Mathematics K-9: Curricular Competency Goals and Objectives
Tool to Support CB IEP Writing (New June 27, 2023)

Replacement Curriculum is meant for students who have an intellectual disability that does not allow them to access the regular curriculum in all or some curricular areas. It is intended for students on the Evergreen Certificate program. The goals are taken from grade K-3 curricular competencies. The objectives are listed when they first appear in a grade level, but they still apply to all other grade levels. Please individualize and specify the objective examples provided.
NOTE: The SD75 Curriculum Pathways will be hyperlinked in future versions of this document when available.

Curricular Competency Area: Reasoning and Analyzing (estimate, mental math strategies, technology)	
Goals (learning standards) and objectives	
Goal: I can make sense of quantities (amounts)	
1	by subitizing up to 5 objects in an unordered arrangement or up to 10 or 12 in a structured arrangement (dice or ten-frame) (K+) - Refer to Counting/Subitizing Ladder (K)
2	by estimating (gr. 1+) - Refer to Estimating Ladder (gr. 1-2+)
3	by object counting (i.e., one-to-one correspondence) (K+) - Refer to Counting/Subitizing SD75 Curriculum Pathway (gr. K+)
4	by comparing and ordering sets of objects to ____ (specify) (K+) - Refer to Comparing Composing Decomposing SD75 Curriculum Pathway (gr. K+)
5	by skip counting by ____ to ____ (specify) to efficiently count a collection of objects (1+) - Refer to Skip Counting SD75 Curriculum Pathway (gr. 2+)
6	by working with attributes (e.g. matching and sorting by colour, shape, size, number, angles, etc.) (gr. K+)
Goal: I can make sense of whole numbers	
1	by knowing the count sequence to _____ (specify) (K+) - Refer to Counting/Subitizing SD75 Curriculum Pathway (gr. K+)
2	by comparing and ordering numbers to _____ (specify) (K+) - Refer to Comparing Composing Decomposing SD75 Curriculum Pathway (gr. K+)
3	by matching a quantity with the number that represents it, up to _____ (specify) (gr. K+)
4	by decomposing a number into smaller parts (10 is 4 and 6; or 2, 7, and 1) (K+) - Refer to Comparing Composing Decomposing SD75 Curriculum Pathway (gr. K)
5	by demonstrating an understanding place value to _____ (specify) (1+) - Refer to Place Value SD75 Curriculum Pathway (gr. 1-2+)
6	by counting forwards/backwards from one number to another (specify) (gr.K+)
7	by skip counting by ___ to ___ (specify) - Refer to Skip Counting SD75 Curriculum Pathway (gr. 2+)
Goal: I can make sense of fractions and decimals (3+) (understanding numbers and not operations)	

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1	by using the area/region model to represent fractions - Refer to Fractions SD75 Curriculum Pathway (gr. 3+)
2	by using a set model to represent fractions (specify) - Refer to Fractions SD75 Curriculum Pathway (gr. 3+)
Goal: I can demonstrate an understanding of computational strategies (1+)	
1	by estimating the answer to any mathematical computation before solving (i.e., what should my answer be close to?) (gr. 1+)
2	by adding ___-digit numbers to ____-digit numbers (specify) using at least two strategies - Refer to Addition to 20 (gr.1+), Addition to 100 (gr. 2+) and Addition Facts (gr. 2-3+) SD75 Curriculum Pathways
3	by subtracting ___-digit numbers from ____-digit numbers (specify) using at least two strategies - Refer to Subtraction to 20 (gr.1+), Subtraction to 100 (gr. 2+) and Subtraction Facts (gr. 2-3+) SD75 Curriculum Pathways
4	by representing multiplication as ___ (repeated addition, skip counting, an array) (specify) - Refer to Multiplication SD75 Curriculum Pathway (gr.3+)
Goal: I can demonstrate and apply financial literacy	
1	by recognizing and naming Canadian coins and their values (K+)
2	by counting coins and bills (specify) - Refer to Financial Literacy SD75 Curriculum Pathway (gr.3+)
3	by representing a value using coins and/or bills (specify) - Refer to Financial Literacy SD75 Curriculum Pathway (gr.3+)
4	by making change with amounts to ____ (specify) - Refer to Financial Literacy SD75 Curriculum Pathway (gr.3+)
Goal: I can demonstrate and apply measurement strategies	
11	by estimating and measuring time duration of familiar routines/events (3+)
1	by knowing the units of time and relationship between the (4 seasons/12 months in a year, 60 seconds in a minute, etc.) (3+)
2	by telling time on a digital clock (4+) - Refer to Time SD75 Curriculum Pathway (gr.4+)
3	by telling time on an analog clock (4+) - Refer to Time SD75 Curriculum Pathwaysr (gr.4+)
4	by determining elapsed time (how long between 11:55 and 1:15 or between April 19th and June 12) (5+) - Recommended strategy: teach this with an open number line.
Goal: I can use technology to support mathematical thinking	
1	by using calculators (specify) Note: When is it appropriate to use? (E.g., not helpful when teaching mental math strategies - Use 10 frames or other manipulatives so they are still thinking mathematically)
2	by using virtual manipulatives (specify)
3	by using concept based apps (specify)
4	by using mathematical digital programs (specify)

