

## Grade 1 - General Resources

Across all units

Pre-assessment	Assessment	Getting There	
		Classroom Routines	Resources
<p><b>Number sense diagnostic assessments</b> These will be done twice a year: at the start of the year and at the end of the year.</p> <p><b>Computation Assessments</b> These will be done three times a year: start of year, mid-year, and end of year. These demonstrate students' understanding of operations.</p> <p><b>Little Books</b> The Little Book resources that match the associated unit provide a wealth of material to introduce topics and initially evaluate where students are</p>	<p><b>Formative</b></p> <p><b>Mathology:</b> -Each “Activity” lesson has an associated formative assessment.</p>	<p><b>Effective Practices</b></p> <ul style="list-style-type: none"> <li>-Integrate hands on activities</li> <li>-Use centers around the room with different activities</li> <li>-Use lots of visuals</li> <li>-Accept variations on how students communicate</li> <li>-Set goals for students</li> <li>-Use of creative exit tickets</li> <li>-Whole class number talks</li> </ul> <p>-In Mathology there are “Intervention” tasks that help to support the basic concepts of each cluster of activities</p> <p><b>Basic Facts Practice</b></p> <ul style="list-style-type: none"> <li>-The resource “Gr. 1 and 2 High Yield Routines For Number Sense”</li> </ul>	<p><b>Mathology</b></p> <ul style="list-style-type: none"> <li>-Sample Long-Range Plan: a standard plan is available for each grade. These are easily modified to arrange units to fit with the suggested order of units in the Overview Plan document.</li> <li>-“Little Books” and associated activities provide an accessible way to present math concepts, with a wide variety of supporting activities</li> <li>-<a href="#">Pearson Line Masters</a> to support related work in both little books and classroom activities</li> </ul> <p><b>Math Tools</b></p> <ul style="list-style-type: none"> <li>-<a href="#">Pearson math tools</a> this online resource provides lots of opportunities for students to practice and play around with concepts; some specific tools are linked in the relevant unit section.</li> </ul> <p><b>Alternative Resources</b></p> <ul style="list-style-type: none"> <li>-<a href="#">Manitoba Activities</a></li> <li>-<a href="#">Saskatchewan curriculum &amp; assessments</a></li> <li>-<a href="#">Indigenous Education Numeracy (SD71)</a></li> <li>-<a href="#">Indigenous Math Network (UBC)</a></li> </ul>
	<p><b>Summative</b></p> <p><b>Mathology:</b> “Consolidation” lessons have assessments that guide relevant observations of students work. These can be done through either an interview style of questioning, or by observing how students solve problems in pairs.</p>		

## Grade 1 - Patterns (Unit 1)

Mid-August - Mid-September (About 4 weeks)

Students will be able to predict and generalize patterns and see how they contribute to reasoning necessary for algebra

Pre-assessment	Assessment	Getting There		Comments
		Classroom Routines	Resources	
<p>Mathology: -Little Book: "Midnight and Snowfall"</p> <p>-Number sense assessment</p>	<p><b>Formative</b></p> <p>-Investigation Repeating Patterns (Patterning 1-4)</p> <p>-Creating Patterns (Patterning 6-8)</p> <hr/> <p><b>Summative</b></p> <p>Consolidation activities</p> <p>-Investigation Repeating Patterns (Patterning 5)</p> <p>-Creating Patterns (Patterning 9)</p>	<p><b>Effective Practices</b></p> <p>-Integrate hands on activities for making patterns such as beading.</p> <p><b>Basic Facts Practice</b></p> <p>-Relevant Word Problems</p> <p>-Math Talks:</p> <p><a href="#">Repeating Patterns</a></p> <p><a href="#">Translating Patterns</a></p> <p><a href="#">Sorting and Classifying by Attribute</a></p>	<p><b>Mathology</b></p> <p>-Repeating Patterns unit.</p> <p>-Classroom activity kit, Patterning and Algebra Cluster 1 and 2</p> <p>-Little Book: Pattern Quest</p> <p><b>Math Tools</b></p> <p><a href="#">Colour Tiles</a></p> <p><a href="#">Building Blocks</a></p> <p>-<a href="#">Patterns and Parks</a> (At a grade 2 level, but with simplified activities this is a valuable resource)</p>	<p>Patterns is an engaging way to introduce Math. Students are able to see progress quickly, and build a comfort around math that doesn't involve using numbers.</p> <p>Repeating Patterns need to be revisited throughout the year using high yield routines and Math Talks. Also encourage students to use a variety of attributes such color, position, orientation to introduce vocabulary.</p> <p><b>Spiraling and Making Connections</b></p> <p>Sorting 2-D Shapes and 3-D Objects</p> <p>Pattern Walk (Indoors and Outdoors) Student sketch and describe patterns they see.</p>

