

Grade 3 JUMP Math Correlation to the New BC Curriculum

NOTES:

Underlined JUMP Math lessons are review from a previous grade.

Italicized JUMP Math lessons contain prerequisite material required to meet the learning standard.

An asterisk (*) indicates that a JUMP Math lesson covers a curriculum requirement primarily in the Teacher's Guide.

JUMP Math strands are represented by:

NS Number Sense

ME Measurement

G Geometry

PA Patterns and Algebra

PDM Probability and Data Management

Big Ideas

Fractions are a type of **number** that can represent quantities.

Development of computational **fluency** in addition, subtraction, multiplication, and division of whole numbers requires flexible decomposing and composing.

Regular increases and decreases in **patterns** can be identified and used to make generalizations.

Standard units are used to describe, measure, and compare **attributes** of objects' shapes.

The likelihood of possible **outcomes** can be examined, compared, and interpreted.

Content

number concepts to 1000

JUMP Math Lessons

Part	Unit	Lessons
1	2	NS3-1 to 11
1	6	<u>NS3-28</u> NS3-27, 29 to 32, 34, 38
2	15	NS3-74
Part	Unit	Lessons
1	2	NS3-10
1	6	<u>NS3-28</u> NS3-27, 29 to 32, 34, 38

• counting:

Content	JUMP Math Lessons		
◦ skip-counting by any number from any starting point, increasing and decreasing (i.e., forward and backward)	Part	Unit	Lessons
	1	2	NS3-10
	1	6	NS3-27, 29 to 31
	2	16	NS3-76
◦ Skip-counting is related to multiplication.	Part	Unit	Lessons
	1	6	NS3-28 NS3-32, 34
◦ investigating place-value based counting patterns (e.g., counting by 10s, 100s; bridging over a century; noticing the role of zero as a placeholder 698, 699, 700, 701; noticing the predictability of our number system)	Part	Unit	Lessons
	1	2	NS3-10
• Numbers to 1000 can be arranged and recognized:	Part	Unit	Lessons
	1	2	NS3-7 to 10
	2	15	NS3-74
◦ comparing and ordering numbers	Part	Unit	Lessons
	1	2	NS3-7 to 10
◦ estimating large quantities	Part	Unit	Lessons
	2	15	NS3-74
• place value:	Part	Unit	Lessons
	1	2	NS3-1 to 6, 11
◦ 100s, 10s, and 1s	Part	Unit	Lessons
	1	2	NS3-1 to 3, 6
◦ understanding the relationship between digit places and their values, to 1000 (e.g., the digit 4 in 342 has the value of 40 or 4 tens)	Part	Unit	Lessons
	1	2	NS3-1 to 3, 6
◦ understanding the importance of 0 as a place holder (e.g., in the number 408, the zero indicates that there are 0 tens)	Part	Unit	Lessons
	1	2	NS3-1 to 3, 6
• instructional resource: <i>Math in a Cultural Context</i> , by Jerry Lipka	Not addressed		
fraction concepts	Part	Unit	Lessons
	2	10	NS3-48
	2	12	NS3-62 to 70
• Fractions are numbers that represent an amount or quantity.	Part	Unit	Lessons
	2	12	NS3-69