Curricular Competency Area: Communicating and Representing **(Note: Goals from this section should be worked on in conjunction with goals from the previous curricular competency areas (ie: understanding and solving)**

Goals (learning standards) and objectives

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Goal: I can communicate mathematical thinking in many ways	
1	by using concrete objects to describe my mathematical thinking (specify) (e.g. ten frames, base 10 blocks, reckenrek counting rack, unifix cubes, counters, fraction circles/strips)
Goal: I can use mathematical vocabulary and language to talk about mathematics (K-9) Note: other mathematical vocabulary is introduced within the specific content area (e.g., addition)	
1	by comparing various quantities and attributes using words (e.g., more/less, equal, taller/shorter, wider/thinner, heavier/lighter) (specify)
2	by learning the language used in daily measurement activities (choose one or more): - learning the names of coins and bills - learning the units of length - learning the units of mass - learning the units of time

Mathematics K-9: Curricular Competency Goals and Objectives
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The objectives within a content area can be taken from the student's grade level or another grade level. The curriculum spirals as we revisit previously learned skills and extend skills when appropriate. The skills from earlier grades apply to the upper grades. The objectives are listed when they first appear in a grade level, but they still apply to all other grade levels. Some content and curricular competencies have been omitted because they are not relevant to the number and fluency strands, which are typically the focus in IEP goals. Please individualize and specify the objective examples provided.

NOTE: The SD75 Curriculum Pathways will be hyperlinked in future versions of this document when available.

Curricular Competency Area: Reasoning and Analyzing (estimate, mental math strategies, technology)	
Goals (learning standards) and objectives	
Goal: I can make sense of quantities (amounts)	
1	by subitizing up to 5 objects in an unordered arrangement or up to 10 or 12 in a structured arrangement (dice or ten-frame) (K+) - Refer to Counting/Subitizing Ladder (K)
2	by estimating (gr. 1+) - Refer to Estimating Ladder (gr. 1-2+)
3	by object counting (i.e., one-to-one correspondence) (K+) - Refer to Counting/Subitizing SD75 Curriculum Pathway (gr. K+)
4	by comparing and ordering sets of objects to ____ (specify) (K+) - Refer to Comparing Composing Decomposing SD75 Curriculum Pathway (gr. K+)
5	by skip counting by ____ to ____ (specify) to efficiently count a collection of objects (1+) - Refer to Skip Counting SD75 Curriculum Pathway (gr. 2+)
6	by working with attributes (e.g. matching and sorting by colour, shape, size, number, angles, etc.) (gr. K+)
Goal: I can make sense of whole numbers	
1	by knowing the count sequence to _____ (specify) (K+) - Refer to Counting/Subitizing SD75 Curriculum Pathway (gr. K+)
2	by comparing and ordering numbers to _____ (specify) (K+) - Refer to Comparing Composing Decomposing SD75 Curriculum Pathway (gr. K+)
3	by matching a quantity with the number that represents it, up to _____ (specify) (gr. K+)
4	by decomposing a number into smaller parts (10 is 4 and 6; or 2, 7, and 1) (K+) - Refer to Comparing Composing Decomposing SD75 Curriculum Pathway (gr. K)
5	by demonstrating an understanding place value to _____ (specify) (1+) - Refer to Place Value SD75 Curriculum Pathway (gr. 1-2+)
6	by counting forwards/backwards from one number to another (specify) (gr.K+)
7	by skip counting by ___ to ___ (specify) - Refer to Skip Counting SD75 Curriculum Pathway (gr. 2+)
Goal: I can make sense of fractions and decimals (3+) (understanding numbers and not operations)	

