

Minnesota State Kindergarten Math Standards Alignment to Starfall

## 1. Number and Operation

Standard 1: Understand the relationship between quantities and whole numbers up to 31.

| Minnesota Standards | Starfall K Math Alignment |
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| K.1.1.1 <br> 1. Recognize that a number can be used to represent how many objects are in a set or to represent the position of an object in a sequence. For example: Count students standing in a circle and count the same students after they take their seats. Recognize that this rearrangement does not change the total number, but may change the order in which students are counted. | Teacher's Guide pp. 87-88 - The Number Seven <br> Teacher's Guide p. 120 - Learning Centers: Number Activity Mats <br> Teacher's Guide pp. 318-319 - Number Representations 1-5 <br> Teacher's Guide p. 323 - Match Dominoes to Number Cards Teacher's Guide pp. 323-324 - Number Representations 6-10 <br> Starfall.com: Math: Numbers |
| K.1.1.2 <br> 2. Read, write, and represent whole numbers from 0 to at least 31. Representations may include numerals, pictures, real objects and picture graphs, spoken words, and manipulatives such as connecting cubes. For example: Represent the number of students taking hot lunch with tally marks. | Daily Routines - (beginning of each week for Units 1-14) Teacher's Guide p. 62 - Introduce the Number One; Introduce Backpack Bear's Workbook \#1; Discriminate the Numeral One; Show One; Write the Numeral One <br> Teacher's Guide p. 63 - Formative Assessment: Draw Representations of the Number One <br> Teacher's Guide p. 65 - Introduce the Number Two; Starfall.com; Discriminate the Numeral Two; Show Two; Write the Number Two <br> Teacher's Guide p. 68 - The Number Three: Math Bag Objects <br> Teacher's Guide p. 69 - Introduce the Number Three; Find Threes; Starfall.com; Formative Assessment: Draw Representations of the Number Three <br> Teacher's Guide p. 72 - Introduce the Number Four; Find Fours; Starfall.com; Formative Assessment: Draw Representations of the Number Four <br> Teacher's Guide pp. 81-82 - Introduce the Number 5; Review Partner Sharing and Finding Fives; Formative Assessment: Backpack Bear's Math Workbook, Page 7 Teacher's Guide pp. 84-85 - Introduce the Number Six; |


|  | Play "Find the Hexagon; Find Sixes; Formative Assessment: Backpack Bear's Math Workbook, Page 8 <br> Teacher's Guide pp. 87-88 - Introduce the Number Seven; Seven Hunt; FInd Sevens; Starfall.com; Formative <br> Assessment: Backpack Bear's Math Bear's Math Workbook, Page 10 <br> Teacher's Guide pp.109-110 - Introduce the Number Line; Introduce One-to-One Correspondence; FInd Nines; Formative Assessment: Backpack Bear's Math Workbook, Page 13 <br> Teacher's Guide pp. 115-116 - Introduce the Number Ten; Formative Assessment: Backpack Bear's Math Workbook, Page 15 <br> Teacher's Guide pp. 215-216-Representations of 11; The <br> Number 11; Formative Assessment: Number Boxes for 11 <br> Teacher's Guide pp. 217-218-Representations of 12; The <br> Number 12; Formative Assessment: Number Boxes for 12 <br> Teacher's Guide p. 227: Introduce 13; The Number 13; <br> Formative Assessment: Number Boxes for 13 <br> Teacher's Guide p. 229: Introduce 14; The Number 14; <br> Formative Assessment: Number Boxes for 14 <br> Teacher's Guide p. 231 - Introduce 15; The Number 15; <br> Formative Assessment: Number Boxes for 15 <br> Teacher's Guide p. 233 - The Number 16; Formative <br> Assessment: Number Boxes for 16 <br> Teacher's Guide pp. 240-241 - Introduce 17; The Number <br> 17; Formative Assessment: Number Boxes for 17 <br> Teacher's Guide pp. 242-243-Number Concentration; Introduce 18; The Number 18; Formative Assessment: <br> Number Boxes for 18 <br> Teacher's Guide p. 245 - Introduce 19; The Number 19; <br> Formative Assessment: Number Boxes for 19 <br> Teacher's Guide pp. 246-247 - Introduce 20; The Number <br> 20; Formative Assessment: Number Boxes for 20; Introduce the Bingo Game |
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| K.1.1.3 <br> 3. Count, with and without objects, forward and backward to at least 20. | Forward: <br> Teacher's Guide Read Me First p. 6 - Hundredth Day Chart <br> Teacher's Guide Read Me First p. 9 - Backpack Bear's Math <br> Games: Count to 100 <br> Teacher's Guide p. 64 - Daily Routine: Number Line (daily) <br> Teacher's Guide p. 108 - Daily Routines: Number Line <br> (daily) <br> Teacher's Guide p. 212 - Counting on from 10-20 <br> Teacher's Guide p. 274 - Count by Fives and Tens <br> Teacher's Guide p. 298 - Counting On <br> Teacher's Guide p. 320 - Counting On from a Given Number <br> Teacher's Guide p. 379-Counting On Using the Number <br> Line <br> Teacher's Guide p. 546 - Counting on from 10 <br> Teacher's Guide p. 560 - Counting On <br> Starfall.com: Math: Numbers <br> Starfall.com: Math: Add \& Subtract: Place Value |


