional shapes according to one attribute at a time, and identify the sorting rule being used				
E1.2 construct three-dimensional objects, and identify two-dimensional shapes contained within structures and objects				
E1.3 construct and describe two-dimensional shapes and three-dimensional objects that have matching halves				
Location and Movement **E1.4** describe the relative locations of objects or people, using positional language				
E1.5 give and follow directions for moving from one location to another				

GRADE 1 - STRAND E - SPATIAL SENSE

E2. Measurement - compare, estimate, and determine measurements in various contexts

SPECIFIC EXPECTATION GRADE 1	P	T1	T2	Notes and Assessments
Attributes **E2.1** identify measurable attributes of two-dimensional shapes and three-dimensional objects, including length, area, mass, capacity, and angle				
E2.2 compare several everyday objects and order them according to length, area, mass, and capacity				
Time **E2.3** read the date on a calendar, and use a calendar to identify days, weeks, months, holidays, and seasons				

GRADE 1 - STRAND F - FINANCIAL LITERACY

F1. Money and Finances - demonstrate an understanding of the value of Canadian currency

SPECIFIC EXPECTATION GRADE 1	P	T1	T2	Notes and Assessments
Money Concepts **F1.1** identify the various Canadian coins up to 50¢ and coins and bills up to $50, and compare their values				