****

Grade 2 Sample Long-Range Pathway – Option 1

In the examples below, the suggested learning is cyclical, allowing concepts to be revisited throughout the year. The Number Strand alternates with another strand every month. Students can then make connections with concepts in another, more prominent strand. This suggested pathway also allows students whose strengths are in the visual-spatial areas of math to have more opportunities to be engaged.

|  | Strand | Big Ideas | Conceptual Threads | Math Every Day Activities | Activity Kit | Mathology Little Books | Practice and Learning Centres |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sept.** | Geometry | 2-D shapes and 3-D solids can be analyzed and classified in different ways by their attributes2-D shapes and 3-D solids can be transformed in many ways and analyzed for change | Investigating geometric attributes and properties of 2-D shapes and 3-D solidsExploring 2-D shapes and 3-D solids by applying and visualizing transformations | 2-D Shapes Card 1: Visualizing Shapes/Comparing Shapes | Geometry Cluster 1 2-D ShapesActivities 1–5 | I Spy Awesome BuildingsSharing Our Stories | Sorting by one or two attributes and identifying the sorting ruleMaking pictures with 2-D shapesShape riddlesCreating, extending, translating, and predicting elements in repeating patterns  |
| **Sept.** | Number | Numbers tell us how many and how much | Applying the principles of countingRecognizing and writing numerals | CountingCard 1A:Skip-Counting on a Hundred Chart/Skip-Counting from Any NumberCard 1B:Skip-Counting with Actions/What’s Wrong? What’s Missing? | Number Cluster 1Counting Activities 1–5\*\*Teachers may choose a smaller number range to begin the year and extend these activities over time. | What Would You Rather?Ways To Count | Counting and subitizing practice, including skip-countingOrdering and comparing smaller numbers |
| Oct. | Patterning and Algebra | Regularity and repetition form patterns that can be generalized and predicted mathematically | Identifying, sorting, and classifying attributes and patterns mathematically (e.g., number of sides, shape, size)Identifying, reproducing, extending, and creating patterns that repeatRepresenting and generalizing increasing/decreasing patterns | Repeating PatternsCard 1:Show Another Way/Repeating Patterns Around UsIncreasing/Decreasing PatternsCard 2A:How Many Can We Make?/Error HuntCard 2B:Making Increasing Patterns/Making Decreasing Patterns | Patterning and AlgebraCluster 1Repeating PatternsActivities 1–5Patterning and AlgebraCluster 2Increasing/Decreasing Patterns\*Activities 6–14\*Decreasing patterns are for Ontario only | Pattern QuestThe Best Surprise | Extending, creating, and predicting elements in repeating patterns and identifying the coreCreating concrete increasing/decreasing patternsSorting 2-D shapes and determining sorting rules |
| Oct. | Number | Numbers are related in many ways | Estimating quantities and numbersDecomposing wholes into parts and composing wholes from parts | Number Relationships 1 Card 2A:Show Me in Different Ways/Guess My NumberCard 2B:Math Commander/Building an Open Number Line | Number Cluster 2Number Relationships 1Activities 6–12 | What Would You Rather?Back to BatocheThe Great Dogsled Race | Counting and subitizing practice, including skip-countingComparing and ordering numbers and quantitiesNumber riddles using odd, even, and ordinal terms |
| Nov. | Geometry | 2-D shapes and 3-D solids can be analyzed and classified in different ways by their attributes | Investigating geometric attributes and properties of 2-D shapes and3-D solids | 3-D SolidsCard 2A: Geometry in Poetry/ What Do You See?Card 2B: Solids Around Us/Which Solid Does Not Belong? | Geometry Cluster 2 3-D SolidsActivities 6–10 | I Spy Awesome Buildings | Sorting 2-D shapes and 3-D solids using one and two attributes and identifying the sorting ruleExtending and creating increasing and decreasing patterns and identifying the pattern rule |
| Nov. | Number | Numbers are related in many ways | Decomposing wholes into parts and composing wholes from parts | Number Relationships 2 Card 5A:Which Ten Is Nearer?/Building NumbersCard 5B:How Many Ways?/What’s the Unknown Part? | Number Cluster 5Number Relationships 2Activities 22–25 | Back to BatocheFamily Fun DayA Class-full of Projects | Counting and subitizing practice, including skip-countingComparing and ordering numbers and quantities Estimating quantity using referentsMissing parts 20 = ? + 14 |
| Dec. | Number | Quantities and numbers can be added and subtracted to tell how many and how much | Developing fluency of addition and subtraction computationDeveloping conceptual meaning of addition and subtraction | Operational FluencyCard 7A:Doubles and Near-Doubles/I Have… I Need...Card 7B:Hungry Bird/Make 10 Sequences | Number Cluster 7Operational FluencyActivities 32–36  | Array’s BakeryMarbles, Alleys, Mibs, and Guli!The Great Dogsled Race | Comparing and ordering numbers Creating and solving story problemsMental math to 20: doubles, 1 or 2 more or less, making tens, adding and subtracting zero |
