


**Planning for
Start-Up in the New
Grade 1 Math
Provincial Cohort
August 22, 2022
Session 1**





In the spirit of reconciliation, we want to acknowledge that this gathering is taking place on traditional lands across the province of Alberta, home to many diverse Indigenous, Métis and Inuit peoples. We acknowledge that this land is a traditional meeting ground giving voice to its original peoples and the story of creation of this country in a way that history may have forgotten.

Treaty 6 Acknowledgement

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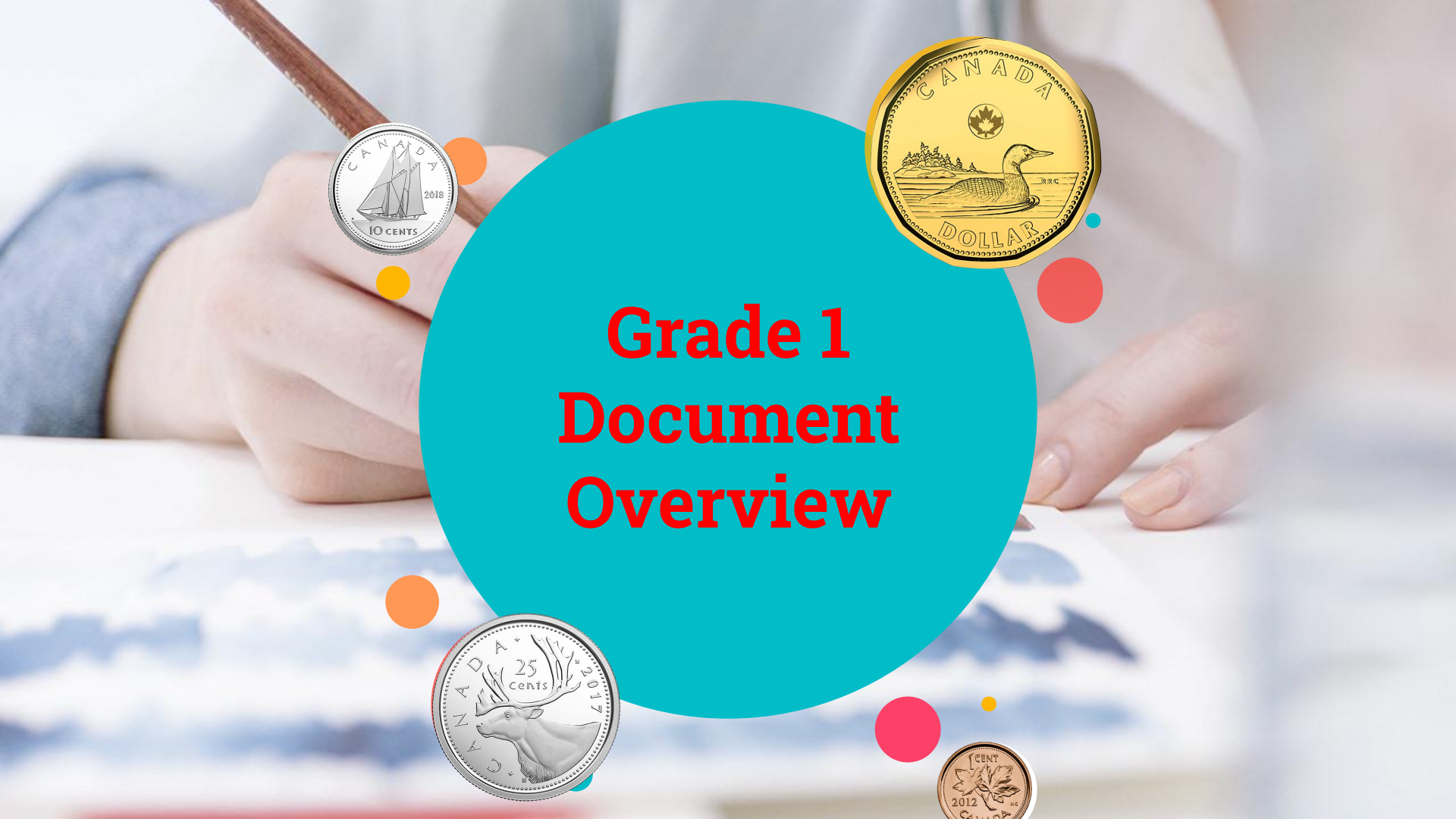
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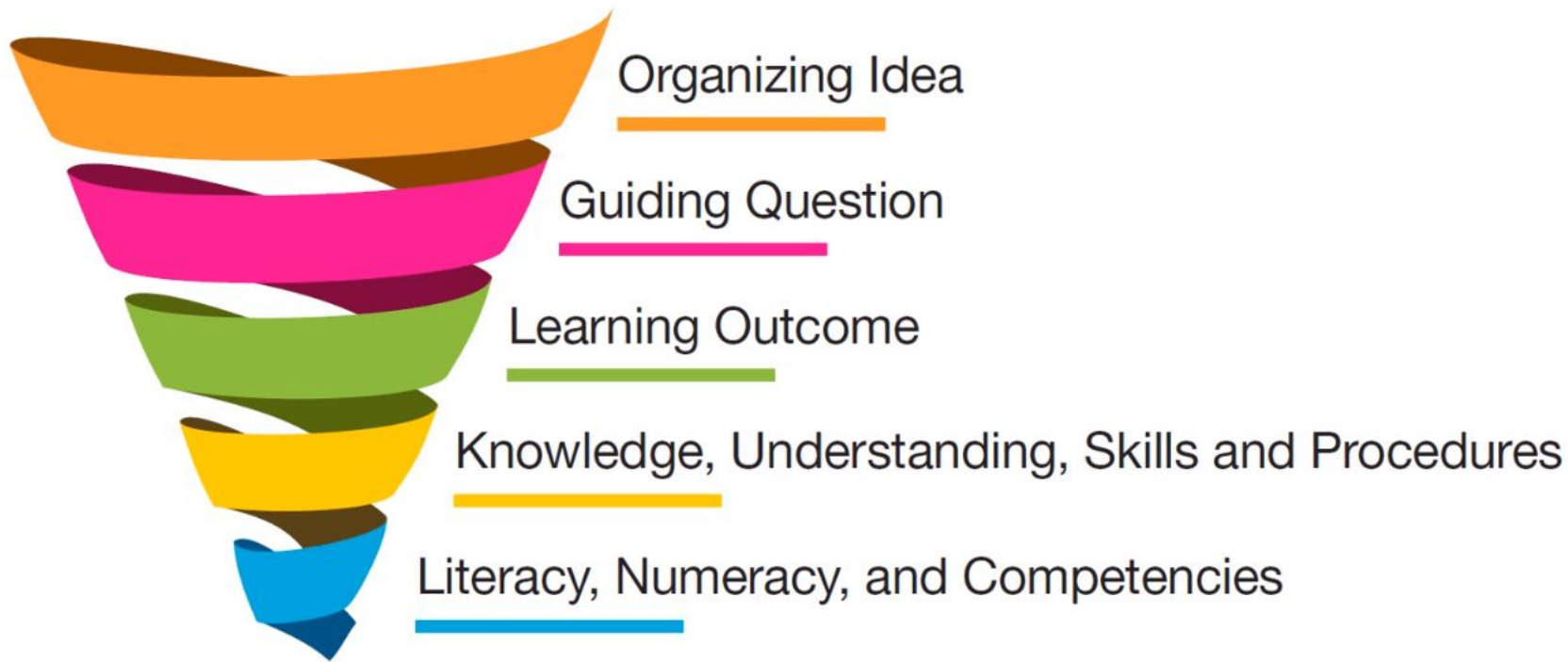
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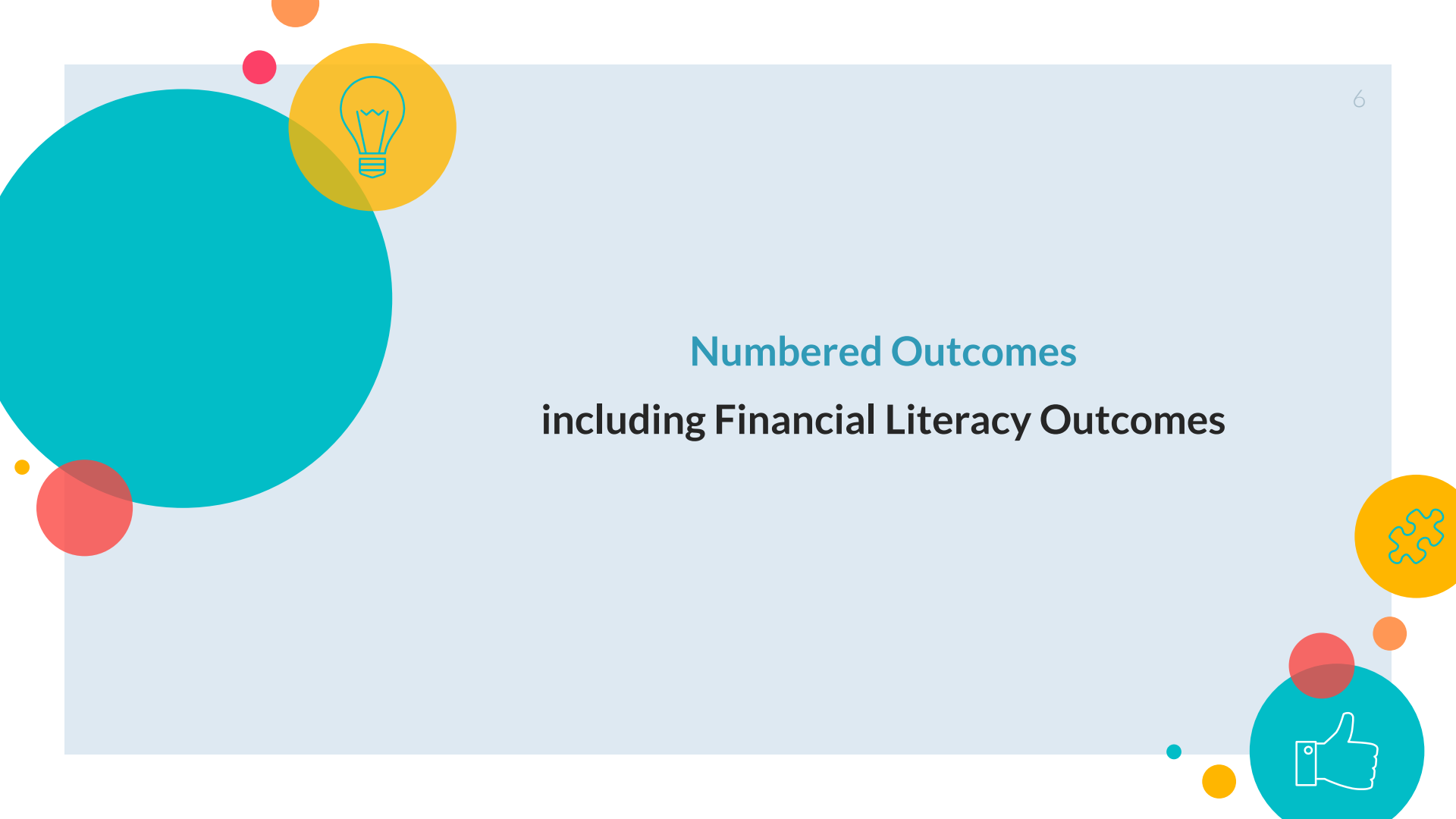