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1	by using the area/region model to represent fractions - Refer to Fractions SD75 Curriculum Pathway (gr. 3+)
2	by using a set model to represent fractions (specify) - Refer to Fractions SD75 Curriculum Pathway (gr. 3+)
3	by using a number line/linear model to represent fractions - Refer to Fractions SD75 Curriculum Pathway (gr. 3+)
4	by naming fractions represented as area/regions, fractions of sets, or on a number line (specify) - Refer to Fractions SD75 Curriculum Pathway (gr. 3+)
5	by comparing fractions (e.g., equivalent, ordering) (specify) - Refer to Fractions Decimals SD75 Curriculum Pathway (gr. 4 & 5+)
6	by ordering and comparing fractions including mixed numbers and improper fractions (6+) - Refer to Improper Fractions SD75 Curriculum Pathway (gr. 6+)
7	by using a grid (area model) to represent decimals to _____ (specify, e.g., tenths, hundredths, etc.) - Refer to Fractions & Decimals SD75 Curriculum Pathway (gr. 4+)
8	by using a numberline/linear model to represent decimals - Refer to Fractions & Decimals SD75 Curriculum Pathway (gr. 4+)
9	by comparing decimals to _____ (specify, e.g., tenths, hundredths, etc.) (4+) - Refer to Fractions & Decimals SD75 Curriculum PathwayLadder (gr. 4 +)
10	by ordering decimals to _____ (specify, e.g., tenths, hundredths, etc.) (4+) - Refer to Fractions & Decimals SD75 Curriculum Pathway (gr. 4+)
11	by representing percents on 100-grids (6+) - Refer to Percent SD75 Curriculum Pathway (gr. 6+)
12	by converting fractions (when denominator is a factor of 100) and decimals (to hundredths) to percents - Refer to Percent SD75 Curriculum Pathway (gr. 6+)
13	by comparing decimals, fractions and percentages (specify) - Refer to Percent SD75 Curriculum Pathway (gr. 7+)
Goal: I can demonstrate and apply mental math strategies (1+)	
1	by adding fluently within 20 (1+) - Refer to Addition to 20 SD75 Curriculum Pathway (gr.1+) and Addition Facts SD75 Curriculum Pathway (gr. 2-3+)
2	by describing or showing the mental math strategies I used to add within 20 (gr. 1+) - Refer to Addition Facts SD75 Curriculum Pathway (gr. 2-3)
3	by subtracting fluently within 20 (1+) - Refer to Subtraction to 20 SD75 Curriculum Pathway (gr.1+) and Subtraction Facts (gr. 2-3+) SD75 Curriculum Pathways
4	by describing or showing the mental math strategies I used to subtract within 20 - Refer to Subtraction Facts SD75 Curriculum Pathway (gr. 2-3+)
5	by recalling multiplication facts to 10 x 10 or using an efficient strategy to calculate them mentally - Refer to Multiplication (gr.3+) and Multiplication and Division Facts (gr. 4-5+) SD75 Curriculum Pathways
6	by describing or showing the mental math strategy I used to multiply to 10 x 10 - Refer to Multiplication (gr.3+) and Multiplication and Division Facts (gr. 4-5+) SD75 Curriculum Pathways
7	by recalling division facts within 100 or using an efficient strategy to calculate them mentally (4+) - Refer to Division (gr.3+) and Multiplication and Division Facts (gr. 4-5+) SD75 Curriculum Pathways
8	by describing or showing the mental math strategy I used to divide within 100 (3+) - Refer to Divisio Ladder (gr.3+) and Multiplication and Division Facts (gr. 4-5+) SD75 Curriculum Pathways
Goal: I can demonstrate an understanding of computational strategies (1+)	
1	by estimating the answer to any mathematical computation before solving (i.e., what should my answer be close to?) (gr. 1+)