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Content	JUMP Math Lessons		
• Fractions can represent parts of a region, set, or linear model.	Part	Unit	Lessons
	2	12	NS3-62 to 70
• Fraction parts are equal shares or equal-sized portions of a whole or unit.	Part	Unit	Lessons
	2	12	NS3-62 to 70
• Provide opportunities to explore and create fractions with concrete materials.	Part	Unit	Lessons
	2	12	NS3-62, 65
• recording pictorial representations of fraction models and connecting to symbolic notation	Part	Unit	Lessons
	2	12	NS3-62 to 70
• equal partitioning	Part	Unit	Lessons
	2	10	NS3-48
	2	12	NS3-62 to 67
• equal sharing, pole ratios as visual parts, medicine wheel, seasons	Part	Unit	Lessons
	2	12	NS3-64
addition and subtraction to 1000	Part	Unit	Lessons
	1	1	PA3-3
	1	2	<u>NS3-12</u> NS3-10*, 13 to 17
	1	3	<u>NS3-24, 25</u> NS3-21 to 23, 26
	2	14	ME3-27
• using flexible computation strategies, involving taking apart (e.g., decomposing using friendly numbers and compensating) and combining numbers in a variety of ways	Part	Unit	Lessons
	1	2	NS3-14, 16
	1	3	NS3-21 to 23
• estimating sums and differences of all operations to 1000	Part	Unit	Lessons
	2	15	NS3-71, 72
• using addition and subtraction in real-life contexts and problem-based situations	Part	Unit	Lessons
	1	2	NS3-16*, 17
	1	3	<u>NS3-24, 25</u> NS3-23*, 26
	2	14	ME3-27
• whole-class number talks	Part	Unit	Lessons
	1	2	NS3-10*, 17*

Content	JUMP Math Lessons		
addition and subtraction facts to 20 (emerging computational fluency)	Part	Unit	Lessons
	1	3	NS3-18 to 20, 22, 23
	2	11	PA3-17 to 19
• adding and subtracting of numbers to 20	Part	Unit	Lessons
	1	3	NS3-18 to 20, 22, 23
• demonstrating fluency with math strategies for addition and subtraction (e.g., decomposing, making and bridging ten, related doubles, and commutative property)	Part	Unit	Lessons
	1	3	NS3-18 to 20, 22, 23
• Addition and subtraction are related.	Part	Unit	Lessons
	2	11	PA3-17 to 19
• At the end of Grade 3, most students should be able to recall addition facts to 20.			
multiplication and division concepts	Part	Unit	Lessons
	1	6	NS3-32 to 38
	1	7	NS3-39 to 47
	1	8	ME3-12, 13
	2	10	NS3-48 to 61
• understanding concepts of multiplication (e.g., groups of, arrays, repeated addition)	Part	Unit	Lessons
	1	6	NS3-33, 35, 38
	1	7	NS3-41 to 47
	1	8	ME3-13
• understanding concepts of division (e.g., sharing, grouping, repeated subtraction)	Part	Unit	Lessons
	2	10	NS3-48 to 52, 54*, 55, 57, 58
• Multiplication and division are related.	Part	Unit	Lessons
	2	10	NS3-56 to 59, 61
• Provide opportunities for concrete and pictorial representations of multiplication.	Part	Unit	Lessons
	1	6	NS3-33, 35
	2	10	NS3-60
• Use games to develop opportunities for authentic practice of multiplication computations.	Part	Unit	Lessons
	1	6	NS3-36, 37
• looking for patterns in numbers, such as in a hundred chart, to further develop understanding of multiplication computation	Part	Unit	Lessons
	1	6	NS3-36, 37

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Content	JUMP Math Lessons		
<ul style="list-style-type: none"> Connect multiplication to skip-counting. 	Part	Unit	Lessons
	1	6	NS3-32, 34
	1	8	ME3-12
	2	10	NS3-54
<ul style="list-style-type: none"> Connect multiplication to division and repeated addition. 	Part	Unit	Lessons
	1	6	NS3-32
	1	8	ME3-12
	2	10	NS3-53
<ul style="list-style-type: none"> Memorization of facts is not intended for this level. 			
<ul style="list-style-type: none"> fish drying on rack; sharing of food resources in First Peoples communities 	Not addressed		
increasing and decreasing patterns	Part	Unit	Lessons
	1	1	<u>PA3-1, 7, 8</u> PA3-2, 4 to 6, 9
	1	6	NS3-27
	2	11	PA3-13 to 15
<ul style="list-style-type: none"> creating patterns using concrete, pictorial, and numerical representations 	Part	Unit	Lessons
	1	1	<u>PA3-1, 7</u> PA3-2, 4 to 6, 9
	2	11	PA3-13 to 15
<ul style="list-style-type: none"> representing increasing and decreasing patterns in multiple ways 	Part	Unit	Lessons
	1	1	PA3-9
	2	11	PA3-13, 14
<ul style="list-style-type: none"> generalizing what makes the pattern increase or decrease (e.g., doubling, adding 2) 	Part	Unit	Lessons
	1	1	PA3-6, 9
	2	11	PA3-13, 14
pattern rules using words and numbers based on concrete experiences	Part	Unit	Lessons
	1	1	PA3-10 to 12
	1	4	ME3-8
	2	11	PA3-13 to 15

