**2nd Grade Math Scope and Sequence 2021 – 2022**

|  |  |
| --- | --- |
| **2nd Grade Math**  **Scope and Sequence 2021 – 2022** | |
| **Process Standards:**  (A)  apply mathematics to problems arising in everyday life, society, and the workplace  (B)  use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the  solution, and evaluating the problem-solving process and the reasonableness of the solution  (C)  select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation,  and number sense as appropriate, to solve problems  (D)  communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as  appropriate  (E)  create and use representations to organize, record, and communicate mathematical ideas  (F)  analyze mathematical relationships to connect and communicate mathematical ideas  (G) display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication | |
| **Grading Period 1** | |
| **Unit 1: Launching Mathematical Mindsets**  Estimated Date Range: 8/11/21 – 8/25/21  Estimated Time Frame: 11 Days | |
| **Concepts within the Unit** | **TEKS** |
| Concept #1: Launching Mathematical  Mindsets  Suggested Days: 11 | In this unit we are Launching Mathematical Mindsets using You Cubed resources along with supports for setting up Math Workshop in the classroom. The focus is on students getting used to classroom routines while engaging in activities that support pre-requisite skills and promote sense making, perseverance, and teamwork. |
| **Unit 2: Numeration (up to 999)**  Estimated Date Range: 8/26/21 – 9/29/21  Estimated Time Frame: 21 days  Note: Includes 2 days for Re-engagement and Assessment | |
| **Concepts within the Unit** | **TEKS** |
| Concept #1: Representing Numbers  Suggested Days:9 | Priority Standard:  **2.2A use concrete and pictorial models to compose and decompose numbers up to ~~1,200~~ 999 in more than one way as a sum of so many thousands, hundreds, tens, and ones**  Integrated Standards  2.2B use standard, word, and expanded forms to represent numbers up to ~~1,200~~ 999  2.2E locate the position of a given whole number on an open number line  2.2F name the whole number that corresponds to a specific point on a number line  2.7B use an understanding of place value to determine the number that is 10 or 100 more or less than a given number up to 1,200  2.9C represent whole numbers as distances from any given location on a number line |
| Concept #2: Compare and Order Numbers  Suggested Days: 10 | **Priority Standards**  **2.2D use place value to compare ~~and order~~ whole numbers up to ~~1,200~~ 999 using comparative language, numbers, and symbols (>, <, or =)**  Important Standard:  2.2A use concrete and pictorial models to compose and decompose numbers up to 1,200 in more than one way as a sum of so many thousands, hundreds, tens, and ones  Integrated Standards  2.2C generate a number that is greater than or less than a given whole number up to 1,200  2.2E locate the position of a given whole number on an open number line  2.2F name the whole number that corresponds to a specific point on a number line  2.9C represent whole numbers as distances from any given location on a number line |
| **Unit 3: Addition & Subtraction (up to 99)**  Estimated Date Range: 9/30/21 – 11/12/2021  Estimated Time Frame: 29 Days *(5 Days in GP1 and 24 Days in GP2)*  Note: Includes 2 days for Re-engagement and Assessment | |
| **Concepts within the Unit** | **TEKS** |
| Concept #1: One Step Addition and Subtraction  Suggested Days: 10 *(5 days in GP 1 and 5 Days in GP 2)* | **Priority Standards**  **2.7C represent and solve addition and subtraction word problems where unknowns may be any one of the**  **terms in the problem**  Important Standards  2.4C solve one-step and multi-step word problems involving addition and subtraction within ~~1,000~~ 99 using a  variety of strategies based on place value, including algorithms |
| **Grading Period 2** | |
| **Unit 3: Addition & Subtraction (up to 99) - Continued**  Estimated Date Range: 9/30/21 – 11/12/2021  Estimated Time Frame: 29 Days *(5 Days in GP1 and 24 Days in GP2)*  Note: Includes 2 days for Re-engagement and Assessment | |
| **Concepts within the Unit** | **TEKS** |
| Concept #1: One Step Addition and Subtraction  Suggested Days: 10 *(5 days in GP 1 and 5 Days in GP 2)* | **Priority Standards**  **2.7C represent and solve addition and subtraction word problems where unknowns may be any one of the**  **terms in the problem**  Important Standards  2.4C solve one-step and multi-step word problems involving addition and subtraction within ~~1,000~~ 99 using a  variety of strategies based on place value, including algorithms |