Grade 1 Document Overview



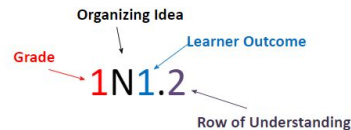
Architecture and Design of Provincial K–12 Curriculum





Numbered Outcomes

including Financial Literacy Outcomes



Mathematics Kindergarten to Grade 6 Curriculum

	Kindergarten			Grade 1			Grade 2	
Organizing Idea	Number: Quantity is measured with numbers that enable counting, labelling, comparing, and operating.							
Guiding Question	How can quantity contribute meaning to daily life?			How can quantity be communicated?			How can quantity contribute to a sense of number?	
Learning Outcome	KN1.1 Children investigate quantity to 10.			1N1.1 Students interpret and explain quantity to 100.			2N1.1 Students analyze quantity to 1000.	
	Knowledge	Understanding	Skills & Procedures	Knowledge	Understanding	Skills & Procedures	Knowledge	Understanding
	Quantity can be represented using <ul style="list-style-type: none"> • objects • pictures • words • numerals 	Quantity can be the number of objects in a set.	Recognize a number of familiar objects as a quantity. Represent a quantity in different ways. Relate a numeral to a specific quantity.	A numeral is a symbol or group of symbols used to represent a number. The absence of quantity is represented by 0.	Quantity is expressed in words and numerals based on patterns. Quantity in the world is represented in multiple ways.	Represent quantities using words, numerals, objects, or pictures. Identify a quantity of 0 in familiar situations.	Any number of objects in a set can be represented by a natural number. The values of the places in a four-digit natural number are thousands, hundreds, tens, and ones. Places that have no value within a given number use zero as a placeholder. The number line is a spatial representation of quantity.	There are infinitely many natural numbers. Every digit in a natural number has a value based on its place. Each natural number is associated with exactly one point on the number line.

**Mathematics Kindergarten to Grade 6 Curriculum
& Financial Literacy for K-2**

Kindergarten			Grade 1			Grade 2	
1.2 Children investigate quantities to 10.			1N1.2 Students interpret and explain quantities to 100.			2N 1.2 Students analyze quantity to 1000.	
Knowledge	Understanding	Skills & Procedures	Knowledge	Understanding	Skills & Procedures	Knowledge	Understanding
<p>A quantity can be determined by counting.</p>	<p>a. A quantity is always counted using the same sequence of words (counting principle: stable order).</p> <p>b. A quantity remains the same no matter the order in which the objects are counted (counting principle: order irrelevance).</p> <p>c. A quantity can be determined by counting each object in a set once and only once (counting principle: one-to-one correspondence).</p> <p>d. The last number used to count represents the</p>	<p>Count within 10, forward and backward, starting at any number, according to the counting principles.</p>	<p>Counting can begin at any number.</p> <p>Counting more than one object at a time is called skip counting.</p>	<p>Each number counted includes all previous numbers (counting principle: hierarchical inclusion).</p> <p>A quantity can be determined by counting more than one object in a set at a time.</p>	<p>Count within 100, forward by 1s, starting at any number, according to the counting principles.</p> <p>Count backward from 20 to 0 by 1s.</p> <p>Skip count to 100, forward by 5s and 10s, starting at 0.</p> <p>Skip count to 20, forward by 2s, starting at 0.</p>	<p>A quantity can be skip counted in various ways according to context.</p> <p>Quantities of money can be skip counted in amounts that are represented by coins and bills (denominations).</p>	<p>A quantity can be interpreted as a composition of groups.</p>

**Mathematics Kindergarten to Grade 6 Curriculum
& Financial Literacy for K-2**

Mathematics Kindergarten to Grade 6 Curriculum & Financial Literacy for K-2									
Learning Outcome	1N1.3 Students interpret and explain quantity to 100.						2N 1.3 Students analyze quantity to 1000.		
	Knowledge	Understanding	Skills & Procedures	Knowledge	Understanding	Skills & Procedures	Knowledge	Understanding	Skills & Procedures
				Sharing involves partitioning a quantity into a certain number of groups. Grouping involves partitioning a quantity into groups of a certain size.	Quantity can be partitioned by sharing or grouping.	Partition a set of objects by sharing and grouping. Demonstrate conservation of number when sharing or grouping.	An even quantity will have no remainder when partitioned into two equal groups or groups of two. An odd quantity will have a remainder of one when partitioned into two equal groups or groups of two.	All natural numbers are either even or odd.	Model even and odd quantities by sharing and grouping. Describe a quantity as even or odd. Partition a set of objects by sharing or grouping, with or without remainders.
Learning Outcome	KN1.3 Children investigate quantity to 10			1N1.4 Students interpret and explain quantity to 100.			2N 1.4 Students analyze quantity to 1000.		
	Knowledge	Understanding	Skills & Procedures	Knowledge	Understanding	Skills & Procedures	Knowledge	Understanding	Skills & Procedures
	A small quantity can be recognized at a glance (subitized).	Quantity can be determined without counting.	Subitize quantities to 5.	Familiar arrangements of small quantities facilitate subitizing.	A quantity can be perceived as the composition of smaller quantities.	Recognize quantities to 10.	A benchmark is a known quantity to which another quantity can be compared.	A quantity can be estimated when an exact count is not needed.	Estimate quantities using benchmarks.

Language Conventions

Language Convention	Interpretation for Implementation	Example from Curriculum
including/include(s)	A list following “including” or “include(s)” contains required knowledge. Students must know all elements of the list in order to achieve the learning outcome.	Subtraction can be applied in various contexts, including <ul style="list-style-type: none">• comparing two quantities• taking away one quantity from another• finding a part of a whole
such as	A list following “such as” provides a list of illustrative examples that support the learning outcome. Teachers may use any of these examples, or they may choose others.	Right angles can be identified using various referents, such as <ul style="list-style-type: none">• the corner of a piece of paper• the angle between the hands on an analog clock at 3:00• a capital letter L
content in parentheses	Words in parentheses are subject-specific terms for teachers and parents. These words follow the associated age-appropriate terms for students.	A shape can change orientation or position through slides (translations), turns (rotations), or flips (reflections).

Verbs Are Defined by Context

Kindergarten: Number

LO: Children **interpret** compositions of quantities within 10.

Verbs from Associated Skills and Procedures

Identify
Compose
Recognize

Grade 1: Geometry

LO: Students **interpret** shape in two and three dimensions.

Verbs from Associated Skills and Procedures

Identify
Model
Sort
Compose
Decompose
Investigate

Grade 3: Number

LO: Students **interpret** fractions in relation to one whole.

Verbs from Associated Skills and Procedures

Model
Visualize
Identify
Name
Express
Compare



Concepts are...

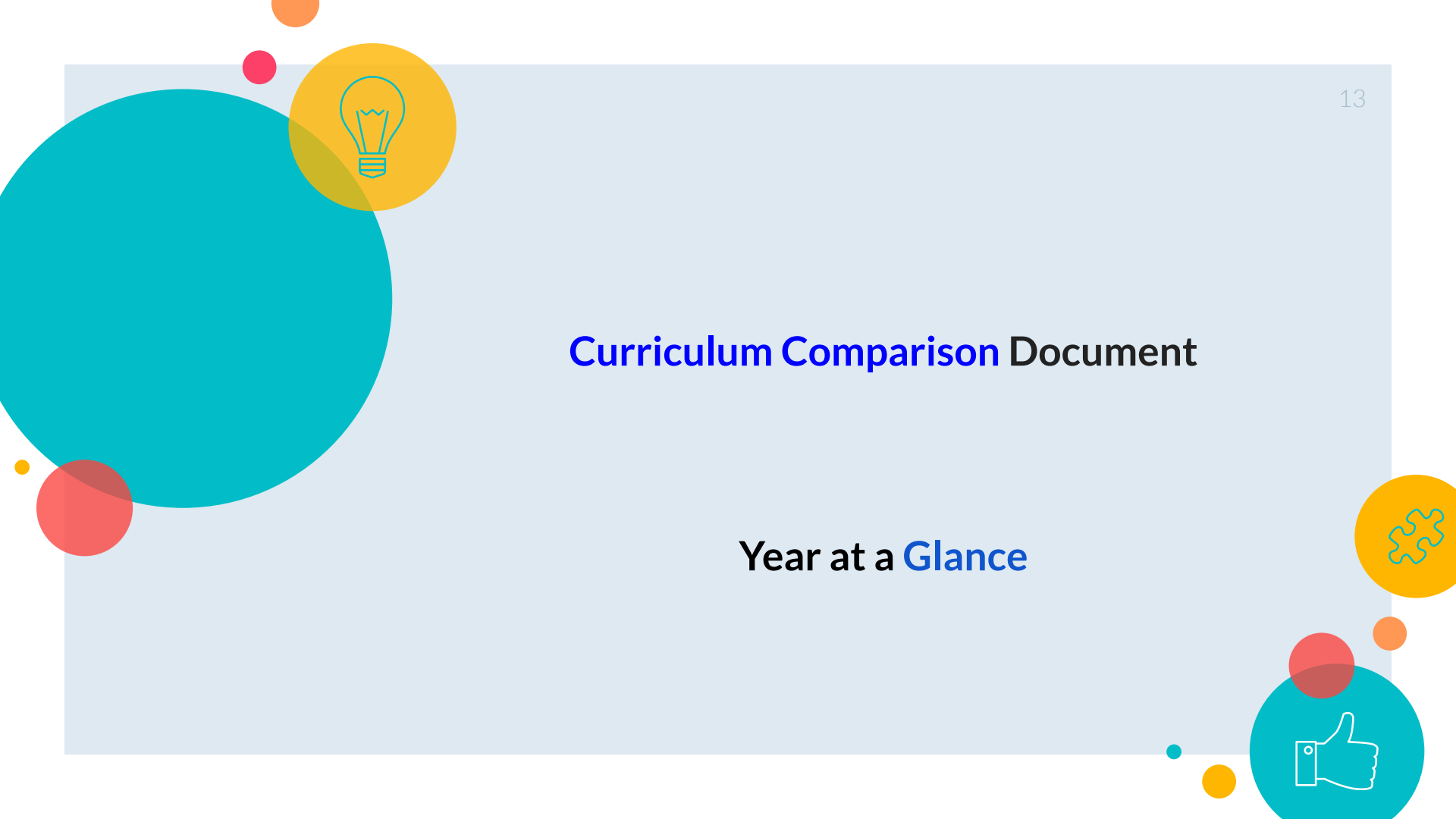
- Timeless
- Universal
- Abstract
- Transferable