| Dec. | Data Management and Probability | Formulating questions, collecting data, and consolidating data in visual and graphical displays helps us to understand, predict, and interpret situations | Formulating questions to learn about groups, collections, and events by collecting relevant dataCollecting data and organizing it into categoriesCreating graphical displays of collected dataReading and interpreting data displaysDrawing conclusions by making inferences and justifying decisions based on data collected Using the language of chance to describe and predict events\*\*Ontario and BC only  | Data ManagementCard 1:Conducting Surveys/Reading and Interpreting GraphsProbability and ChanceCard 2: What’s in the Bag?/Word of the Day\*\* Ontario and BC only  | Data Management and Probability Cluster 1Data ManagementActivities 1–6\*Activities 2 and 5 are for Ontario onlyData Management & Probability Cluster 2Probability and ChanceActivities 7–9\*\*Ontario and BC only  | Graph It! (Grade 1)Big Buddy DayMarsh Watch | Extending and creating increasing and decreasing concrete and numerical patterns and finding the pattern ruleCollecting data and making graphsDevelop and solve story problems using graphs2-D shape and 3-D solids riddles using geometric attributes |
| Jan. | Number | Quantities and numbers can be grouped by or partitioned into equal-sized units | Unitizing quantities into ones, tens, and hundreds (place value concepts)Unitizing quantities and comparing units to the whole | Grouping and Place ValueCard 3A:Adding Ten/Taking Away TenCard 3B:Thinking Tens/Describe Me | Number Cluster 3Grouping and Place ValueActivities 13–16 | A Class-full of Projects | Skip-counting practiceMental math activitiesComparing and ordering numbers on a number lineComposing and decomposing numbers including in tens and onesCreating and solving story problems  |
| Jan. | Measurement\*\*All provinces except for BC | Many things in our world (e.g., objects, spaces, events) have attributes that can be measured and compared | Understanding attributes that can be measuredDirectly and Indirectly comparing and ordering objects with the same measurable attributeSelecting and using non-standard units to estimate, measure, make comparisons | Using Non-Standard UnitsCard 1:Estimation Scavenger Hunt/Estimation Station | Measurement Cluster 1Using Non-Standard UnitsActivities 1–7 | Getting Ready for School | Mental math activitiesCreating, translating, and predicting elements of repeating and increasing patternsCreating and solving measurement story problems Measuring length, height, width, and distance around and object with different non-standard units |
| Feb. | Patterning and Algebra | Patterns and relations can be represented with symbols, equations, and expressions | Understanding equality and inequality, building n generalized properties of numbers and operationsUsing symbols, unknowns, and variables to represent mathematical relations | Equality and InequalityCard 3A: Equal or Not Equal?/How Many Ways?Card 3B: Which One Doesn’t Belong?/What’s Missing? | Patterning and Algebra Cluster 3Equality and InequalityActivities 15–20 | Nutty and Wolfy (Grade 1)Kokum’s Bannock | Mental math activities Extending, creating, finding missing elements, and predicting elements in repeating, increasing and decreasing patternsMeasurement using multiple uniform units (linking cubes) |
| Feb./Mar. | Number | Quantities and numbers can be added and subtracted to tell how many and how much | Developing conceptual meaning of addition and subtraction | ConceptualizingAddition and SubtractionCard 6:What Math Do You See?/What Could the Story Be? | Number Cluster 6Conceptualizing Addition and SubtractionActivities 26–31 | Array’s BakeryMarbles, Alleys, Mibs, and Guli!The Great Dogsled Race | Conceptual subitizing practice (decomposing quantities into visualized parts and finding sum)Mental math activitiesComparing and ordering numbers on a number lineComposing and decomposing numbers including as tens and onesCreating and solving story problems |
| Mar. | Geometry  | 2-D shapes and 3-D solids can be analyzed and classified in different ways by their attributes | Investigating 2-D shapes, 3-D solids, and their attributes through composition and decomposition | Geometric RelationshipsCard 3A: Fill Me In!/Make Me a PictureCard 3B: Name the Solid/Draw the Shape | Geometry Cluster 3Geometric Relationships Activities 11–17 | I Spy Awesome BuildingsSharing Our Stories | Creating, finding missing elements, and predicting elements in concrete and numerical growing patterns Measurement using iteration of different uniform non-standard unitsShape trains with 1 or 2 attributes changing |