| Concept #2: Multi-Step Addition and Subtraction  Suggested Days: 12  District Learning Assessment 1  Assessment Window: 10/27/21 – 11/3/21  Reporting Due Date 11/10/21 | **Priority Standards**  **2.4C solve one-step and multi-step word problems involving addition and subtraction within ~~1,000~~ 99 using a**  **variety of strategies based on place value, including algorithms**  Important Standards  2.7C represent and solve addition and subtraction word problems where unknowns may be any one of the terms  in the problem  Integrated Standards  2.4A recall basic facts to add and subtract within 20 with automaticity  2.4B add up to four two-digit numbers and subtract two-digit numbers using mental strategies and algorithms  based on knowledge of place value and properties of operations  2.4D generate and solve problem situations for a given mathematical number sentence involving addition and subtraction of whole numbers within ~~1,000~~ 99  2.11A calculate how money saved can accumulate into a larger amount over time |
| Concept #3: Collection of Coins  Suggested Days: 5 | **Priority Standards**  **2.5A determine the value of a collection of coins up to one dollar**  Integrated Standards  2.5B use the cent symbol, dollar sign, and the decimal point to name the value of a collection of coins |
| **Unit 4: Personal Financial Literacy and Data Analysis**  Estimated Date Range: 11/15/21 – 12/17/21  Estimated Time Frame: 20 Days  Note: Includes 2 days forRe-engagement and Assessment | |
| **Concepts within the Unit** | **TEKS** |
| Concept #1: Personal Financial Literacy  Suggested Days: 5 | Integrated Standards  2.11A calculate how money saved can accumulate into a larger amount over time  2.11B explain that saving is an alternative to spending  2.11C distinguish between a deposit and a withdrawal  2.11D identify examples of borrowing and distinguish between responsible and irresponsible borrowing  2.11E identify examples of lending and use concepts of benefits and costs to evaluate lending decisions  2.11F differentiate between producers and consumers and calculate the cost to produce a simple item |
| Concept #1: Data Analysis  Suggested Days: 13 | **Priority Standards**  **2.10C write and solve one-step word problems involving addition or subtraction using data represented within**  **pictographs and bar graphs with intervals of one**  Integrated Standards  2.10B organize a collection of data with up to four categories using pictographs and bar graphs with intervals of one or more  2.10D draw conclusions and make predictions from information in a graph  2.10A explain that the length of a bar in a bar graph or the number of pictures in a pictograph represents the number of data points for a given category. |
| **Grading Period 3** | |
| **Unit 5: Numeration, Addition & Subtraction**  Estimated Date Range: 1/5/21 - 2/15/21  Estimated Time Frame: 29 Days  Note: Includes 2 days for Re-engagement and Assessment | |
| Concept #1: Compare and Order (Up to 1,200)  Suggested Days: 7 | **Priority Standards**  **2.2D use place value to compare and order whole numbers up to 1,200 using comparative language, numbers,**  **and symbols (>, <, or =)**  Integrated Standards  2.2A use concrete and pictorial models to compose and decompose numbers up to 1,200 in more than one way as a sum of so many thousands, hundreds, tens, and ones  2.2B use standard, word, and expanded forms to represent numbers up to 1,200  2.2C generate a number that is greater than or less than a given whole number up to 1,200  2.2E locate the position of a given whole number on an open number line  2.2F name the whole number that corresponds to a specific point on a number line  2.7B use an understanding of place value to determine the number that is 10 or 100 more or less than a given  number up to 1,200  2.9C represent whole numbers as distances from any given location on a number line |
| Concept #2: Addition and Subtraction (up to 1,000)  Suggested Days: 9 | **Priority Standards**  **2.4C solve one-step and multi-step word problems involving addition and subtraction within 1,000 using a**  **variety of strategies based on place value, including algorithms**  Important Standards  2.7C represent and solve addition and subtraction word problems where unknowns may be any one of the terms in the problem  Integrated Standards  2.4A recall basic facts to add and subtract within 20 with automaticity  2.4B add up to four two-digit numbers and subtract two-digit numbers using mental strategies and algorithms  based on knowledge of place value and properties of operations  2.4D generate and solve problem situations for a given mathematical number sentence involving addition and  subtraction of whole numbers within 1,000 |
| Concept #3: Multi-Step Addition and Subtraction (up to 1,000)  Suggested Days: 11  District Learning Assessment 2  Assessment Window: 2/7/22 – 2/15/22  Reporting Due Date 2/24/22 | **Priority Standards**  **2.4C solve one-step and multi-step word problems involving addition and subtraction within 1,000 using a**  **variety of strategies based on place value, including algorithms**  Important Standards  2.7C represent and solve addition and subtraction word problems where unknowns may be any one of the terms  in the problem  Integrated Standards  2.4A recall basic facts to add and subtract within 20 with automaticity  2.4B add up to four two-digit numbers and subtract two-digit numbers using mental strategies and algorithms  based on knowledge of place value and properties of operations  2.4D generate and solve problem situations for a given mathematical number sentence involving addition and  subtraction of whole numbers within 1,000 |