Look in the *Organizing Idea* for your “Big Concepts”

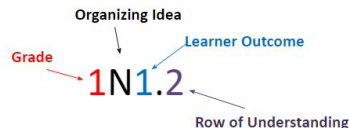


Curriculum Comparison Document

Year at a Glance



Generic Grade 1 Curriculum Comparison to the New Alberta Curriculum



Important Links

Comparison of Current 2007 Curriculum or Draft 2021 [Changes](#) to the new April 2022 Version

Comparison of [Multi-grades](#) of new Curriculum

N = Number **P= Patterns** **M = Measurement** **Time = T** **Geometry = G** **Statistics = ST**

Outcomes from 2007 Curriculum	Understandings from April Draft: (New Understandings)	Draft Outcomes, Knowledge, Skills and Procedures	
Number Strand	Number (N)		
<p>Specific Outcome 1 Say the number sequence 0 to 100 by:</p> <ul style="list-style-type: none"> 1s forward between any two given numbers 1s backward from 20 to 0 2s forward from 0 to 20 5s and 10s forward from 0 to 100. <p>Specific Outcome 3 Demonstrate an understanding of counting:</p> <ul style="list-style-type: none"> indicating that the last number said identifies 'how many' showing that any set has only one count using counting-on using parts or equal groups to count sets <p>Specific Outcome 8 Identify the number, up to 20, that is:</p> <ul style="list-style-type: none"> one more two more one less two less <p>than a given number.</p>	<p>UNDERSTANDING Each number counted includes all previous numbers (counting principle: hierarchical inclusion)</p> <p>A quantity can be determined by counting more than one object in a set at a time.</p>	<p>LEARNING OUTCOME 1N1.2 Students interpret and explain quantity to 100.</p> <p>KNOWLEDGE Counting can begin at any number.</p> <p>Counting more than one object at a time is called skip counting.</p>	<p>SKILLS & PROCEDURES Count within 100, forward by 1s, starting at any number, according to the counting principles.</p> <p>Count backward from 20 to 0 by 1s.</p> <p>Skip count to 100, forward by 5s and 10s, starting at 0.</p> <p>Skip count to 20, forward by 2s, starting at 0.</p>
<p>Specific Outcome 2 Subitize (recognize at a glance) and name familiar arrangements of 1 to 10 objects or dots.</p>	<p>UNDERSTANDING A quantity can be perceived as the composition of smaller quantities.</p>	<p>LEARNING OUTCOME 1N1.4 Students interpret and explain quantity to 100.</p> <p>KNOWLEDGE Familiar arrangements of small quantities facilitate subitizing.</p>	<p>SKILLS & PROCEDURES Recognize quantities to 10.</p>
<p>Specific Outcome 4 Represent and describe numbers to 20, concretely, pictorially and symbolically</p>	<p>UNDERSTANDING Quantity is expressed in words and numerals based on patterns.</p> <p>Quantity in the world is represented in multiple ways.</p>	<p>LEARNING OUTCOME 1N1.1 Students interpret and explain quantity to 100.</p> <p>KNOWLEDGE A numeral is a symbol or group of symbols used to represent a number.</p>	<p>SKILLS & PROCEDURES Represent quantities using words, numerals, objects, or pictures.</p> <p>Identify a quantity of 0 in familiar situations.</p>

Outcomes from 2007 Curriculum	Understandings from April Draft (New Understandings)	Draft Outcomes, Knowledge, Skills and Procedures	
<p>Specific Outcome 4 Represent and describe numbers to 20, concretely, pictorially and symbolically</p>	<p>UNDERSTANDING Quantity is expressed in words and numerals based on patterns.</p> <p>Quantity in the world is represented in multiple ways.</p>	<p>LEARNING OUTCOME 1N1.1 Students interpret and explain quantity to 100.</p> <p>KNOWLEDGE A numeral is a symbol or group of symbols used to represent a number.</p> <p>The absence of quantity is represented by 0.</p>	<p>SKILLS & PROCEDURES Represent quantities using words, numerals, objects, or pictures.</p> <p>Identify a quantity of 0 in familiar situations.</p>
<p>Specific Outcome 5 Compare sets containing up to 20 elements, using:</p> <ul style="list-style-type: none"> • referents • one-to-one correspondence to solve problems <p>Specific Outcome 6 Estimate quantities to 20 by using referents.</p> <p>Specific Outcome 7 Demonstrate an understanding of conservation of number.</p> <p>Patterns and Relations - Variables & Equations Specific Outcome 4 Describe equality as a balance and inequality as an imbalance, concretely and pictorially (0 to 20).</p>	<p>UNDERSTANDING Two quantities are equal when there is the same number of objects in both sets.</p> <p>Equality is a balance between two quantities.</p>	<p>LEARNING OUTCOME 1N1.5 Students interpret and explain quantity to 100.</p> <p>KNOWLEDGE Comparisons of quantity can be described by using words such as</p> <ul style="list-style-type: none"> • equal • not equal • less • more <p>Equality can be modelled using a balance.</p> <p>The equal sign, =, is used to show equality between two quantities.</p> <p>The unequal sign is \neq is used to show that two quantities are not equal.</p>	<p>SKILLS & PROCEDURES Investigate equal and unequal quantities, including using a balance model.</p> <p>Identify numbers that are one more, two more, one less, and two less than a given number.</p> <p>Represent a quantity relative to another, including symbolically.</p>
<p>Patterns and Relations - Variables & Equations Specific Outcome 5 Record equalities, using the equal symbol.</p>	<p>UNDERSTANDING Quantity can be partitioned by sharing or grouping.</p>	<p>LEARNING OUTCOME 1N1.3 Students interpret and explain quantity to 100.</p> <p>KNOWLEDGE Sharing involves partitioning a quantity into a certain number of groups.</p> <p>Grouping involves partitioning a quantity into groups of a certain size.</p>	<p>SKILLS & PROCEDURES Partition a set of objects by sharing and grouping.</p> <p>Demonstrate conservation of number when sharing or grouping.</p>
	<p>UNDERSTANDING In a quantity partitioned into two equal groups, each group represents one-half of the whole quantity.</p> <p>In a shape or object partitioned into two identical pieces, each piece represents one-half of the whole.</p>	<p>LEARNING OUTCOME 1N3.1 Students examine one-half as a part-whole relationship.</p> <p>KNOWLEDGE One-half can be one of two equal groups or one of two equal pieces.</p>	<p>SKILLS & PROCEDURES Identify one-half in familiar situations.</p> <p>Partition an even set of objects into two equal groups, limited to sets of 10 or less.</p> <p>Partition a shape or object into two equal pieces.</p> <p>Describe one of two equal groups or pieces as one-half.</p> <p>Verify that the two halves of one whole group, shape, or object are the same size.</p>

Zone 4

**K-3 Alberta Mathematics
Generic Sample Year Plan (June 1)**

Grade 1

September

October

November

Number: Quantity is measured with numbers that enable counting, labelling, comparing and operating.

1N1.2 Students interpret and explain quantities to 100. (to 20)

- Each number counted includes all previous numbers (counting principle: hierarchical inclusion)
- A quantity can be determined by counting more than one object in a set at a time.

1N1.3 Students interpret and explain quantities to 100. (to 20)

- A quantity can be perceived as the composition of smaller quantities
- Quantity can be partitioned by sharing or grouping.

1N1.1 Students interpret and explain quantities to 100. (to 20)

- Quantity is expressed in words and numerals based on patterns.
- Quantity in the world is represented in multiple ways. **including with money.**

1N1.5 Students interpret and explain quantities to 100. (to 20)

- Two quantities are equal when there is the same number of objects in both sets.
- Equality is a balance between two quantities.

1N1.2 Students interpret and explain quantities to 100. (to 20)

- Each number counted includes all previous numbers (counting principle: hierarchical inclusion)
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1N1.1 Students interpret and explain quantities to 100. (to 20)

- Quantity is expressed in words and numerals based on patterns.
- Quantity in the world is represented in multiple ways. **including with money.**

1N1.5 Students interpret and explain quantities to 100. (to 20)

- Two quantities are equal when there is the same number of objects in both sets.
- Equality is a balance between two quantities.

1N1.2 Students interpret and explain quantities to 100. (to 50)

- Each number counted includes all previous numbers (counting principle: hierarchical inclusion)
- A quantity can be determined by counting more than one object in a set at a time.

1N1.3 Students interpret and explain quantities to 100. (to 50)

- A quantity can be perceived as the composition of smaller quantities
- Quantity can be partitioned by sharing or grouping.

1N1.1 Students interpret and explain quantities to 100. (to 50)

- Quantity is expressed in words and numerals based on patterns.
- Quantity in the world is represented in multiple ways. **including with money.**

1N1.4 Students interpret and explain quantities to 100. (to 50)

- A quantity can be perceived as the composition of smaller quantities.

1N1.5 Students interpret and explain quantities to 100. (to 50)

- Two quantities are equal when there is the same number of objects in both sets.

September	October	November
<p>1N2. 1 Students examine addition and subtraction within 20. (introduce)</p> <ul style="list-style-type: none"> Addition and subtraction are processes that describe the composition and decomposition of quantity. 	<p>1N2. 1 Students examine addition and subtraction within 20. (introduce)</p> <ul style="list-style-type: none"> Addition and subtraction are processes that describe the composition and decomposition of quantity. 	<ul style="list-style-type: none"> Equality is a balance between two quantities. Quantity can be partitioned by sharing or grouping. <p>1N2. 1 Students examine addition and subtraction within 20. (introduce)</p> <ul style="list-style-type: none"> Addition and subtraction are processes that describe the composition and decomposition of quantity.

Patterns: Awareness of patterns supports problem solving in various situations.

<p>1P1. Students examine patterns in cycles.</p> <ul style="list-style-type: none"> A pattern that appears to repeat may not repeat in the same way forever. A cycle is a repeating pattern that repeats in the same way forever. 	<p>1P1. Students examine patterns in cycles.</p> <ul style="list-style-type: none"> A pattern that appears to repeat may not repeat in the same way forever. A cycle is a repeating pattern that repeats in the same way forever. 	<p>1P1. Students examine patterns in cycles.</p> <ul style="list-style-type: none"> A pattern that appears to repeat may not repeat in the same way forever. A cycle is a repeating pattern that repeats in the same way forever.
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Time: Duration is described and quantified with time.