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2	by adding ___-digit numbers to ____-digit numbers (specify) using at least two strategies - Refer to Addition to 20 (gr.1+), Addition to 100 (gr. 2+) and Addition Facts (gr. 2-3+) SD75 Curriculum Pathways
3	by subtracting ___-digit numbers from ____-digit numbers (specify) using at least two strategies - Refer to Subtraction to 20 (gr.1+), Subtraction to 100 (gr. 2+) and Subtraction Facts (gr. 2-3+) SD75 Curriculum Pathways
4	by representing multiplication as ___ (repeated addition, skip counting, an array) (specify) - Refer to Multiplication SD75 Curriculum Pathway (gr.3+)
5	by multiplying ___-digit numbers by ____-digit numbers (specify) - Refer to Multiplication SD75 Curriculum Pathways (gr.3, 4, 5+)
6	by explaining or showing the strategy I used to multiply - Refer to Multiplication SD75 Curriculum Pathways (gr.3, 4, 5+)
7	by representing division as ___ (e.g., equal groups, skip counting, rows and columns) - Refer to Division SD75 Curriculum Pathway (gr.4+)
8	by dividing ___-digit numbers by ____-digit numbers (specify) - Refer to Division SD75 Curriculum Pathways (gr. 3, 4+)
9	by explaining or showing the strategy I used to divide - Refer to Division SD75 Curriculum Pathways (gr. 3, 4+)
10	by adding decimals pictorially and symbolically to _____ (e.g., tenths, hundredths, etc.) - Refer to Adding and Subtracting Decimals SD75 Curriculum Pathways (gr.4-5+)
11	by subtracting decimals pictorially and symbolically to ___ (e.g., tenths, hundredths, etc.) - Refer to Adding and Subtracting Decimals SD75 Curriculum Pathways (gr.4-5+)
12	by multiplying decimals by whole numbers - Refer to Multiplying and Dividing Decimals SD75 Curriculum Pathway (gr.6+)
13	by dividing decimals by whole numbers - Refer to Multiplying and Dividing Decimals SD75 Curriculum Pathway (gr.6+)
14	by multiplying decimals by decimals to _____ (specify) - Refer to Multiplying and Dividing Decimals SD75 Curriculum Pathways (gr.7+)
15	by dividing decimals by decimals to _____ (specify) - Refer to Multiplying and Dividing Decimals SD75 Curriculum Pathways (gr.7+)
16	by adding fractions pictorially and symbolically (specify) (8+)
17	by subtracting fractions pictorially and symbolically (specify) (8+)
18	by multiplying fractions pictorially and symbolically (specify) (8+)
19	by dividing fractions pictorially and symbolically (specify) (8+)
20	by estimating the percent of a number using benchmarks (6+) - Refer to Introduction to Percent SD75 Curriculum Pathways (gr.6+)
21	by making calculations using percents (7+) - Refer to Introduction to Percent (gr.6+) and Percent (gr.7+) SD75 Curriculum Pathways
22	by performing calculations with integers (specify) using a number line, algebra tiles, or other model (7+)
Goal: I can demonstrate and apply financial literacy	
1	by recognizing and naming Canadian coins and their values (K+)
2	by counting coins and bills (specify) - Refer to Financial Literacy SD75 Curriculum Pathway (gr.3+)
3	by representing a value using coins and/or bills (specify) - Refer to Financial Literacy SD75 Curriculum Pathway (gr.3+)
4	by making change with amounts to ____ (specify) - Refer to Financial Literacy SD75 Curriculum Pathway (gr.3)