| **Unit 6: Measurement**  Estimated Date Range: 2/16/22 - 3/25/22  Estimated Time Frame: 21 Days (16 Days in GP3 and 5 Days in GP4) | |
| **Concepts within the Unit** | **TEKS** |
| Concept #1: Time  Suggested Days: 8 | Important Standards  2.9G read and write time to the nearest one-minute increment using analog and digital clocks and distinguish between a.m. and p.m. |
| Concept #2: Length  Suggested Days: 8 | **Priority Standards**  **2.9D determine the length of an object to the nearest marked unit using rulers, yardsticks, meter sticks, or measuring tapes**  Integrated Standards  2.9A find the length of objects using concrete models for standard units of length  2.9B describe the inverse relationship between the size of the unit and the number of units needed to equal the  length of an object  2.9E determine a solution to a problem involving length, including estimating lengths |
| **Grading Period 4** | |
| **Unit 6: Measurement**  Estimated Date Range: 2/16/22 - 3/25/22  Estimated Time Frame: 21 Days (16 Days in GP3 and 5 Days in GP4)  Note: Includes 2 dayfor Re-engagement and Assessment | |
| **Concepts within the Unit** | **TEKS** |
| Concept #3: Area  Suggested Days: 3 | Integrated Standards  2.9F use concrete models of square units to find the area of a rectangle by covering it with no gaps or overlaps, counting to find the total number of square units, and describing the measurement using a number and the unit  2.9B describe the inverse relationship between the size of the unit and the number of units needed to equal the length of an object |
| **Unit 7: Geometry**  Estimated Date Range: 3/28/22 - 4/14/22  Estimated Time Frame: 14 Days  Note: Includes 2 days forRe-engagement and Assessment | |
| **Concepts within the Unit** | **TEKS** |
| Concept #1: 2-D Shapes  Suggested Days: 5 | **Priority Standards**  **2.8C classify and sort polygons with 12 or fewer sides according to attributes, including identifying the number of sides and number of vertices**  Integrated Standards  2.8A create two-dimensional shapes based on given attributes, including number of sides and vertices  2.8D compose two-dimensional shapes with given properties or attributes  2.8E decompose two-dimensional shapes such as cutting out a square from a rectangle, dividing a shape in half, or partitioning a rectangle into identical triangles and identify the resulting geometric parts |
| Concept #2: 3-D Solids  Suggested Days: 7 | **Priority Standards**  **2.8B classify and sort three-dimensional solids, including spheres, cones, cylinders, rectangular prisms (including cubes as special rectangular prisms), and triangular prisms, based on attributes using formal geometric language**  Integrated Standards  2.8D compose three-dimensional solids with given properties or attributes |
| **Unit 8: Understanding Fractions**  Estimated Date Range: 4/19/22 - 5/04/22  Estimated Time Frame: 12 Days  Note: Includes 2 days for Re-engagement and Assessment | |
| **Concepts within the Unit** | **TEKS** |
| Concept #1: Fractions  Suggested Days: 10  District Learning Assessment 3  Assessment Window: 4/27/22 – 5/04/22  Reporting Due Date 5/16/22 | **Priority Standards**  **2.3B explain that the more fractional parts used to make a whole, the smaller the part; and the fewer the**  **fractional parts, the larger the part**  Integrated Standards  2.3A partition objects into equal parts and name the parts, including halves, fourths, and eighths, using words  2.3C use concrete models to count fractional parts beyond one whole using words and recognize how many parts it takes to equal one whole  2.3D identify examples and non-examples of halves, fourths, and eighths |
| **Unit 9: Foundations of Multiplication & Division**  Estimated Date Range: 5/05/22 - 5/26/22  Estimated Time Frame: 16 Days  Note: Includes 2 days forRe-engagement and Assessment | |
| **Concepts within the Unit** | **TEKS** |
| Concept #1:Joining and Separating Equal Groups  Suggested Days: 14 | Integrated Standards  2.7A determine whether a number up to 40 is even or odd using pairings of objects to represent the number  2.6A model, create, and describe contextual multiplication situations in which equivalent sets of concrete objects are joined; and  2.6B model, create, and describe contextual division situations in which a set of concrete objects is separated into equivalent sets. |

**Learning Assessments**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Standard** | **Unit** | **Concept** | **Assessment Window** | **Reporting Due Date** |
| 2.7 & 2.4C | Unit 3 | Concept 2: Multistep Addition and Subtraction up to 99 | 10/27/21 – 11/3/21 | 11/10/21 |
| 2.7C & 2.4C | Unit 5 | Concept 3: Multistep Addition and Subtraction up to 1,000 | 2/7/22 – 2/15/22 | 2/24/22 |
| 2.3B & 2.3C | Unit 8 | Concept 1: Fractions | 4/27/22 – 5/04/22 | 5/16/22 |