<ul style="list-style-type: none"> Cycles - summer to fall - introduce here Calendar Time all year Weekly cycles could consider the Indigenous Calendar for teaching specific topics at an appropriate time. <p>All of the above is ongoing through the year</p>	<p>1T1. Students explain time in relation to cycles.</p> <ul style="list-style-type: none"> Time is an experience of change Time can be perceived as a cycle 	<p>1T1. Students explain time in relation to cycles.</p> <ul style="list-style-type: none"> Time is an experience of change Time can be perceived as a cycle
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December

January

February

Number: Quantity is measured with numbers that enable counting, labelling, comparing and operating.

1N1.2 Students interpret and explain quantities to 100 (to 50)

- Each number counted includes all previous numbers (counting principle: hierarchical inclusion)
- A quantity can be determined by counting more than one object in a set at a time.

1N1.3 Students represent equal sharing and grouping of quantities within 20.

- Quantity can be partitioned by sharing or grouping.

1N1.1 Students interpret and explain quantities to 100.

(to 50)

- Quantity is expressed in words and numerals based on patterns.
- Quantity in the world is represented in multiple ways. **including with money.**

1N1.4 Students interpret and explain quantities to 100.

(to 50)

- A quantity can be perceived as the composition of smaller quantities.

1N1.5 Students interpret and explain quantities to 100.

(to 50)

- Two quantities are equal when there is the same number of objects in both sets.
- Equality is a balance between two quantities.

1N2. 1 Students examine addition and subtraction within 20.

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1N2. 1 Students examine addition and subtraction within 20.

- Addition and subtraction are processes that describe the composition and decomposition of quantity

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1N1.4 Students interpret and explain quantities to 100.

- A quantity can be perceived as the composition of smaller quantities.

1N1.5 Students interpret and explain quantities to 100.

- Two quantities are equal when there is the same number of objects in both sets.
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1N2. 1 Students examine addition and subtraction within 20.

- Addition and subtraction are processes that describe the composition and decomposition of quantity

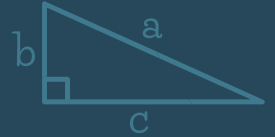
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Taking Inventory

Looking at our 2 months, where a
at in planning.



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September 2022

September

October

Number: Quantity is measured with numbers that enable counting, labelling, comparing and operating.

1N1.2 Students interpret and explain quantities to 100.(to 20)

- Each number counted includes all previous numbers (counting principle: hierarchical inclusion)
- A quantity can be determined by counting more than one object in a set at a time.

1N1.3 Students interpret and explain quantities to 100.(to 20)

- A quantity can be perceived as the composition of smaller quantities
- Quantity can be partitioned by sharing or grouping.

1N1.1 Students interpret and explain quantities to 100.(to 20)

- Quantity is expressed in words and numerals based on patterns.
- Quantity in the world is represented in multiple ways. *including with money.*

1N1.5 Students interpret and explain quantities to 100.(to 20)

- Two quantities are equal when there is the same number of objects in both sets.
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- Quantity in the world is represented in multiple ways. *including with money.*

1N1.5 Students interpret and explain quantities to 100.(to 20)

- Two quantities are equal when there is the same number of objects in both sets.
- Equality is a balance between two quantities.

Identify what resources you currently have to meet the Number and Exposure to patterns Outcomes:

What do you need more of?

Do you have resources to share?

1N1.5 Students interpret and explain quantity to 100.

Notes

Knowledge	Understanding	Skills & Procedures
<p>Comparisons of quantity can be described by using words such as</p> <ul style="list-style-type: none"> • equal • not equal • less • more <p>Equality can be modelled using a balance.</p> <p>The equal sign, =, is used to show equality between two quantities.</p> <p>The unequal sign, \neq, is used to show that two quantities are not equal.</p>	<p>Two quantities are equal when there is the same number of objects in both sets.</p> <p>Equality is a balance between two quantities.</p>	<p>Investigate equal and unequal quantities, including using a balance model.</p> <p>Identify numbers that are one more, two more, one less, and two less than a given number.</p> <p>Represent a quantity relative to another, including symbolically.</p>

(OLD) 1N3. Students represent equal sharing and grouping of quantities within 20. **(starting with numbers 0-10)**

- Quantity can be partitioned by sharing or grouping.

1N2. 1 Students examine addition and subtraction within 20. **(introduce - up tp 12)**

- Addition and subtraction are processes that describe the composition and decomposition of quantity.

- Quantity can be partitioned by sharing or grouping.
- 1N2. 1 Students examine addition and subtraction within 20. **(introduce - up tp 12)**
- Addition and subtraction are processes that describe the composition and decomposition of quantity. **(introduce as a concept)**

- number of objects in both sets.
- Equality is a balance between two quantities.
- (OLD)** 1N3. Students represent equal sharing and grouping of quantities within 20. **(to 10)**
- Quantity can be partitioned by sharing or grouping.
- 1N2. 1 Students examine addition and subtraction within 20. **(introduce - up tp 12)**
- Addition and subtraction are processes that describe the composition and decomposition of quantity. **(introduce as a concept)**

Patterns: Awareness of patterns supports problem solving in various situations.

1P1. Students examine patterns in cycles.

- A pattern that appears to repeat may not repeat in the same way forever.
- A cycle is a repeating pattern that repeats in the same way forever.

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Notes:



How can addition and subtraction provide perspectives of number?

1N2.1 Students examine addition and subtraction within 20.

Knowledge	Understanding	Skills & Procedures
<p>Quantities can be composed or decomposed to model a change in quantity.</p> <p>Addition can be applied in various contexts, including</p> <ul style="list-style-type: none">combining partsto find the wholeincreasing an existing quantity <p>Subtraction can be applied in various contexts, including</p> <ul style="list-style-type: none">comparing two quantitiestaking awayone quantity from anotherfinding a part of a whole <p>Addition and subtraction can be <u>modelled</u> using a balance.</p>	<p>Addition and subtraction are processes that describe the composition and decomposition of quantity.</p>	<p>Visualize quantities between 10 and 20 as compositions of 10 and another quantity.</p> <p>Model addition and subtraction within 20 in various ways, including with a balance.</p> <p>Relate addition and subtraction to various contexts involving composition or decomposition of quantity.</p>

Notes

What can patterns communicate?**1P1 Students examine patterns in cycles.**

Knowledge	Understanding	Skills & Procedures
<p>A cycle can express repetition of events or experiences.</p> <p>Cycles include</p> <ul style="list-style-type: none"> ◦ seasons day/night ◦ life cycles ◦ calendars ◦ <p>The same pattern can be represented with different elements.</p> <p>A pattern core is a sequence of one or more elements that repeats as a unit.</p>	<p>A pattern that appears to repeat may not repeat in the same way forever.</p> <p>A cycle is a repeating pattern that repeats in the same way forever.</p>	<p>Recognize cycles encountered in daily routines and nature.</p> <p>Investigate cycles found in nature that inform First Nations, Métis, or Inuit practices.</p> <p>Identify the pattern core, up to four elements, in a cycle.</p> <p>Identify a missing element in a repeating pattern or cycle.</p> <p>Describe change and constancy in repeating patterns and cycles.</p> <p>Create different representations of the same repeating pattern or cycle, limited to a pattern core of up to four elements.</p> <p>Extend a sequence of elements in various ways to create repeating patterns.</p>

Notes:**How can time characterize change?****1T1 Students explain time in relation to cycles.**

Knowledge	Understanding	Skills & Procedures
<p>Time can be perceived through observable change.</p> <p>First Nations, Métis, and Inuit experience time through sequences and cycles in nature, including cycles of seasons.</p> <p>Cycles from a calendar include days of the week and months of the year.</p>	<p>Time is an experience of change.</p> <p>Time can be perceived as a cycle.</p>	<p>Describe cycles of time encountered in daily routines and nature.</p> <p>Describe observable changes that indicate a cycle of time.</p> <p>Relate cycles of seasons to First Nations, Métis, or Inuit practices.</p> <p>Identify cycles from a calendar.</p>

Notes:

Guiding Question	What is Money?		
Learning Outcome	KF1. Children explore money.		
	Knowledge	Understanding	Skills & Procedures
	Canadian money comes in many forms, such as <ul style="list-style-type: none"> • coins • bills Canadian coins and bills come in different	Money has unique features to represent its value	Explore the value of Canadian coins and bills. Identify features of Canadian coins and bills.
	denominations, such as <ul style="list-style-type: none"> • loonies • toonies • \$5 • \$10 Canadian coins and bills have different features, such as <ul style="list-style-type: none"> • colour • number • images • size 		

Money as a Concept and as a Manipulative - how will you integrate it as/into your lessons?

In what ways can money be used?

1F1 Students explore money and how it is used for everyday living.

Knowledge	Understanding	Skills & Procedures
<p>Canadian money comes in many forms, such as</p> <ul style="list-style-type: none"> • coins • bills • debit cards • credit cards 	<p>Money can be used to exchange for goods and services.</p> <p>Money has value and purpose in everyday living.</p> <p>Money has unique</p>	<p>Explore the value of Canadian coins and bills.</p> <p>Sort Canadian coins and bills.</p> <p>Identify goods and services that can be</p>
<p>Canadian coins and bills come in different denominations, such as</p> <ul style="list-style-type: none"> • nickels • dimes • quarters • loonies • toonies • \$5 • \$10 • \$20 • \$50 • \$100 <p>Images on Canadian coins and bills include</p> <ul style="list-style-type: none"> • wildlife • sports • boats • emblems • historic figures <p>Money can be</p> <ul style="list-style-type: none"> • shared • earned • saved • spent 	<p>features to represent its value.</p>	<p>exchanged for money.</p>

Notes:



Let's move to
some September
& October Focus
Areas and
Activities



Starting Off the
Year being
Intentional with
Money



How would you model, exemplify or teach the following using money?

Kindergarten:

- Quantities using objects, words, pictures, numbers
- Counting objects
- Subitize to 5/10
- “like/unlike/more/less/same”/enough/too many/too few
- Compose quantities within 10 in various ways
- “Share” - this is the beginning of fractions
- Describe a shape using words such as flat, curved, straight, or round.
- Sort shapes according to one attribute and describe the sorting rule.
- Measurable attributes can include • length • area • capacity • mass
- “longer • taller • shorter • heavier • lighter • bigger • smaller • big enough • too big • too small”
- Describe the size of an object in relation to another object, using comparative language.
Describe the size of an object in relation to a purpose or need, using comparative language.
- Identify the pattern core, up to three elements, in a repeating pattern.
- Predict the next elements in a repeating pattern. Create a repeating pattern with a pattern core of up to three elements.

How would you model, exemplify or teach the following using money?