Content	JUMP Math Lessons		
<ul style="list-style-type: none"> from a concrete pattern, describing the pattern rule using words and numbers 	Part	Unit	Lessons
	1	1	PA3-11
	1	4	ME3-8
	2	11	PA3-13 to 15
<ul style="list-style-type: none"> predictability in song rhythm and patterns 	Not addressed		
<ul style="list-style-type: none"> Share examples of local First Peoples art with the class, and ask students to notice patterns in the artwork. 	Not addressed		
one-step addition and subtraction equations with an unknown number	Part	Unit	Lessons
	1	6	NS3-27
	2	11	PA3-16 to 19
<ul style="list-style-type: none"> start unknown (e.g., $n + 15 = 20$ or $\square + 15 = 20$) 	Part	Unit	Lessons
	2	11	PA3-17 to 19
<ul style="list-style-type: none"> change unknown (e.g., $12 + n = 20$ or $12 + \square = 20$) 	Part	Unit	Lessons
	2	11	PA3-17 to 19
<ul style="list-style-type: none"> result unknown (e.g., $6 + 13 = n$ or $6 + 13 = \square$) 	Part	Unit	Lessons
	2	11	PA3-17 to 19
<ul style="list-style-type: none"> investigate even and odd numbers 	Part	Unit	Lessons
	1	6	NS3-27
measurement using standard units (linear, mass, and capacity)	Part	Unit	Lessons
	1	4	ME3-1 to 8
	1	6	NS3-38
	1	7	NS3-47
	1	8	ME3-9 to 13
	2	14	ME3-23, 25, 26
<ul style="list-style-type: none"> linear measurements using standard units (e.g., centimetre, metre, kilometre) 	Part	Unit	Lessons
	1	4	ME3-1 to 6
<ul style="list-style-type: none"> capacity measurements using standard units (e.g., millilitre, litre) 	Part	Unit	Lessons
	2	14	ME3-23
<ul style="list-style-type: none"> Introduce concepts of perimeter, area, and circumference (the distance around); use of formula and pi to calculate not intended — the focus is on the concepts. 	Part	Unit	Lessons
	1	4	ME3-7, 8
	1	6	NS3-38
	1	7	NS3-47
	1	8	ME3-9 to 13

