











# Grade One – Suggested Math Instructional Resources





















Access Digital copy  
here.

## Number Sense

(numbers to 20 represent quantities that can be decomposed into 10s and 1s.)















Curricular Content	Curricular Competencies (The student can...)	Online Resources	Print Resources (all are available in the DLC or in schools)
Representing numbers to 20	Represent, compare, order numbers to 20. Demonstrate understanding of teen numbers as ten and ones.	 Steve Wyborney: <a href="#">Subitizing Slides</a>  Math 4 Love:  <a href="#">Domino Sorting</a>  <a href="#">Cuisenaire Rods Lessons</a>   <a href="#">1st Grade Number Sense Routines</a>  <a href="#">Which One Doesn't Belong</a>  <a href="#">Number Talk Images</a>  <a href="#">Dot Card and Number Talks</a>  SD 38:  <a href="#">Sense of 5 and 10, addition and subtraction facts to 20</a>  <a href="#">Part 2 : number concepts to 10, 20 and 100</a>   Picture Books: <a href="#">Lesson and Activities for Number Sense and Patterns and Geometry</a>	<i>Messy Maths</i> (Robertson, 2016) Chapters 3 and 4 <ul style="list-style-type: none"> <li>• Exploring Numbers (pp. 47-67)</li> <li>• Number Functions and Fractions (pp. 69-83)</li> <li>• Making a Staircase Number Line (p. 64)</li> </ul> <i>Place Value in Primary</i> (Fullerton, 2016) <ul style="list-style-type: none"> <li>• Representing the Teens with 10-frames (pp. 87-90)</li> <li>• Matching Numerals to Sets (pp. 94-95)</li> </ul> <i>Sums and Differences: Grade One and Two</i> (Fullerton, 2013) <ul style="list-style-type: none"> <li>• Modeling Bigger Numbers in 10's and 1's (pp. 13-27)</li> </ul> <i>Elementary and Middle School Mathematics</i> (Van deWalle) <ul style="list-style-type: none"> <li>• Chapter 7 (pp. 118-144)</li> </ul> <i>Good Questions for Building Number Sense in Kindergarten and Grade 1</i> (Fullerton, 2022)

Curricular Content	Curricular Competencies (The student can...)	Online Resources	Print Resources (all are available in the DLC or in schools)
			<p><i>Shuffling into Math</i> (Felling, 2022)</p> <ul style="list-style-type: none"> <li>• Quick Math Warm Ups (p. 116)</li> <li>• Next in Line to 100 (pp. 131-134)</li> <li>• Betweeners (pp. 137-139)</li> </ul> <p><i>How Many? A Different Kind of Counting Book</i> (Danielson, 2018)</p>
Counting to 20	<p>Count to 20 in various ways (by 1s, 2s, 5s, ascending and descending, counting on from a number).</p> <p> <a href="#">Information on Counting</a></p>	<p> <a href="#">Counting Collections</a></p> <p> <a href="#">Counting Collections</a></p> <p> <a href="#">Feet Under the Table</a></p> <p> <a href="#">Pig</a></p>	<p><i>How Many? A Different Kind of Counting Book</i> (Danielson, 2018)</p> <p><i>Place Value in Primary</i> (Fullerton, 2016)</p> <ul style="list-style-type: none"> <li>• Counting Collections (pp. 113-117)</li> </ul> <p><i>Messy Maths</i> (Robertson, 2016) Chapter 3 and 4</p> <ul style="list-style-type: none"> <li>• Exploring Numbers (pp. 47-67)</li> <li>• Number Functions and Fractions (pp. 69-83)</li> <li>• Counting Backwards as well as Forwards (p. 51)</li> <li>• Stick Tapping (pp. 58-59)</li> </ul>
Ways to make 10	<p><a href="#">Compose</a> and <a href="#">decompose</a> 10 in many ways using concrete, pictorial and symbolic forms (ie 5+5, 5+3+2, 6+3+1).</p> <p> <a href="#">Information on decomposing</a></p>	<p>Steve Wyborney:</p> <p> <a href="#">20 Days of Number Sense</a></p> <p> <a href="#">"Splats through 10"</a></p> <p> <a href="#">Cuisenaire Rods Lessons</a></p> <p>Games:</p> <p> <a href="#">Math Games: 1 through 10</a></p> <p> <a href="#">Pyramid Game</a></p> <p> <a href="#">How Many are Hiding</a></p>	<p><i>Place Value in Primary</i> (Fullerton, 2016)</p> <ul style="list-style-type: none"> <li>• Subitizing Game (pp. 63-64)</li> <li>• Cuisenaire Rods (pp. 65- 67)</li> <li>• Connecting the Materials (pp. 68-69)</li> </ul> <p><i>Messy Maths</i> (Robertson, 2016) Chapter 3 and 4</p> <ul style="list-style-type: none"> <li>• Exploring Numbers (pp. 47-67)</li> <li>• Number Functions and Fractions (pp. 69-83)</li> <li>• Petra's Dice Pattern Game (p. 58)</li> </ul>