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5	by making monetary calculations including decimal notation to ___ (specify) - Refer to Financial Literacy SD75 Curriculum Pathway (gr.4+)
6	by making financial percentage calculations (discount, sales tax, etc.) - Refer to Percent SD75 Curriculum Pathways (gr. 7+)
Goal: I can demonstrate and apply measurement strategies	
1	by explaining or showing metric units in terms of referents (my finger is about 1 cm wide) (2+)
2	by explaining or showing the relationship between metric units (2+)
3	by estimating metric measurements (2+)
4	by using a metric ruler to measure a length in cm or mm (2+)
5	by using a metre stick to measure a length in m, cm, or mm (2+)
6	by measuring perimeter using standard and non-standard units (3+)
7	by calculating perimeter given the side-lengths of a shape (3+)
8	by measuring area using square units (standard and non-standard) (3+)
9	by calculating the area of _____ (specify: rectangles, circles, composite shapes, etc.) (5+)
10	by measuring mass using metric units (3+)
11	by estimating and measuring time duration of familiar routines/events (3+)
12	by knowing the units of time and relationship between the (4 seasons/12 months in a year, 60 seconds in a minute, etc.) (3+)
13	by telling time on a digital clock (4+) - Refer to Time SD75 Curriculum Pathway (gr.4+)
14	by telling time on an analog clock (4+) - Refer to Time SD75 Curriculum Pathwaysr (gr.4+)
15	by determining elapsed time (how long between 11:55 and 1:15 or between April 19th and June 12) (5+) - Recommended strategy: teach this with an open number line.
Goal: I can use technology to support mathematical thinking	
1	by using calculators (specify) Note: When is it appropriate to use? (E.g., not helpful when teaching mental math strategies - Use 10 frames or other manipulatives so they are still thinking mathematically)
2	by using virtual manipulatives (specify)
3	by using concept based apps (specify)
4	by using mathematical digital programs (specify)
Curricular Competency Area: Understanding and Solving	
Goals (learning standards) and objectives	
Goal: I can use multiple strategies to engage in problem solving (K-9)	
1	by saying what the problem is about (Note: use this objective for all students working on problem-solving)

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2	by drawing a picture or diagram of the mathematical problem
3	by acting out or modeling the problem using materials
4	by making a table of known facts
5	by writing an equation and solving it
6	by estimating the answer before attempting to solve

Curricular Competency Area: Communicating and Representing **(Note: Goals from this section should be worked on in conjunction with goals from the previous curricular competency areas (ie: understanding and solving)**

Goals (learning standards) and objectives	
Goal: I can communicate mathematical thinking in many ways	
1	by using concrete objects to describe my mathematical thinking (specify) (e.g. ten frames, base 10 blocks, reckenrek counting rack, unifix cubes, counters, fraction circles/strips)
2	by using models to describe my mathematical thinking (specify) (e.g. array, number line, ratio table)
3	by using symbolic representations to explain my mathematical calculations (specify) (e.g. equation, numbers)
4	by using oral language to explain my mathematical calculations (specify)
5	by using written language to explain my calculations (specify) (e.g. math journal)
Goal: I can use mathematical vocabulary and language to talk about mathematics (K-9) Note: other mathematical vocabulary is introduced within the specific content area (e.g., addition)	
1	by comparing various quantities and attributes using words (e.g., more/less, equal, taller/shorter, wider/thinner, heavier/lighter) (specify)
2	by learning the language used in daily measurement activities (choose one or more): - learning the names of coins and bills - learning the units of length - learning the units of mass - learning the units of volume - learning the units of time

Curricular Competency Area: Connecting and Reflecting (for grades 7+)

Goals (learning standards) and objectives	
Goal: I can use mathematical arguments to support personal choices (6-9) recommended in IEPs for grade 7+	
1	by developing simple financial decisions (specify) (4+)
2	by developing simple financial plans (specify) (5+)

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3	by developing a simple budget (specify) (6+)
4	by determining best buys (specify) (8+)