Grade 1

- No quantity represented by 0
- Know all coins and bills including 100
- Know value of each coin and bill
- Skip count to 100 by 5, 10; 20 by 2"s
- Symbols for equal, not equal
- Words greater than, less than, Compose quantities within 20 in various ways
- Model transactions with money, limited to dollar values within 20
- In a part-part-whole relationship, the sum represents the whole and the difference represents a missing part.
- Sharing involves partitioning a quantity into a certain number of groups.
- $\frac{1}{2}$, one- half of the whole quantity.(not using fraction)
- **Length** may refer to the size of any one dimensional measurable attribute of an object, including: • **height** • **width** • **depth** • **diameter**
- Compare the **length**, area, mass, or capacity of two objects directly, or indirectly using a third object.
- Describe the **size of an object in relation to another object**, using comparative language.
- **Pattern** core, up to four elements, in a cycle. Identify a missing element in a repeating pattern or cycle. Describe change and constancy in repeating patterns and cycles.
- **Create different representations of the same repeating pattern or cycle**, limited to a pattern core of up to four elements.
- **Extend a sequence** of elements in various ways to create repeating patterns

What did we see when we emptied our bowl on the table?



Money - Manipulative or Concept?



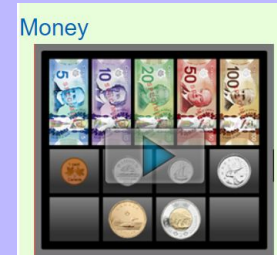


What is a COIN?

Do you have any coins?



- Understanding “Money” and its role in many other concepts.
- Understanding how it connects between grades and end goals.
- “Money is a Leader”
- The 4 C’s - Concept, Content, Clarifier & Context
- A Physical “tool” - should be related to other “tools”
- Culturally Common - Common Context regardless of language
- Note: Canadian Money has **colour** as part of its identification - try to use stay away from black/white unless there are no other options and then ensure the coins are *realistic!*





The Story of Our Coins



Hi! I'm the Penny

Pennies can help you learn to count!

Queen Elizabeth II on the back of the Penny.



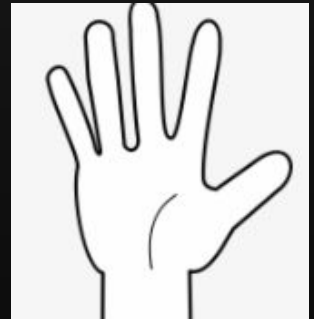
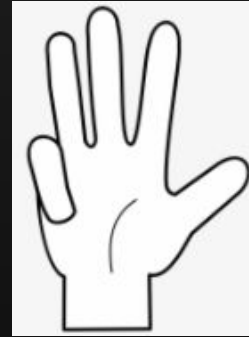
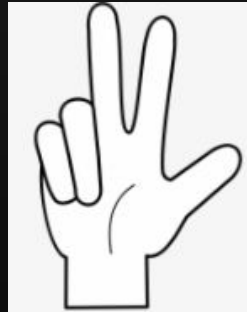
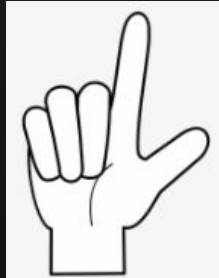
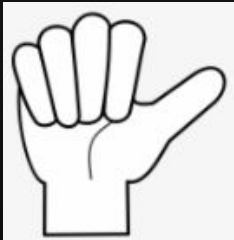
Did you know they do not make me anymore!

Maple leaves: On the front of the Penny

I am worth 1¢

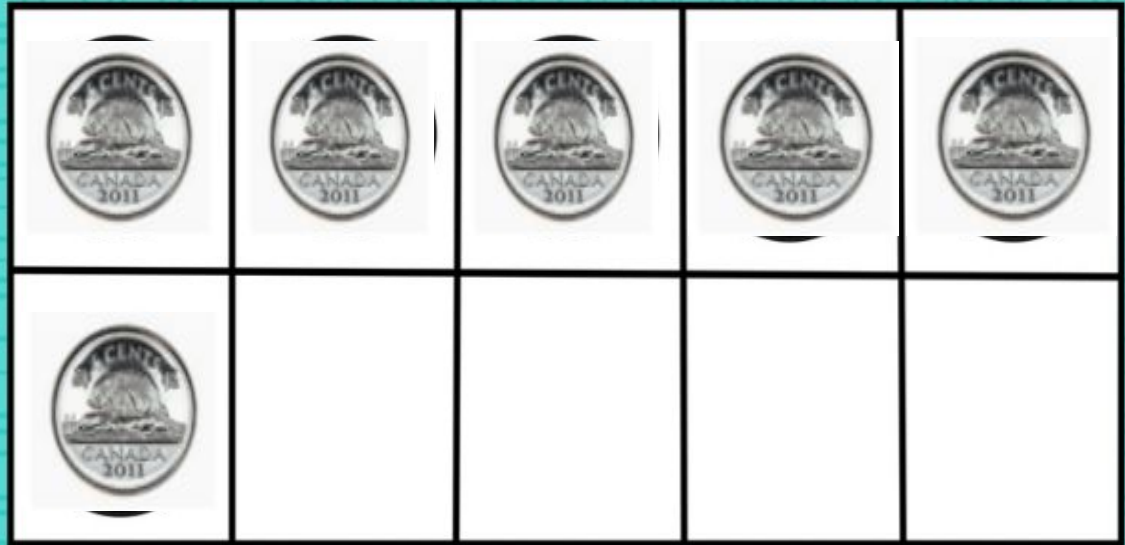
Suggest purchasing this money [resource](#)

Match coin in 5 frame to subitizing card



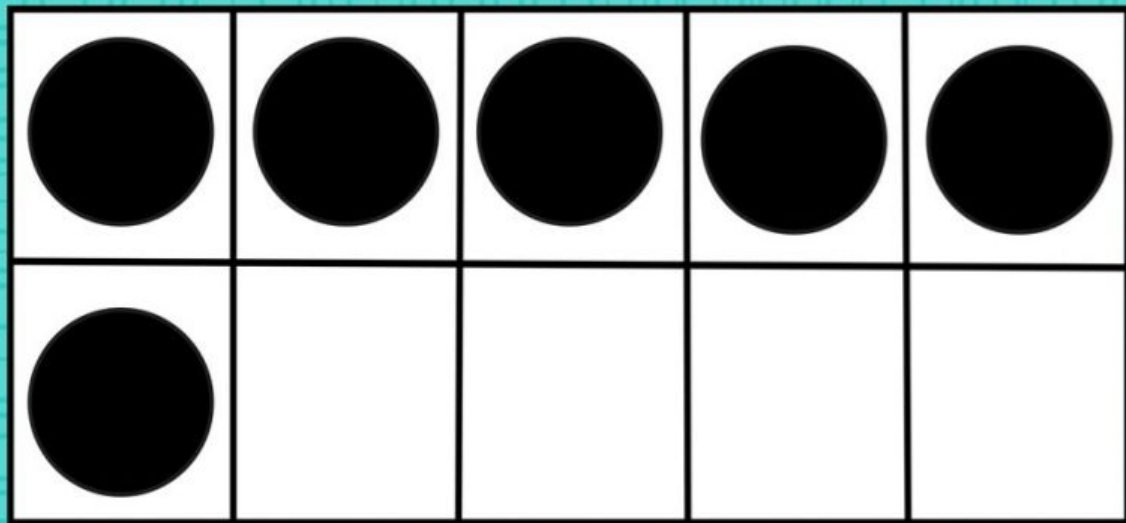
What number is this?

Drag and drop the number here



What number is this?

Drag and drop the number here



Show Me

1

5

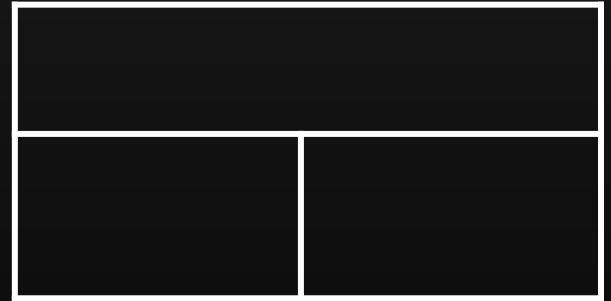
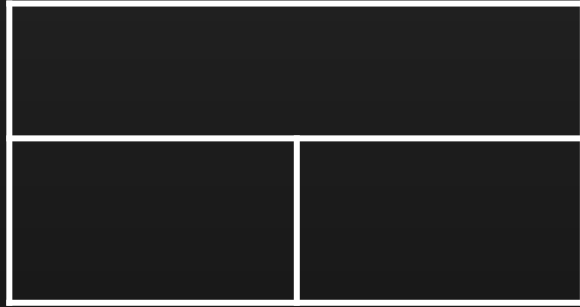