Curricular Content	Curricular Competencies (The student can...)	Online Resources	Print Resources (all are available in the DLC or in schools)
		 <a href="#">Make Ten Game</a>	<p><i>Good Questions for Building Number Sense in Kindergarten and Grade 1</i> (Fullerton, 2022)</p> <ul style="list-style-type: none"> <li>• p. 138</li> </ul> <p><i>Elementary and Middle School Mathematics</i> (Van de Walle, 2022)</p> <ul style="list-style-type: none"> <li>• Chapter 7 (pp. 118-144)</li> </ul> <p><i>Number Talks – Whole Number Computation</i> (Parrish, 2014)</p> <ul style="list-style-type: none"> <li>• pp. 88-96</li> </ul>
Compare more and less	Put numbers to 20 in sequence/order. Given a number, such as 12, say what number is 1 more and what number is 1 less, (and 2 more/less).	 <a href="#">Cuisenaire Rods Lessons</a>  <a href="#">"Evergreen Subitizing Games"</a> Online Games:  <a href="#">Comparing Cards</a>  <a href="#">Double Compare</a>   <a href="#">Number concepts to 10, 20 and 100 (comparing and ordering)</a>	<p><i>Place Value in Primary</i> (Fullerton, 2016)</p> <ul style="list-style-type: none"> <li>• More than and Less than (pp. 74-76)</li> <li>• Putting Sets in Order (pp. 96-99)</li> <li>• Using a Number line (pp. 105-108)</li> </ul> <p><i>Messy Maths</i> (Robertson, 2016) Chapter 3 and 4</p> <ul style="list-style-type: none"> <li>• Exploring Numbers (pp. 47-67)</li> <li>• Number Functions and Fractions (pp. 69-83)</li> <li>• Environmental Number Lines (p. 58)</li> <li>• Pocket Number Lines (p. 50)</li> <li>• Hopscotch (p. 60)</li> </ul>

































## Computational Fluency

(Addition and subtraction with numbers to 10 can be modelled concretely, pictorially, and symbolically to develop computational [fluency](#).)

Curricular Content	Curricular Competencies (The student can...)	Online Resources	Print Resources (all are available in the DLC or in schools)
Addition and subtraction of number to/within 20	<p>Demonstrate understanding of the processes of addition and subtraction using materials, pictures and numbers/symbols.</p> <p>Use more than one strategy to add (ie. counting all, counting on or back, making and bridging 10, decomposing, using doubles).</p> <p>Use more than one strategy to subtract (ie comparing, counting back, removal, finding the difference).</p>	<p> <a href="#">"Splats through 20 and Multiple Splats"</a></p> <p> <a href="#">Flower Petal Puzzle</a></p> <p>3 Act Task:</p> <p> <a href="#">Peas in a Pod</a></p> <p> <a href="#">Humpty Dumpty</a></p> <p> <a href="#">Bag-o-chips</a></p> <p>Games:</p> <p> <a href="#">Sum What Math</a></p> <p> <a href="#">Face Off</a></p> <p> <a href="#">Lucky 13</a></p> <p>SD 38:</p> <p> <a href="#">Part 1: decomposing quantities, addition and subtraction facts to 20, addition and subtraction to 20, 100 (concept, process)</a></p> <p> <a href="#">Part 2: decomposing quantities</a></p>	<p><i>Shuffling Into Math</i> (Felling, 2022)</p> <ul style="list-style-type: none"> <li>• Subtraction Horse Race (pp. 48-51)</li> <li>• Salute (pp. 67-70)</li> </ul> <p><i>Messy Maths</i> (Robertson, 2016) Chapter 3 and 4</p> <ul style="list-style-type: none"> <li>• Exploring Numbers (pp. 47-67)</li> <li>• Number Functions and Fractions (pp. 69-83)</li> <li>• 'Show me' Games (pp. 74)</li> <li>• Adding on Games (pp. 75)</li> <li>• Using a Pair of Dice (pp. 72)</li> </ul> <p><i>Number Talks – Whole Number Computation</i> (Parrish, 2014)</p> <ul style="list-style-type: none"> <li>• p. 97-118</li> </ul> <p><i>Elementary and Middle School Mathematics</i> (Van de Walle, 2022)</p> <ul style="list-style-type: none"> <li>• Chapter 8 (p. 146-156)</li> <li>• Chapter 10 (p. 174-189)</li> </ul> <p><i>Mastering the Facts: Addition</i> (Fullerton, 2020)</p>
Change in quantity to 20 concretely and verbally	<p>Use materials such as blocks to show increases and decreases in quantity of a set (two more, one more, two less, one less).</p> <p>Verbally explain what they need to do to change 7 to 10 or 12 to 10.</p>	<p>Games:</p> <p> <a href="#">Addition Scale</a></p> <p> <a href="#">Missing Addend</a></p> <p> <a href="#">Missing Subtrahend</a></p> <p> <a href="#">Algebraic thinking</a></p>	<p><i>Place Value in Primary</i> (Fullerton, 2016)</p> <ul style="list-style-type: none"> <li>• Estimating Numbers to 20 (pp. 109-112)</li> </ul> <p><i>Messy Maths</i> (Robertson, 2016) Chapter 3 and 4</p> <ul style="list-style-type: none"> <li>• Exploring Numbers (pp. 47-67)</li> <li>• Number Functions and Fractions (pp. 69-83)</li> <li>• Subtraction <ul style="list-style-type: none"> <li>○ Partitioning (p. 75)</li> </ul> </li> </ul>