### I Can Statements

<b>Patterns</b>	I can identify and reproduce more complex patterns, e.g. positional and circular patterns.
	I can increase patterns using manipulatives, sounds, actions and whole numbers.
	I can identify the core of repeating patterns.

**Grade 1 - Number Sense I (Unit 2) and Place Value (Unit 3)**

**Mid September to end of November (About 11 weeks)**

Students should be able to count and subitize to help quantify collections of objects

Pre-assessment	Assessment	Getting There		Comments
		Classroom Routines	Resources	
<p>Mathology: -Little Books: “Oh Safari!”, “A Family Cookout”, “Paddling the River”, “How Many is Too Many” and “That’s 10!”</p> <p>-Number sense assessment</p>	<p><b>Formative</b></p> <ul style="list-style-type: none"> <li>-Counting (Number 1, 3-4)</li> <li>-Spatial Reasoning (Number 6, 7)</li> <li>-Comparing and Ordering (Number 9-11)</li> <li>-Skip Counting (Number 13-15)</li> <li>- Composing and Decomposing (Number 17-22)</li> </ul> <p><b>Summative</b></p> <p>Consolidation activities:</p> <ul style="list-style-type: none"> <li>-Counting (Number-5)</li> <li>-Spatial Reasoning (Number 8)</li> <li>-Comparing and Ordering (Number 12)</li> <li>-Skip Counting (Number 16)</li> <li>-Composing and Decomposing (Number 23)</li> </ul>	<p><b>Effective Practices</b></p> <ul style="list-style-type: none"> <li>- Establish regular routines for number talks to review what has been covered</li> </ul> <p><b>Basic Facts Practice</b></p> <p>Effective Good Practice for Number Sense Gr. (1 – 3):</p> <ul style="list-style-type: none"> <li>-Counting</li> <li>-Skip Counting</li> <li>-Comparing and Ordering</li> <li>-Early Place Value and Number Lines</li> <li>-Representing Numbers</li> <li>-See “Learning Basic Facts By Strategy” document for ideas</li> </ul>	<p><b>Mathology</b></p> <ul style="list-style-type: none"> <li>-Units on: Counting, Number relationships, Grouping and Place Value, and Operational Fluency</li> <li>-Classroom activity kit</li> <li>Number Clusters: Counting, Number Relationships 1, Grouping and Place Value</li> </ul> <p><b>Math Tools</b></p> <ul style="list-style-type: none"> <li><a href="#">Number Line Model</a></li> <li><a href="#">Build a Number Line</a></li> <li><a href="#">Hundred Chart</a></li> </ul>	<p>This is a broad unit that introduces students to a range of counting strategies. Be aware that there are a some Mathology resources that include counting strategies to 50, but only going to 20 is required for the BC curriculum.</p> <p>Place value is discussed here, but reinforced after the winter break</p> <p><b>Spiraling and Making Connections</b></p> <p>Number Sense needs to be spiralled throughout the year.</p> <p><i>Financial Literacy</i> – Combinations of coins to make 100</p> <p><i>Patterns</i> – Increasing patterns related to skip counting</p>

**Number Sense - I Can Statements**

<b>Place Value</b>	I can decompose numbers up to 20 using a 10 block and 1's
	I can sequence numbers up to 20
<b>Counting</b>	I can say numbers forwards and backwards to 20.
	I can skip count by 2s or 5s.
	I can subitize.

<b>Representing and Writing Whole Numbers</b>	I can represent numbers many ways.
	I can make groups up to 10.