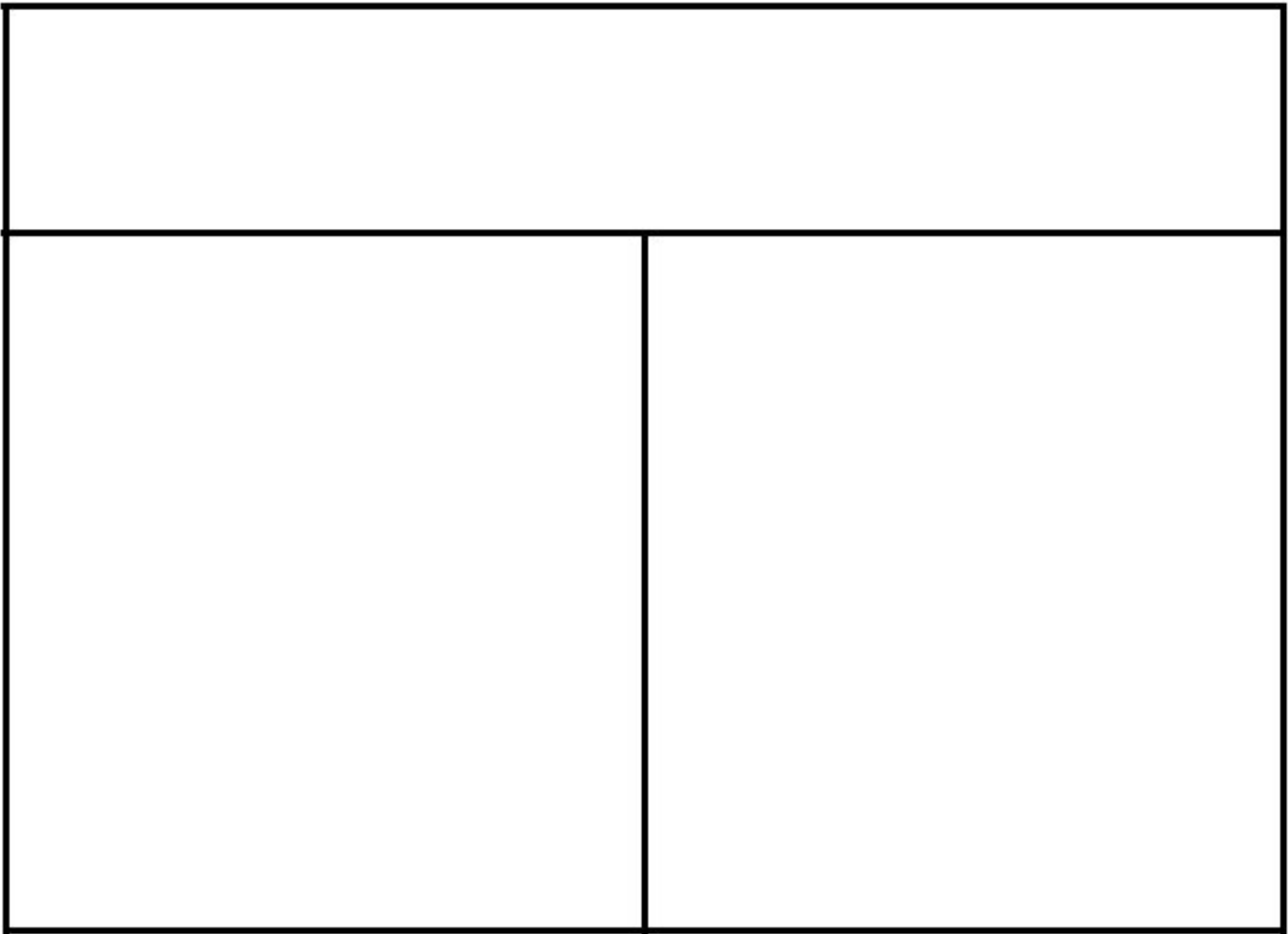
2

4



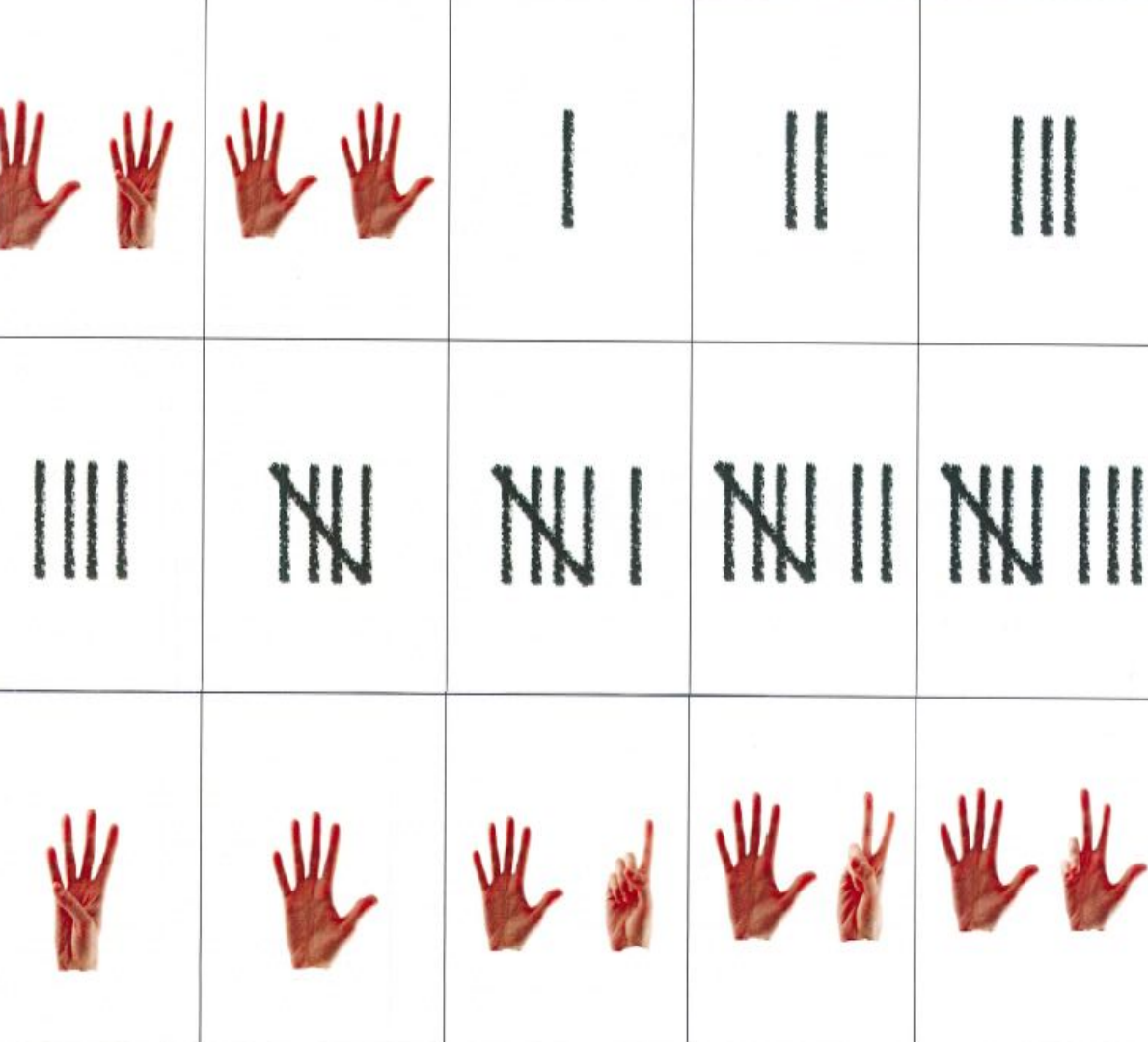
Show Me





Part-Part-Whole





Every child should have their own subitizing cards!

MONEY BINGO

M	O	N	E	Y
				
				
		FREE SPACE		
				
				

BINGO



Go Fish



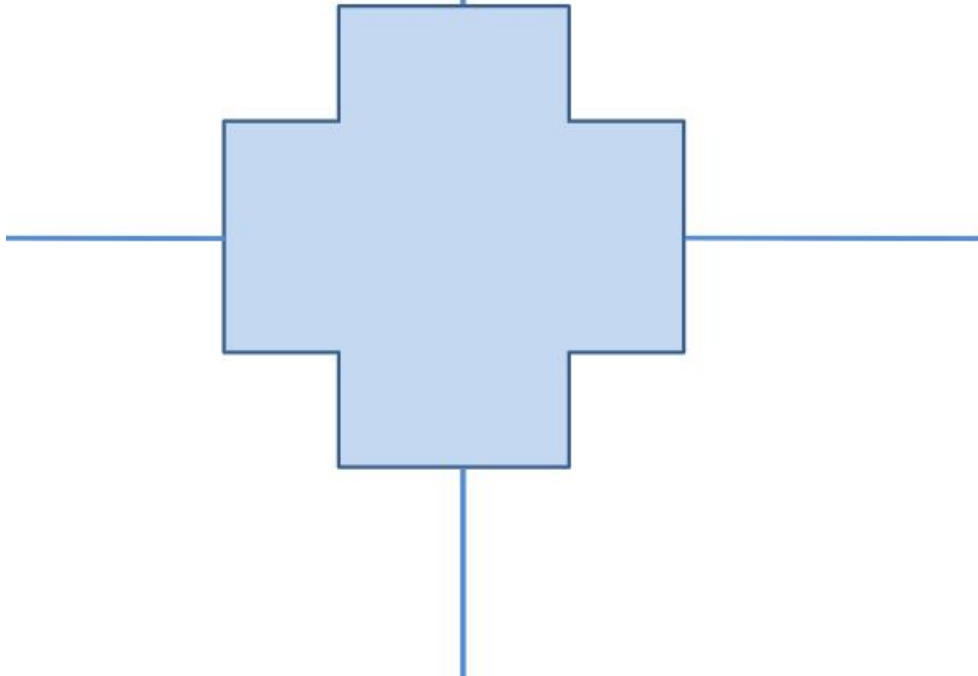
Coin Sorting by Letter

Extension Activity for *Kindergarten Reads or Earn, Save, Spend & Share Presentations*






1

Show Me The Money



Place Value Chart Beginning with Money (Penny, Nickel, Dime)