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Content	JUMP Math Lessons		
<ul style="list-style-type: none"> area measurement, using square units (standard and non-standard) 	Part	Unit	Lessons
	1	8	ME3-9, 11 to 13
<ul style="list-style-type: none"> mass measurements using standard units (e.g., gram, kilogram) 	Part	Unit	Lessons
	2	14	ME3-25, 26
<ul style="list-style-type: none"> estimation of measurements using standard referents (e.g., If this cup holds 100 millilitres, about how much does this jug hold?) 	Part	Unit	Lessons
	1	4	ME3-3
	2	14	ME3-23, 26
time concepts	Part	Unit	Lessons
	2	13	ME3-14, 21, 22
	2	14	ME3-29
<ul style="list-style-type: none"> understanding concepts of time (e.g., second, minute, hour, day, week, month, year) 	Part	Unit	Lessons
	2	13	ME3-14, 21, 22
<ul style="list-style-type: none"> understanding the relationships between units of time 	Part	Unit	Lessons
	2	13	ME3-14, 21, 22
<ul style="list-style-type: none"> Telling time is not expected at this level. 			
<ul style="list-style-type: none"> estimating time, using environmental references and natural daily/seasonal cycles, temperatures based on weather systems, traditional calendar 	Part	Unit	Lessons
	2	13	ME3-22*
	2	14	ME3-29
construction of 3D objects	Part	Unit	Lessons
	1	5	G3-4
	2	17	G3-19 to 23
<ul style="list-style-type: none"> identifying 3D objects according to the 2D shapes of the faces and the number of edges and vertices (e.g., construction of nets, skeletons) 	Part	Unit	Lessons
	2	17	G3-20 to 23
<ul style="list-style-type: none"> describing the attributes of 3D objects (e.g., faces, edges, vertices) 	Part	Unit	Lessons
	2	17	G3-19 to 23
<ul style="list-style-type: none"> identifying 3D objects by their mathematical terms (e.g., sphere, cube, prism, cone, cylinder) 	Part	Unit	Lessons
	2	17	G3-20 to 23
<ul style="list-style-type: none"> comparing 3D objects (e.g., How are rectangular prisms and cubes the same or different?) 	Part	Unit	Lessons
	2	17	G3-20, 21, 23
<ul style="list-style-type: none"> understanding the preservation of shape (e.g., the orientation of a shape will not change its properties) 	Part	Unit	Lessons
	2	17	G3-22*
<ul style="list-style-type: none"> jingle dress bells, bentwood box, birch bark baskets, pithouses 	Not addressed		

Content	JUMP Math Lessons		
one-to-one correspondence with bar graphs, pictographs, charts, and tables	Part	Unit	Lessons
	1	5	G3-3
	1	9	PDM3-1 to 3
	2	18	PDM3-4, 7, 10
<ul style="list-style-type: none"> collecting data, creating a graph, and describing, comparing, and discussing the results 	Part	Unit	Lessons
	1	9	PD3-2, 3
	2	18	PDM3-4
<ul style="list-style-type: none"> choosing a suitable representation 	Part	Unit	Lessons
	2	18	PDM3-7, 10
likelihood of simulated events , using comparative language	Part	Unit	Lessons
	2	18	PDM3-12 to 16
<ul style="list-style-type: none"> using comparative language (e.g., certain, uncertain; more, less, or equally likely) 	Part	Unit	Lessons
	2	18	PDM3-14
<ul style="list-style-type: none"> developing an understanding of chance (e.g., tossing a coin creates a 50-50 chance of landing a head or tail; drawing from a bag, using spinners, and rolling dice all simulate probability events) 	Part	Unit	Lessons
	2	18	PDM3-12, 14 to 16
<ul style="list-style-type: none"> story: <i>The Snowsnake Game</i> 	Part	Unit	Lessons
	2	18	PDM3-13*
financial literacy — fluency with coins and bills to 100 dollars, and earning and payment	Part	Unit	Lessons
	1	1	PA3-9
	2	15	NS3-74, 75
	2	16	NS3-77 to 85, 87
<ul style="list-style-type: none"> counting mixed combinations of coins and bills up to \$100: 	Part	Unit	Lessons
	2	15	NS3-74, 75
	2	16	NS3-83, 85
<ul style="list-style-type: none"> ◦ totalling up a set of coins and bills 	Part	Unit	Lessons
	2	16	NS3-77 to 85

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Content	JUMP Math Lessons		
<ul style="list-style-type: none"> ◦ using different combinations of coins and bills to make the same amount 	Part	Unit	Lessons
	2	16	NS3-77 to 85
<ul style="list-style-type: none"> • understanding that payments can be made in flexible ways (e.g., cash, cheques, credit, electronic transactions, goods and services) 	Part	Unit	Lessons
	2	16	NS3-85, 87
<ul style="list-style-type: none"> • understanding that there are different ways of earning money to reach a financial goal (e.g., recycling, holding bake sales, selling items, walking a neighbour's dog) 	Part	Unit	Lessons
	1	1	PA3-9
	2	16	NS3-87
<ul style="list-style-type: none"> • Using pictures of First Peoples trade items (e.g., dentalium shells, dried fish, or tools when available) with the values indicated on the back, have students play a trading game. 	Part	Unit	Lessons
	2	16	NS3-85*

Grade 3 JUMP Math Exemplar Lessons for Curricular Competencies

The Curricular Competencies in the new BC Mathematics curriculum are addressed throughout JUMP Math's Grade 3 resource. The following table lists a selection of JUMP Math lessons that provide effective illustrations of how each Curricular Competency is addressed.