**Grade 1 - Geometry (Unit 4)**

**End of November – End of December (About 4 Weeks)**

Students will be able to analyze and classify to help create categories of different objects by noticing and reasoning their similarities

Pre-assessment	Assessment	Getting There		Comments
		Classroom Routines	Resources	
Mathology: -Little Books: “The Tailor Shop”, “What was here?”  -Number sense assessment	<p align="center"><b>Formative</b></p> -2-D shapes (Geometry-1-5) -3-D solids (Geometry-7-9)  <p align="center"><b>Summative</b></p> Consolidation activities: -2-D shapes (Geometry-6) -3-D solids (Geometry-10)	<p align="center"><b>Effective Practices</b></p> - This is a great unit to get students engaged with their environment. When possible get students out into the playground to run activities.  <p align="center"><b>Basic Facts Practice</b></p> -Changing from daily “number talks” to “shape talks”	<p align="center"><b>Mathology</b></p> -Units on 2-D Shapes and 3-D Solids  <p align="center"><b>Math Tools</b></p> <a href="#">Geoboard</a> <a href="#">Shapes</a>	Studying geometry involves many foundational skills and competencies. Spatial reasoning helps students develop logical thinking skills, deductive and analytic reasoning, and problem-solving skills.  <p align="center"><b>Spiraling and Making Connections</b></p> <i>Sorting and Repeating Patterns:</i> Use shapes and objects to sort and make patterns. Students will use the names of the shapes to explain their sorting rules and to describe the core of the patterns. This will help them visualize shapes.

**I Can Statements**

<b>Geometry</b>	I can replicate composite 2D shapes and 3D objects with manipulatives.
	I can sort 2D shape using one attribute.
	I can compare 2D and 3D shapes in the environment
	I can sort 3D objects using one attribute.
	I can describe relative positions using positional language.

## Grade 1 - Number Sense II with Addition and Subtraction (Unit 5)

January – End of February (About 7 Weeks)

I can use more complex operations to solve more complex patterns that are built on the foundations of algebra.

Pre-assessment	Assessment	Getting There		Comments
		Classroom Routines	Resources	
<p>Mathology: -Little Books: “Hockey Time”, “Buy 1-Get 1”, “Canada’s Oldest Sport”, “Cats and Kittens”, “On Safari!”, “At the Corn Farm”</p> <p>-Number sense assessment</p>	<p style="text-align: center;"><b>Formative</b></p> <p>-Operational Fluency I (Number 28-29) -Operational Fluency II (Number 31-34) -Early Place Value (24-26)</p> <hr/> <p style="text-align: center;"><b>Summative</b></p> <p>Consolidation activities: -Operational Fluency I (Number 30) -Operational Fluency II (Number 35) -Early Place Value (27)</p>	<p style="text-align: center;"><b>Effective Practices</b></p> <p>-Building on number sense from earlier in the year effective daily routines help hugely in cementing these ideas. Running centers around the room are effective to allowing you to cover the variety of math exposed here</p> <p style="text-align: center;"><b>Basic Facts Practice</b></p> <p>-See “Learning Basic Facts By Strategy” document for ideas</p>	<p style="text-align: center;"><b>Mathology</b></p> <p>Units on Operational Fluency and Early Place Value</p> <p style="text-align: center;"><b>Math Tools</b></p> <p><a href="#">Number Line Model</a> <a href="#">Number Line Build</a> <a href="#">Relational Rods</a></p>	<p>This section ties back to what students were learning at the start of the year. In this unit, students are focusing on expanding computational fluency with an increased emphasis on addition and subtraction, and are developing a more comprehensive understanding of place value</p> <p style="text-align: center;"><b>Spiraling and Making Connections</b></p> <p><i>Number Sense 1</i>: Basic number skills</p>

### I Can Statements

<b>Place Value</b>	I can decompose numbers up to 20 using a 10 block and 1's.
	I can sequence numbers up to 20.
<b>Comparing and Ordering</b>	I can add & subtract doubles, 0 and 1 in my head. I know sums of 10.
<b>Addition and Subtraction</b>	I can write an addition or subtraction story and can solve problems.
	I know 1 more and 2 more, and 1 less and 2 less.