|  | Starfall.com: Math: Kindergarten Mathematics Generators: <br> Counting - Count to 100 <br> 100th Day of School Supplement pp. 2-4-100th Day of School Activities <br> Starfall.com: Math: Numbers: Train <br> Backward: <br> Teacher's Guide p. 47 - Introduce Zero <br> Teacher's Guide p. 47 - Count Down From 5 <br> Teacher Guide p. 48 -Zero Song <br> Starfall.com: Math Songs: "Zero Song" \& "5 Little Speckled Frogs" <br> Starfall.com: Math: Numbers - 123 "Feed the Animals" and "Count Cookie" |
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| K.1.1.4 <br> 4. Find a number that is 1 more or 1 less than a given number. | Teacher's Guide p. 128 - Less Than <br> Teacher's Guide p. 132-One More <br> Teacher's Guide p. 288 - One Less <br> Teacher's Guide p. 342 - One More/One Less |
| K.1.1.5 <br> 5. Compare and order whole numbers, with and without objects, from 0 to 20 . For example: Put the number cards 7, 3, 19 and 12 in numerical order. | Teacher's Guide p. 380 - Making a Large Number Line <br> Teacher's Guide p. 561 - Formative Assessment: Calendar <br> Questions <br> Teacher's Guide p. 583 - Index Card Sequence Activity |

Standard 2: Use objects and pictures to represent situations involving combining and separating.

| Minnesota Standards | Starfall K Math Alignment |
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| K.1.2.1 <br> 1. Use objects and draw pictures to find the <br> sums and differences of numbers between 0 <br> and 10. | Teacher's Guide pp. 377-378 - Using Counters and <br> Ten-Frames <br> Teacher's Guide pp. 382-383 - Create an Addition Story; <br> Drawing Pictures <br> Teacher's Guide p. 383 - Solve Number Stories <br> Teacher's Guide p. 396-Story Maps <br> Teacher's Guide pp. 418-419 - Subtraction Practice <br> Teacher's Guide pp. 420-421 - Five Little Teddy Bear <br> Subtraction <br> Teacher's Guide p. 422 - Learning Centers: Add and <br> Subtract <br> Starfall.com: Math: Addition \& Subtraction: Addition Intro <br> Starfall.com: Math:Addition \& Subtraction: Addition <br> Practice <br> Starfall.com: Math:Addition \& Subtraction: Addition Within <br> 10 <br> Starfall.com: Math:Addition \& Subtraction: Subtraction <br> Intro <br> Starfall.com: Math:Addition \& Subtraction: Subtraction <br> Within 10 <br> Starfall.com: Math:Add \& Subtract: Word Problems |


|  | Starfall.com: Math: Addition \& Subtraction: Word Problems Add To: Change Unknown |
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| K.1.2.2 <br> 2. Compose and decompose numbers up to 10 with objects and pictures. For example: A group of 7 objects can be decomposed as 5 and 2 objects, or 2 and 3 and 2, or 6 and 1 . | Teacher's Guide p. 350 - Number Bonds to 10 <br> Teacher's Guide pp. 351-352 - Review Number Bonds <br> Teacher Guide p. 353 - Write Equations for Ten <br> Teacher's Guide p. 377 - Using Counters and Ten-Frames <br> Teacher's Guide p. 384 - Learning Centers: Shake, Spill, and <br> Add <br> Teacher's Guide p. 400 - Create Addition Problems to 10 <br> Teacher's Guide pp. 452-453 - Review Addition <br> Teacher's Guide pp. 468-469 - Creating Addition and <br> Subtraction Equations <br> Teacher's Guide pp. 620-621 -Composing and <br> Decomposing Numbers 6-10 <br> Starfall.com: Math: Add \& Subtract: Compose/Decompose <br> Tens and Ones <br> Starfall.com: Math: Add \& Subtract: Math Helpers |

## 2. Algebra

Standard 1: Recognize, create, complete, and extend patterns.

| Minnesota Standards | Starfall K Math Alignment |
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| K.2.1.1 <br> 1. Identify, create, complete, and extend simple patterns using shape, color, size, number, sounds and movements. Patterns may be repeating, growing or shrinking such as $A B B$, $A B B, A B B$ or 0,00 . | Teacher's Guide p. 38 - Introduce AB Patterns <br> Teacher's Guide p. 38-Create AB Patterns <br> Teacher's Guide p. 39 - Formative Assessment: Partner to <br> Create AB Patterns <br> Teacher's Guide p. 44 - Review AB Patterns <br> Teacher's Guide p. 44 - Introduce AABB Patterns <br> Teacher's Guide p. 45 - Bingo Song <br> Teacher's Guide p. 68 - Magic Math Moment: ABC Patterns <br> Teacher's Guide p. 118 - Pattern Review: Review Patterns <br> Teacher's Guide p. 118-AABB Patterns <br> Teacher's Guide p. 119 - Making Patterns <br> Teacher's Guide p. 119 - Formative Assessment: Backpack <br> Bear's Math Workbook, Page 16 |