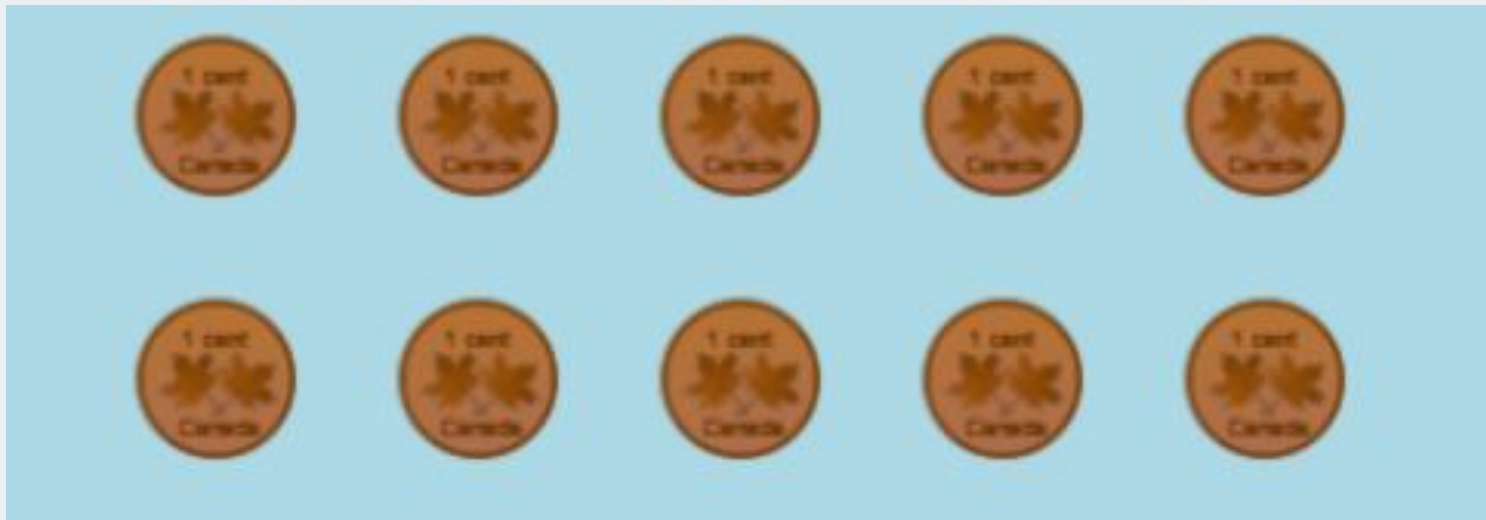
Dime 	Nickel 	Penny 

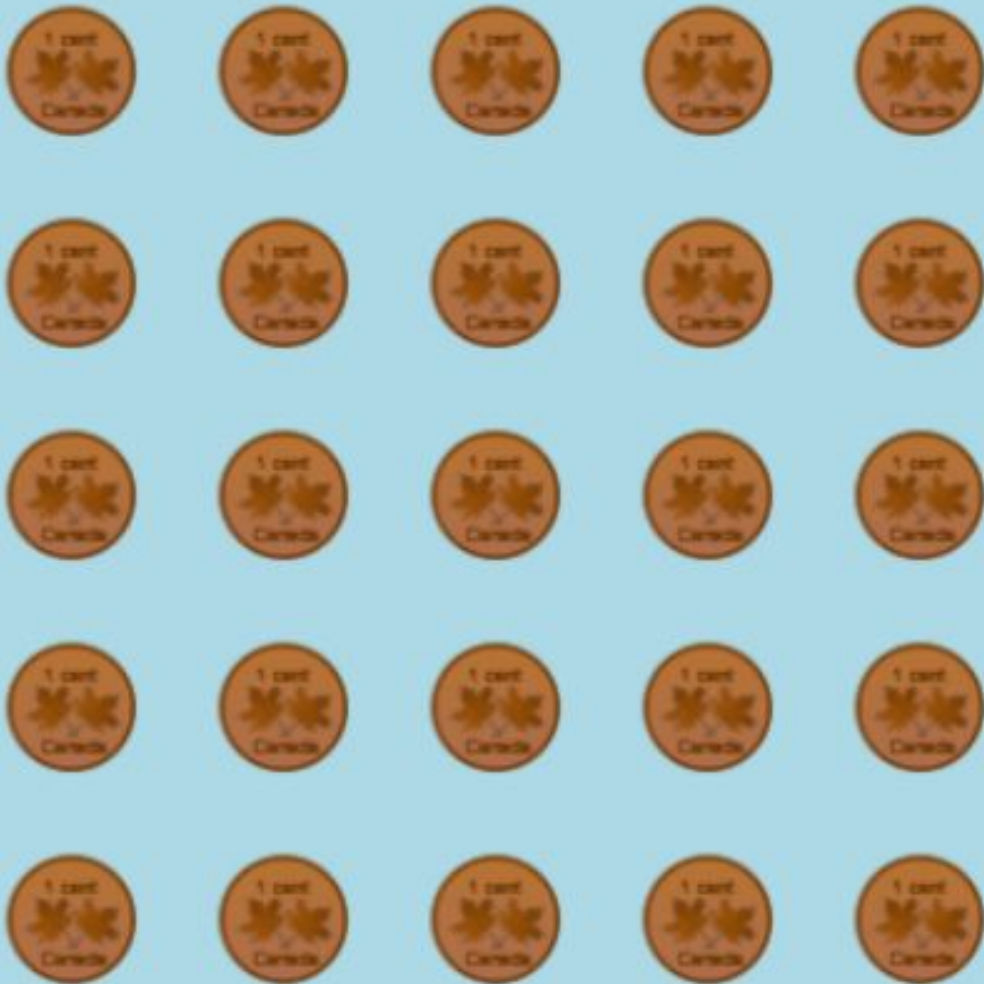


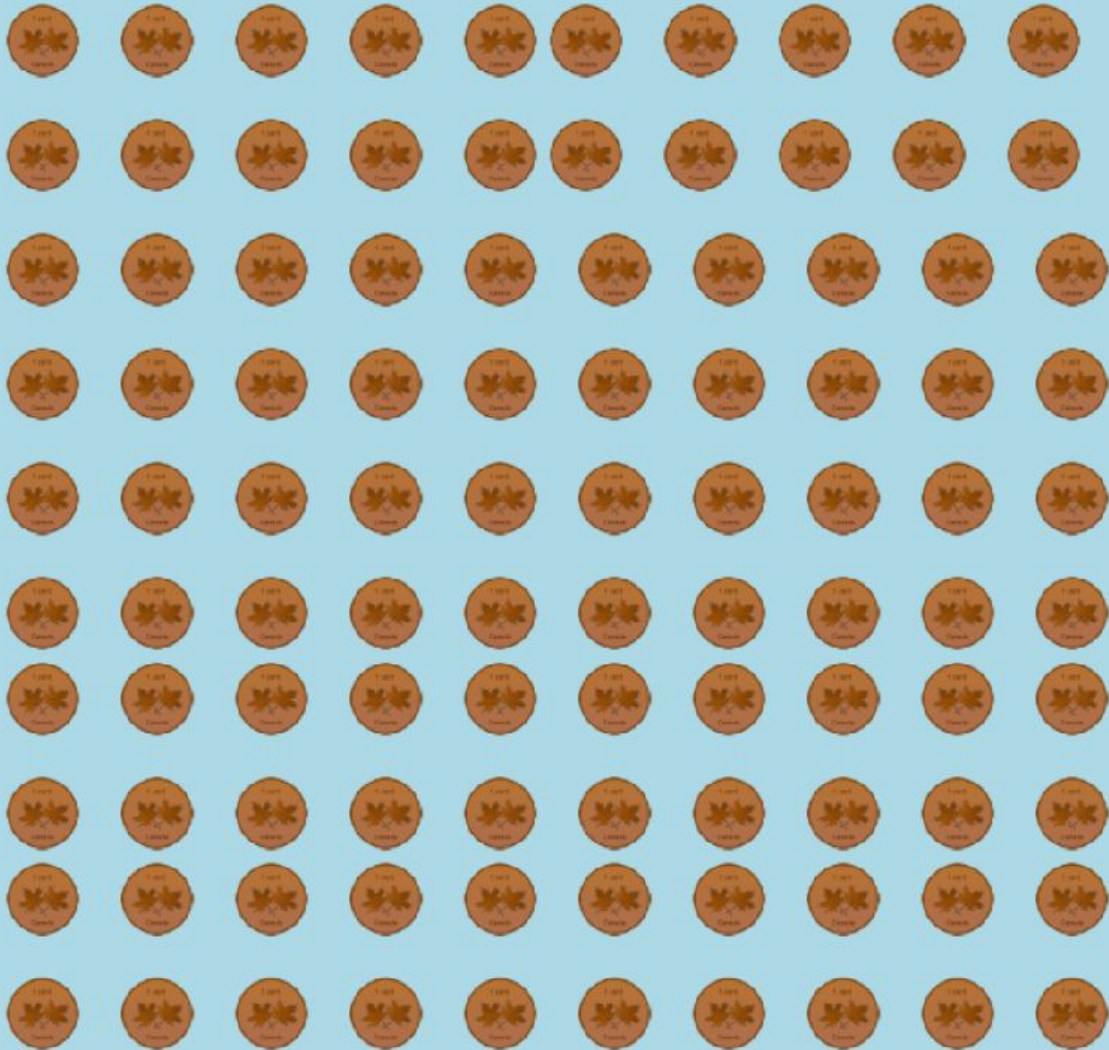
Understanding Place value











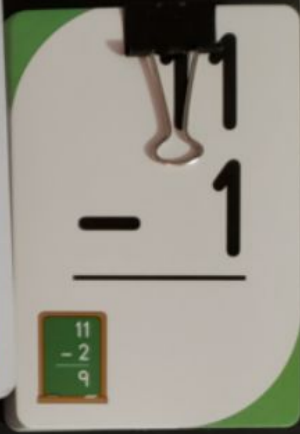
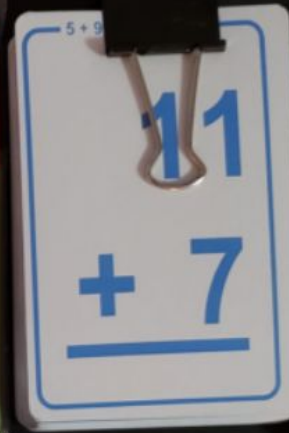


Making Money Many Ways

8¢



Group



Suggested amounts of Money for each Ziplock Bag



Grade 1 (Identify coins, features, skip count 2, 5, 10, patterns, attributes)

10 pennies

20 nickels

10 dimes

4 quarters

5 loonies

5 toonies

10 x \$5.00

10 x \$10.00

1 x \$20.00

1 x \$50.00

1 x \$100.00

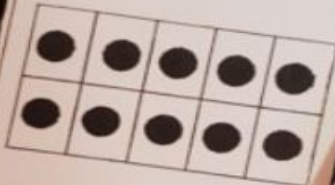
*add extra coins to each bag

Additional cash, if needed, can be retrieved from the “Bank”

twenty



three



4

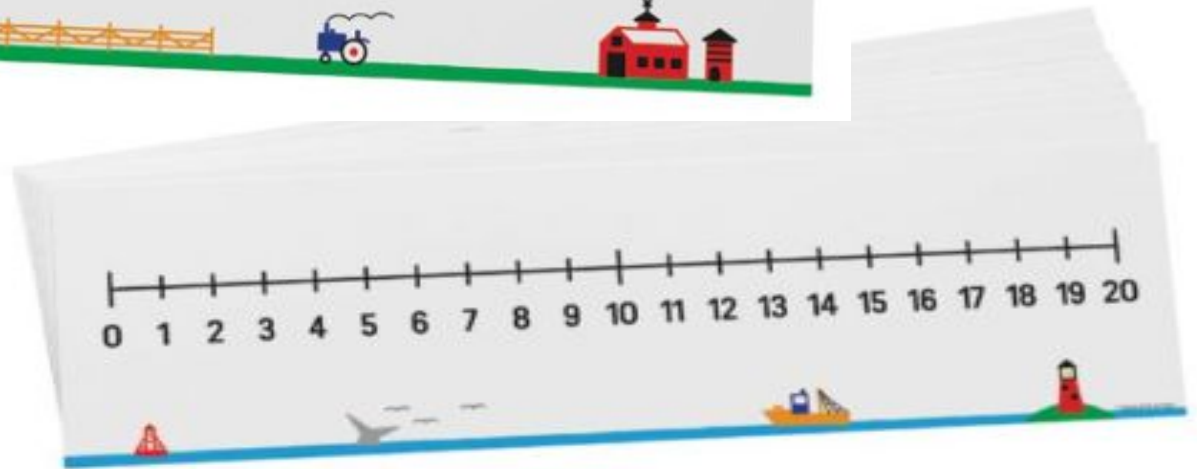
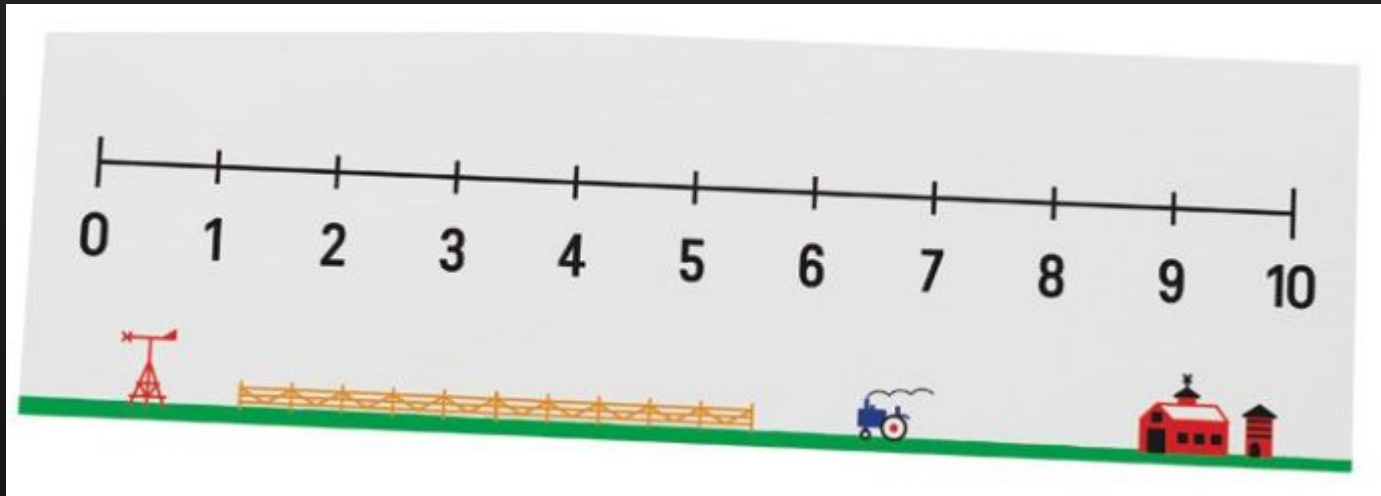