| Mar. | Number\*\*Ontario only  | Quantities and numbers can be grouped by and partitioned into units to determine how many and much | Developing conceptual meaning of multiplication and division | Early Multiplicative ThinkingCard 8A:Counting Equal Groups to Find How Many/I SpyCard 8B:How Many Blocks?/How Many Ways? | Number Cluster 8Early Multiplicative ThinkingActivities 37–42 | Array’s BakeryMarbles,Alleys, Mibs, and Guli! | Measuring and graphing length or width of objects to compare Explore equality and inequality with towersMental math activities |
| Apr. | Measurement\*\*All provinces except for BC | Many things in our world(e.g., objects, spaces, events) have attributes that can be measured and compared. | Understanding attributes that can be measured | Time and temperatureCard 3A: Hula Hoop Clock\*/Calendar QuestionsCard 3B: Monthly Mix-Up/Thermometer Drop or Pop\*\*Ontario only  | Measurement Cluster 3Time and TemperatureActivities 13–14Activities 15–18\*\*Ontario only  |  | Creating, finding missing elements, and predicting elements in concrete and numerical increasing and decreasing patterns Mental math activitiesShape trains changing with 1 or 2 attributes changing or sorting 2-D shapes and 3-D solids |
| Apr. | Measurement\*\*Ontario and BC only  | Assigning a unit to a continuous attribute allows us to measure and make comparisons | Selecting and using standard units to estimate, measure, and make comparisons | Using Standard UnitsCard 2: What Am I?/Which Unit? | Measurement Cluster 2Using Standard UnitsActivities 8–12 | Animal Measures (Grade 1)The Discovery | Creating and solving story problems using measurement Balance-scale activities to explore equality and inequalityReplicating, filling and creating composite 2-D shapes and 3-D solids |
| Apr. | Number  | Financial Literacy\*\*Ontario and BC only |  | Financial literacyCard 9:Collections of Coins/ Showing Money in Different Ways | Number Cluster 9Financial LiteracyActivities 43–47 | The Money Jar | Using coins to show skip counting to a given numberCreating and solving story problems using coinsCreating, finding missing elements, and predicting elements in concrete and numerical growing patterns  |
| May | Number\*\*Ontario only  | Quantities and numbers can be grouped by or partitioned into equal-sized units  | Partitioning quantities to form fractions | Early Fractional ThinkingCard 4A:Equal Parts from Home/Modelling Fraction AmountsCard 4B:Regrouping Equal Parts/Naming Equal Parts | Number Cluster 4Early Fractional ThinkingActivities 17–21 | The Best Birthday | Mental math activitiesConceptual subitizing practiceComparing and ordering numbers on a number line |
| May  | Geometry  | Objects can be located in space and viewed from multiple perspectives | Locating and mapping objects in spaceViewing and representing objects from multiple perspectives | Location and MovementCard 4A\*: Our Design/Treasure MapCard 4B\*: Crazy Creatures/Perspective Matching GameCodingCard 5: Code of the Day/Wandering Animals\*Ontario only | Geometry Cluster 4Location and MovementActivities 18–21\*Geometry Cluster 5CodingActivities 22–25\*Ontario only | Robo | Composing and decomposing numbers including as tens and ones Estimating quantities using referentsMental math activities |
| May | Number | Quantities and numbers can be grouped by or partitioned into equal-sized units | Unitizing quantities into ones, tens, and hundreds (place-value concepts) | Grouping and Place ValueCard 3A:Adding Ten/Taking Away TenCard 3B:Thinking Tens/Describe Me | Revisit Number Cluster 3Grouping and Place ValueBuilding and naming numbersDecomposing and composing numbers using tens and ones | A Class-full of Projects | Ordering and placing numbers on a number lineUsing benchmarksCollecting data related to days of the week and months of the year and represent on a graph (birthdays, activities)Mental math activities |
| May | Number | Quantities and numbers can be added and subtracted to tell how many and how much | Developing fluency of addition and subtraction computation\*Developing the conceptual meaning of addition and subtraction\*\*Consider a focus on subtraction in revisiting these activities.  | ConceptualizingAddition and SubtractionCard 6:What Math Do You See?/What Could the Story Be?Operational FluencyCard 7A:Doubles and Near-Doubles/I Have… I Need…Card 7B:Hungry Bird/ Make 10 Sequences | Revisit Number Cluster 6 Conceptualizing Addition and Subtraction Activities 28–31Revisit Number Cluster 7Operational FluencyActivities 32–36 Number Talks for mental math fluency and basic fact recallProblem-Solving with all problem types for addition and subtraction | The Money JarMarbles, Alleys, Mibs, and Guli!The Great Dogsled Race | Decomposing quantities and numbers using 10s and 1sCreating, finding missing elements, and predicting elements in concrete and numerical increasing and decreasing patternsDescribing equality and inequality symbolically(14 + 6 = 13 + 7)Replicating, filling, creating, and filling composite 2-D shapes and 3-D solids |
| June | Revisit difficult concepts |  |  |  | Activities from each strand |  |  |