## 3. Geometry and Measurement

Standard 1: Recognize and sort basic two- and three-dimensional shapes; use them to model real-world objects.

| K.3.1.1 <br> 1. Recognize basic two- and three-dimensional shapes such as squares, circles, triangles, rectangles, trapezoids, hexagons, cubes, cones, cylinders and spheres. | Teacher's Guide pp. 18-19 - Review One, Preview Two <br> (Properties of a circle) <br> Teacher's Guide pp. 21-22 - Preview Three (Properties of a <br> Triangle) <br> Teacher's Guide pp. 24-25 - Preview Four (Properties of a <br> rectangle and square) <br> Teacher's Guide p. 134-Computer Center <br> Teacher's Guide p. 150 - Identify shapes in the <br> Environment <br> Teacher's Guide pp. 265-266 - Shape Properties <br> Teacher's Guide pp. 268-269 - Introduce Cube <br> Teacher's Guide pp. 271-273 - Introduce the Rectangular <br> Prism <br> Teacher's Guide pp. 274-275 - Introduce the Cone <br> Teacher's Guide pp. 282-283 - Introduce the Cylinder <br> Teacher's Guide p. 284 -Introduce the Sphere <br> Teacher's Guide pp. 286-287 - Introduce the Square <br> Pyramid <br> Starfall.com: Math - Geometry and Measurement: Triangles <br> \& Make Shapes <br> Starfall.com: Math - Geometry and Measurement: Puzzles <br> Starfall.com: Math - Geometry and Measurement: 2D/3D <br> Shapes |
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| K.3.1.2 <br> 2. Sort objects using characteristics such as shape, size, color and thickness. | Teacher's Guide p. 132- Introduce Attributes <br> Teacher's Guide p. 132 - Sorting by Attributes <br> Teacher's Guide p. 133 - Different Ways to Sort <br> Teacher's Guide p. 134 - Learning Centers: SOrting Objects |
| K.3.1.3 <br> 3. Use basic shapes and spatial reasoning to model objects in the real-world. For example: $A$ cylinder can be used to model a can of soup. Another example: Find as many rectangles as you can in your classroom. Record the rectangles you found by making drawings. | Teacher's Guide pp. 18-19 - Review One, Preview Two <br> (Properties of a circle) <br> Teacher's Guide pp. 21-22 - Preview Three (Properties of a <br> Triangle) <br> Teacher's Guide pp. 24-25 - Preview Four (Properties of a rectangle and square) <br> Teacher's Guide p. 134 - Computer Center <br> Teacher's Guide p. 150 - Identify shapes in the <br> Environment <br> Teacher's Guide pp. 265-266 - Shape Properties <br> Teacher's Guide pp. 268-269 - Introduce Cube <br> Teacher's Guide pp. 271-273 - Introduce the Rectangular Prism <br> Teacher's Guide pp. 274-275 - Introduce the Cone <br> Teacher's Guide pp. 282-283 - Introduce the Cylinder <br> Teacher's Guide p. 284 -Introduce the Sphere <br> Teacher's Guide pp. 286-287 - Introduce the Square <br> Pyramid <br> Starfall.com: Math - Geometry and Measurement: Triangles <br> \& Make Shapes <br> Starfall.com: Math - Geometry and Measurement: Puzzles <br> Starfall.com: Math - Geometry and Measurement: 2D/3D Shapes |

Standard 2: Compare and order objects according to location and measurable attributes.

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| K.3.2.1 <br> 1. Use words to compare objects according to length, size, weight and position. For example: Use same, lighter, longer, above, between and next to. Another example: Identify objects that are near your desk and objects that are in front of it. Explain why there may be some objects in both groups. | Teacher's Guide pp. 28-29 - Introduce Measuring with <br> Rectangles, Match Lengths, Compare Rectangles <br> Teacher's Guide pp. 126-127 - Introduce Measurement <br> Teacher's Guide pp.128-129 - Ordinal Numbers <br> Teacher's Guide pp. 152-153 - Introduce Positional Words <br> Teacher's Guide p. 268 - Taller or Shorter? <br> Teacher's Guide p. 284 - One Less <br> Teacher's Guide p. 285 - One More <br> Teacher's Guide p. 160 - Positional Words <br> Teacher's Guide p. 623 - Position Words <br> Starfall.com: Math: Geometry \& Measurement: <br> Measurement |
| K.3.2.2 <br> 2. Order 2 or 3 objects using measurable attributes, such as length and weight. | Teacher's Guide pp. 126-127 - Measurement <br> Teacher's Guide pp. 132-133 - Sort by Attribute <br> Teacher's Guide pp. 508-509 - Measure Distance <br> Teacher's Guide pp. 510-511- Classroom Size Comparison <br> Teacher's Guide pp. 512-514 - Comparing Surface Area <br> Starfall.com: Math: Geometry \& Measurement: <br> Measurement <br> Starfall.com: Math: Geometry \& Measurement: Weight |

*The standards in this document were copied directly from Minnesota Academic Standards in Mathematics: Kindergarten.