Curricular Content	Curricular Competencies (The student can...)	Online Resources	Print Resources (all are available in the DLC or in schools)
			<ul style="list-style-type: none"> <li>○ Counting back (p. 76)</li> <li>○ Comparing quantities and finding the difference (p.76)</li> <li>● The Game of Nim (pp. 76-77)</li> <li>● Add or Subtract (p. 74)</li> </ul>

## General Resources

<p>General Strategies and Routines</p>	<p> <a href="#">Coast Metro Math Project</a></p> <p> <a href="#">Which One Doesn't Belong</a></p> <p> <a href="#">Dot Card and Number Talks</a></p> <p> <a href="#">Number Talk Images</a></p>	<p> <a href="#">Esti-Mysteries</a></p> <p> <a href="#">The Estimation Clipboard</a></p> <p> <a href="#">Cube Conversations</a></p> <p> <a href="#">Estimation</a></p> <p> <a href="#">Math Applications</a></p>	<p> <a href="#">Supporting Numeracy in Early Years</a></p> <p> <a href="#">Week of Inspirational Math</a></p> <p> <a href="#">Building Thinking Classrooms</a></p> <p> <a href="#">Puzzles, Problems and Tasks</a></p>
<p>Building our Understanding</p>	<p> <a href="#">What is number sense?</a></p> <p> <a href="#">Coast Metro Math Project</a></p> <p> <a href="#">Concreteness Fading</a></p>	<p> <a href="#">Planning Balanced Numeracy</a></p> <p> <a href="#">Spiraling the Curriculum</a></p> <p> <a href="#">Building Math Fact Fluency</a></p>	<p> <a href="#">Progression of Early Number</a></p> <p> <a href="#">Progression of Addition and Subtraction</a></p>
<p>Classroom Assessment</p>	<p> <a href="#">Coast Metro Math Project</a></p>	<p> <a href="#">Assessing Curricular Competencies</a></p>	
<p>Indigenous Connections</p>	<p> <a href="#">Coast Metro Math Project</a></p>	<p> <a href="#">When Seagull Stole the Sun</a></p>	<p> <a href="#">BC Numeracy Network</a></p>
<p>Planning</p>	<p> <a href="#">BC Numeracy Network</a></p> <p> <a href="#">Math Year Plan For K-5</a></p>	<p> <a href="#">Critical Concepts Map</a></p> <p> <a href="#">Coast Metro Math Year at a Glance</a></p>	<p> <a href="#">Planning - Year, Week, Day</a></p> <p> <a href="#">BCED K-4 Math progressions</a></p>

**This document intentionally focusses on number sense and computational fluency as these are foundational skills that can be spiraled throughout the rest of the content standards while being grounded in the curricular competencies.**