Finished kit - container from Dollarama



Container fits in a student desk or cubby.

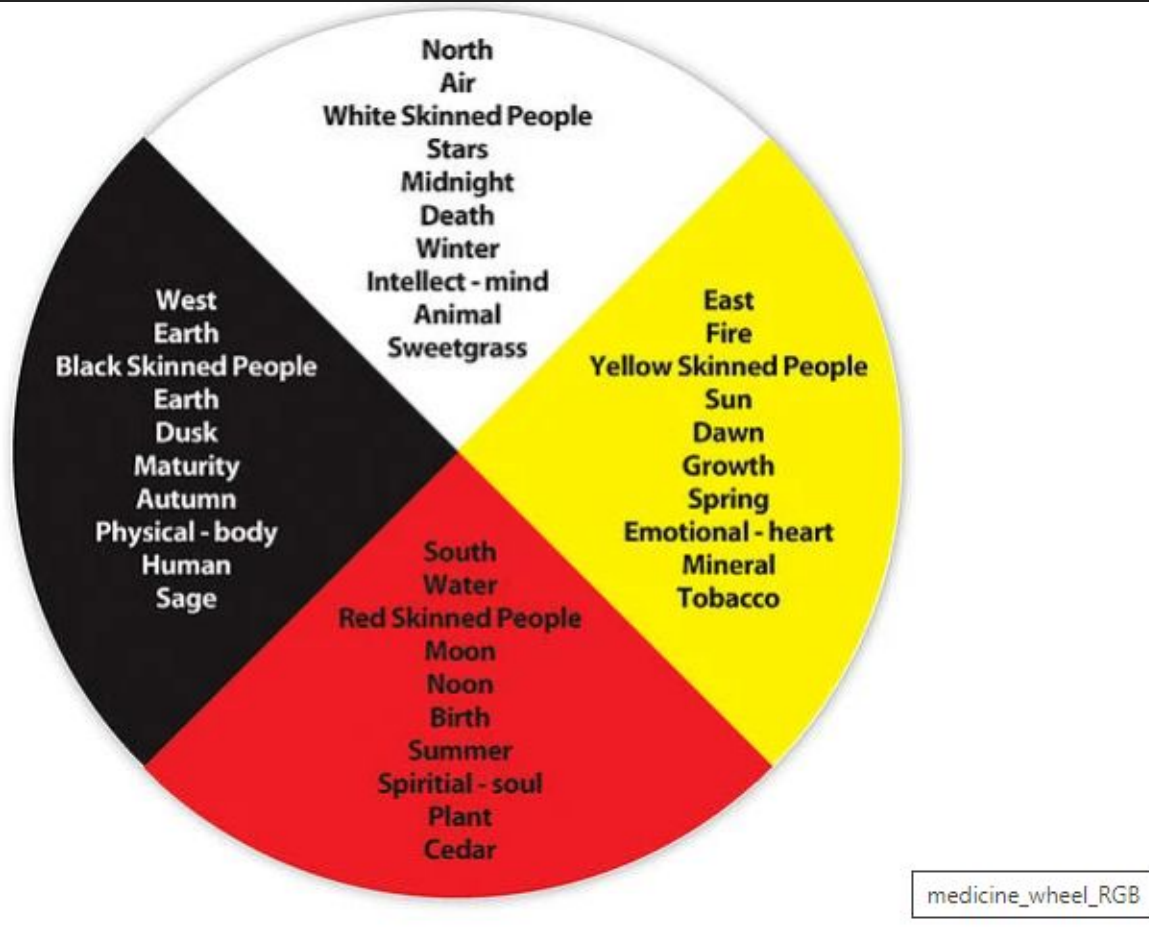
Didax Numberline



Leah Dorion



Seasonal
Wheels by the
Kwakiutl (BC
Indigenous)

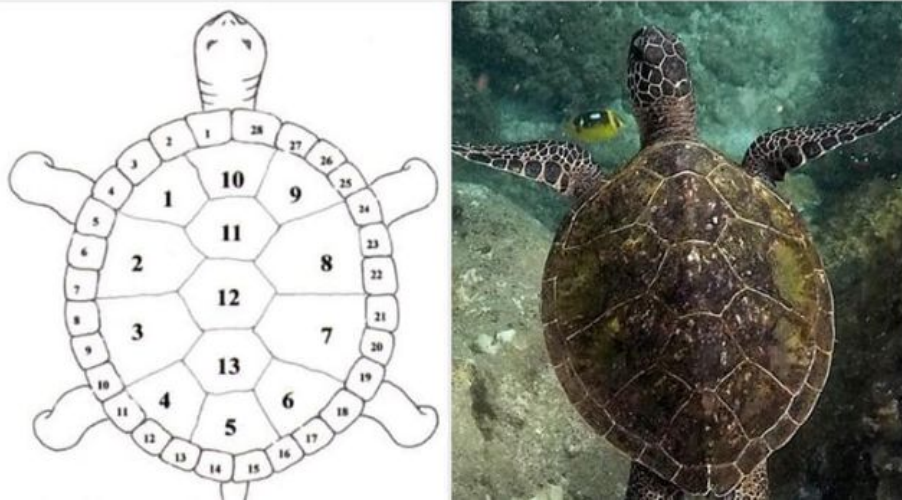


Cree and Blackfoot Tipis



13 moons & 28 days on all turtle shells. This equals 364 days, plus one day of rest. All indigenous people around the world knew the wisdom of the turtle and followed a 13 month calendar; after all, there are 13 moon cycles in a year & 27-29 days per cycle.

It's almost as if white man subtracted one month in order sever the connection between the people and the sun, moon & stars, which are themselves a giant clock.



Source:

<https://earthhaven.ca/blog/13-moons-on-turtles-back/208>



Resource website

www.movingforwardcurriculum.ca

Key Documents, Kits and Additional Resources for the website will be found at this site. Look across the top bar on the home page for Math, French Immersion, Science and Additional resources to help support your planning.

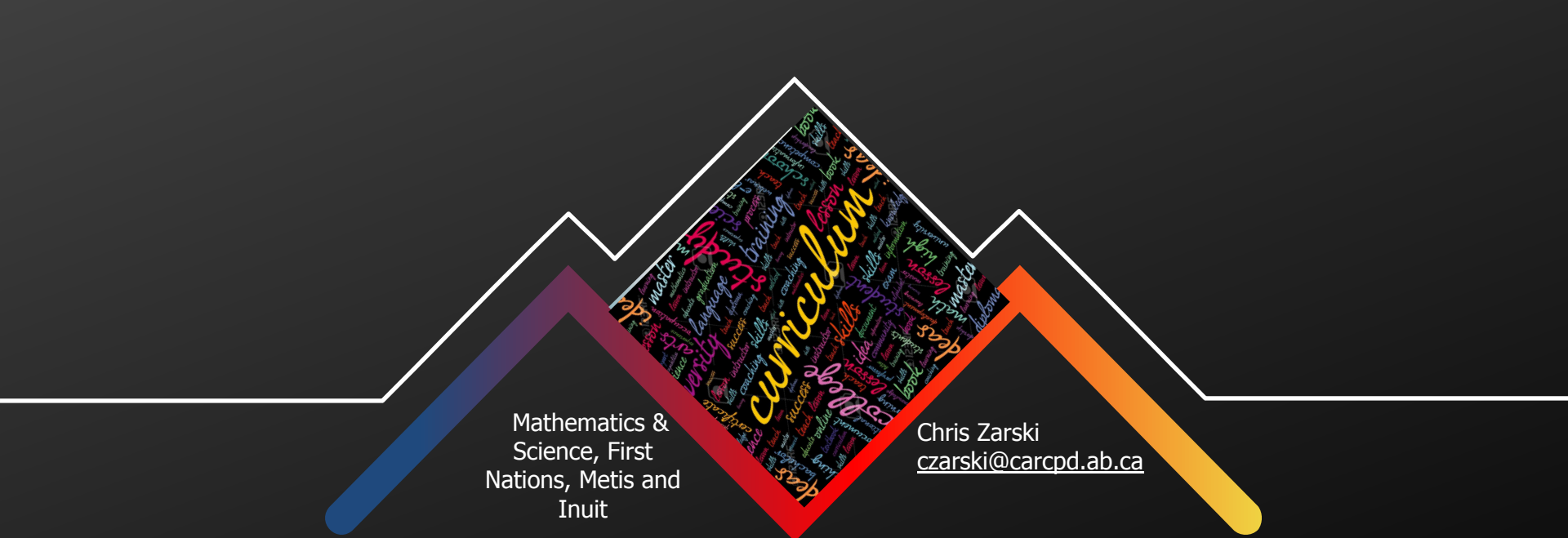
$$n\sqrt{x}$$

$$x/2y$$

$$x$$

$$3 \cdot 3 = 9$$

$$9 + 9 = 18$$



Mathematics &
Science, First
Nations, Metis and
Inuit

Chris Zarski
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Thank You!

Please don't hesitate to connect.