Curricular Competencies			
Reasoning and analyzing	JUMP Math Lessons		
<ul style="list-style-type: none"> Use reasoning to explore and make connections 	Part	Unit	Lessons
	1	7	NS3-42
	1	8	ME3-10
	2	17	G3-20
<ul style="list-style-type: none"> Estimate reasonably 	Part	Unit	Lessons
	1	4	ME3-3
	2	14	ME3-23
<ul style="list-style-type: none"> Develop mental math strategies and abilities to make sense of quantities 	Part	Unit	Lessons
	1	3	NS3-19, 20
	2	15	NS3-72
<ul style="list-style-type: none"> Use technology to explore mathematics 	Part	Unit	Lessons
	1	2	NS3-10
	2	16	NS3-76
<ul style="list-style-type: none"> Model mathematics in contextualized experiences 	Part	Unit	Lessons
	1	6	NS3-33
	2	10	NS3-50
Understanding and solving	JUMP Math Lessons		
<ul style="list-style-type: none"> Develop, demonstrate, and apply mathematical understanding through play, inquiry, and problem solving 	Part	Unit	Lessons
	1	7	NS3-47
	2	13	ME3-22
	2	18	PDM3-15
<ul style="list-style-type: none"> Visualize to explore mathematical concepts 	Part	Unit	Lessons
	1	4	ME3-5
	2	17	G3-22

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Curricular Competencies

<ul style="list-style-type: none"> Develop and use multiple strategies to engage in problem solving 	Part	Unit	Lessons
	1	6	NS3-30
	2	11	PA3-17
	2	17	G3-19
<ul style="list-style-type: none"> Engage in problem-solving experiences that are connected to place, story, cultural practices, and perspectives relevant to local First Peoples communities, the local community, and other cultures 	Part	Unit	Lessons
	1	4	ME3-3, 5
	2	12	NS3-64
	2	18	PDM3-13
Communicating and representing		JUMP Math Lessons	
<ul style="list-style-type: none"> Communicate mathematical thinking in many ways 	Part	Unit	Lessons
	1	6	NS3-32
	2	11	PA3-15
	2	16	NS3-87
<ul style="list-style-type: none"> Use mathematical vocabulary and language to contribute to mathematical discussions 	Part	Unit	Lessons
	1	3	NS3-18
	2	17	G3-20
<ul style="list-style-type: none"> Explain and justify mathematical ideas and decisions 	Part	Unit	Lessons
	1	1	PA3-6
	2	11	PA3-13
<ul style="list-style-type: none"> Represent mathematical ideas in concrete, pictorial, and symbolic forms 	Part	Unit	Lessons
	1	7	NS3-42
	2	18	PDM3-10
Connecting and reflecting		JUMP Math Lessons	
<ul style="list-style-type: none"> Reflect on mathematical thinking 	Part	Unit	Lessons
	1	4	ME3-8
	1	6	NS3-29, 32
	2	12	NS3-65

Curricular Competencies			
<ul style="list-style-type: none"> • Connect mathematical concepts to each other and to other areas and personal interests 	Part	Unit	Lessons
	1	4	ME3-5, 8
	2	11	PA3-16
<ul style="list-style-type: none"> • Incorporate First Peoples worldviews and perspectives to make connections to mathematical concepts 	2	17	G3-20
	Part	Unit	Lessons
	1	1	PA3-11
	2	13	ME3-22