## Grade 1 - Measurement (Unit 6)

End of February - March (About 4 weeks)

I can use measurable attributes to quantify and compare seemingly different objects

Pre-assessment	Assessment	Getting There		Comments
		Classroom Routines	Resources	
Mathology: -Little Books: "The Amazing Seed"  -Number sense assessment	<p style="text-align: center;"><b>Formative</b></p> -Comparing Objects (Measurement 1-5) -Using Uniform Units (Measurement 7-14) -Time and Temperature (Measurement 16-20) *Extension*	<p style="text-align: center;"><b>Effective Practices</b></p> Incorporate measurement talks into your daily routine, or consider making models of the students' designs that rely on them making measurements of dimensions.	<p style="text-align: center;"><b>Mathology</b></p> -Clusters on Comparing Objects, Using Uniform Units and Time & Temperature (though this is beyond the curriculum, it is still useful content)	Measurement lends itself very well to practical activities and place-based learning. There are opportunities to develop class units of measurement. This is also a chance to identify common misconceptions around what different units are for, though only measurements of length are really needed.  <b>Spiraling and Making Connections</b> <i>Addition and Subtraction:</i> I can add and subtract numbers up to 2 digits
	<p style="text-align: center;"><b>Summative</b></p> Consolidation activities: -Comparing Objects (Measurement 6) -Using Uniform Units (Measurement 15) -Time and Temperature (Measurement 21)*	<p style="text-align: center;"><b>Basic Facts Practice</b></p> -Math Every Day: Measurement 1-2  <p style="text-align: center;"><b>*Extension*</b></p> -Beyond curriculum level, but included in Mathology resources are activities on Time and Temperature	<p style="text-align: center;"><b>Math Tools</b></p> <p style="text-align: center;"><a href="#">Pearson Math Tools</a></p> -Research-based measurement activities:  <p style="text-align: center;"><a href="#">How to Teach Measurement in 1st and 2nd Grade</a></p>	

### I Can Statements

<b>Measurement</b>	I can measure with centimeters and meters.
	I can measure length, height and width.

## Grade 1 - Equality and Inequality (Unit 7)

April (About 4 weeks)

I can use algebraic tools are efficient ways to represent, generalize, and analyze patterns.

Pre-assessment	Assessment	Getting There		Comments
		Classroom Routines	Resources	
Mathology: -Little Books: “Nutty and Wolfy”  -Number sense assessment	<p><b>Formative</b> -Equality and Inequality (Patterning 10-12)</p> <p><b>Summative</b> -Equality and Inequality (Patterning 13)</p>	<p><b>Effective Practices</b> -Incorporate non-number examples of how to work with equality and inequality. A seesaw in the playground is a great tool for this, or challenges with balancing in a class.</p> <p><b>Basic Facts Practice</b> -“Learning Basic Facts By Strategy” document  -Playing number game “Mobi” if available</p>	<p><b>Mathology</b> -Cluster on Equality and Inequality from the Patterning unit.</p> <p><b>Math Tools</b> <a href="#">Balance</a> numbers <a href="#">Balance</a> symbols</p>	<p>This topic adds onto a very basic understanding of algebra. At this level it is important that positive language is used around the ability to solve problems with more than just equal signs. Students can begin to develop an understanding of equivalent representations (8+10 and 7+11 both equal 18)</p> <p>A playground seesaw is a great and engaging way to represent equality and inequality</p> <p style="text-align: center;"><b>Spiraling and Making Connections</b></p> <p>In Grade 1 there is a gradual transition from patterns into algebra as number skills begin to develop more.</p> <p><i>Patterns:</i> I can identify increasing and decreasing patterns</p>

### I Can Statements

<b>Algebra</b>	I can demonstrate and explain what equal and not equal means.
	I can record equations symbolically using = and $\neq$ .



## Grade 1 - Data Management and Probability (Unit 8)

May (About 3 weeks)

In Grade 1 students will begin to explore basic representations of the data, and start to become familiar with descriptions of chance.

Pre-assessment	Assessment	Getting There		Comments
		Classroom Routines	Resources	
Mathology: -Little Books: “Graph It!”  -Number sense assessment	<p style="text-align: center;"><b>Formative</b></p> <ul style="list-style-type: none"> <li>- Data Management (Data 1-3)</li> <li>- Probability and Chance (Data Management 5)</li> </ul> <p style="text-align: center;"><b>Summative</b></p> <ul style="list-style-type: none"> <li>- Data Management (Data 4)</li> <li>- Probability and Chance (Data Management 6)</li> </ul>	<p style="text-align: center;"><b>Effective Practices</b></p> <ul style="list-style-type: none"> <li>-Graphs showing fun things, possibly from class surveys</li> </ul> <p style="text-align: center;"><b>Basic Facts Practice</b></p> <ul style="list-style-type: none"> <li>-Predicting outcomes</li> <li>Making graphs of simple events</li> </ul>	<p style="text-align: center;"><b>Mathology</b></p> <p>Units on Data Management and Probability and Chance.</p> <p>-In place of building graphs with physical linking cubes, it is possible to make them with the building blocks tool below</p> <p style="text-align: center;"><b>Math Tools</b></p> <p style="text-align: center;"><a href="#">Graph Data</a></p> <p style="text-align: center;"><a href="#">Create a Graph</a></p> <p style="text-align: center;"><a href="#">Building Blocks</a></p>	<p>Data Management gives students the chance to collect and display data. It is a great chance to engage students with basic statistical literacy, and graph data relevant to students lives. Class surveys on anything from favorite fruit to the results of challenges can engage students in the data they are graphing.</p> <p>For Probability at this level it is primarily around students understanding of language, and that all events do not have the same likelihood.</p> <p style="text-align: center;"><b>Spiraling and Making Connections</b></p> <p><i>Number Sense:</i> Counting and representing numbers</p>

### I Can Statements

<b>Data Management</b>	I can create, describe, and compare a one-to-one concrete graphs.
<b>Probability</b>	I can correctly use the language of probability (never, sometimes, always, likely).
	I can describe cycles.

## Grade 1 - Financial Literacy (Unit 9)

Integrated throughout the year

In Grade 1 students recognize coins and counts sets of the same coins (nickels, dimes, loonies, and toonies). They will role play financial transactions and investigate wants and needs.

Pre-assessment	Assessment	Getting There		Comments
		Classroom Routines	Resources	
Mathology: -Little Books: “The Money Jar”	<b>Formative</b> -Financial Literacy (Number 36-39)	<b>Effective Practices</b> -Class markets -“Food Truck” type activities  <b>Basic Facts Practice</b> -“Learning Basic Facts By Strategy” document  -Integrating “money talks” in place of “number talks”	<b>Mathology</b> -The unit on Financial Literacy is a cluster of activities in the Number resources.  <b>Math Tools</b> <a href="#">Money Tools</a>	Beginning to talk about financial literacy early helps students learn how to balance needs and wants.  <b>Spiraling and Making Connections</b> Financial literacy is intended to be integrated throughout the year, making connections with financial calculations and any of the other units that are being covered.
	<b>Summative</b> -Financial Literacy (Number 40)			

### I Can Statements

<b>Financial Literacy</b>	I can identify the value of coins.
	I can count multiples of the same denomination.
	I can use money as a medium for exchange.
	I can play trade games and understand some objects have more value than others.
	I can role-play transactions.

## Sample Weekly Lesson Plan (Blank)

Goal (Intention) for the week:

I Can Statements:

	<b>Lesson 1</b>	<b>Lesson 2</b>	<b>Lesson 3</b>	<b>Lesson 4</b>	<b>Lesson 5</b>
<b>Vocabulary</b>					
<b>Read Aloud</b>					
<b>Basic Facts</b>					
<b>Computation Review</b>					
<b>Videos</b>					
<b>Math Talk</b>					
<b>Word Problems (Place Based)</b>					
<b>Guided Instruction Whole Group</b>					
<b>Guided Instruction Small Group</b>					
<b>Follow-up/Practice</b>					
<b>Assessment</b>					

<b>Comments</b>					