



**Utah State Kindergarten Math Standards  
Alignment to Starfall**

**Strand: COUNTING AND CARDINALITY (K.CC)**

**Know number names and the counting sequence (Standards K.CC.1-3).**

Utah Standards	Starfall Alignment
<p><b>Standard K.CC.1.</b> Count to 100 by ones and by tens.</p>	<p><b>Teacher's Guide <i>Read Me First</i> p. 6</b> - Hundredth Day Chart  <b>Teacher's Guide <i>Read Me First</i> p. 9</b> - Backpack Bear's Math Games: Count to 100  <b>Teacher's Guide p. 108</b> - Daily Routines: Number Line (daily)  <b>Teacher's Guide p. 115</b> - Number Bundles  <b>Teacher's Guide p. 274</b> - Count by Fives and Tens  <b>100th Day of School Supplement pp. 2-4</b> - 100th Day of School Activities  <b>Starfall.com:</b> Math: <i>Numbers</i>  <b>Starfall.com:</b> Math: Add &amp; Subtract: Place Value  <b>Starfall.com:</b> Math: Kindergarten Mathematics Generators: Counting - Count to 100</p>
<p><b>Standard K.CC.2.</b> Count forward beginning from a given number within the known sequence (instead of having to begin at 1).</p>	<p><b>Teacher's Guide p. 64</b> - Daily Routine: Number Line (daily)  <b>Teacher's Guide p. 212</b> - Counting on from 10-20  <b>Teacher's Guide p. 298</b> - Counting On  <b>Teacher's Guide p. 320</b> - Counting On from a Given Number  <b>Teacher's Guide p. 379</b> - Counting On Using the Number Line  <b>Teacher's Guide p. 546</b> - Counting on from 10  <b>Teacher's Guide p. 560</b> - Counting On</p>

	<i>Starfall.com</i> : Math: Numbers: Train
<b>Standard K.CC.3.</b> Read and write numbers using base ten numerals from 0 to 20. Represent a number of objects with a written numeral, in or out of sequence (0 represents a count of no objects).	<b>Teacher’s Guide pp. 199 - 248</b> - Unit 5: Troublesome Teens <b>Teacher’s Guide pp. 246-247</b> - Introduce 20 <b>Teacher’s Guide p. 248</b> - Learning Centers: Computer <b>Teacher’s Guide p. 248</b> - Learning Centers: A Walk in the Park <b>Teacher’s Guide p.249</b> - Learning Centers: Dot-to-Dot (1-20) <b>Teacher’s Guide pp. 546-547</b> - Numbers 10-20 <b>Backpack Bear’s Math Workbook 1</b> - Numbers 1 - 20

**Count to tell the number of objects (Standards K.CC. 4–5).**

Utah Standards	Starfall Alignment
<p><b>Standard K.CC.4.</b> Understand the relationship between numbers and quantities; connect counting to cardinality.</p> <p><b>a.</b> When counting objects, say the numbers in the standard order. Pair each quantity of objects with one and only one number and each number with the correct quantity of objects.</p> <p><b>b.</b> Understand that the last number said represents the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.</p> <p><b>c.</b> Understand that each successive number refers to a quantity that is one greater than the previous number</p>	<p><b>Teacher’s Guide <i>Read Me First</i> p. 9</b> - Backpack Bear’s Math Games - “Race to 20”  <b>Teacher’s Guide p. 87</b> - Using Math Strategies  <b>Teacher’s Guide p.92</b> - Learning Centers: Ways to Represent Numbers  <b>Teacher’s Guide pp. 109-110</b> - One-to-One Correspondence and the Number Nine  <b>Teacher’s Guide pp.112-113</b> - The Number Zero  <b>Teacher’s Guide p. 116</b> - Formative Assessment  <b>Teacher’s Guide p. 282</b> - Seeing Number Patterns  <i>Starfall.com</i>: Math: Numbers  <i>Starfall.com</i>: Math Songs  <i>Starfall.com</i>: Math: Numbers: Count Cookies</p> <p><b>Teacher’s Guide pp. 87- 88</b> - The Number Seven  <b>Teacher’s Guide p.120</b> - Learning Centers: Number Activity Mats  <b>Teacher’s Guide pp. 318-319</b> - Number Representations 1-5  <b>Teacher’s Guide p. 323</b> - Match Dominoes to Number Cards  <b>Teacher’s Guide pp. 323-324</b> - Number Representations 6-10  <i>Starfall.com</i>: Math: Numbers</p> <p><b>Teacher’s Guide p. 40</b> - Daily Routines: Number Line (daily)  <b>Teacher’s Guide p. 44</b> - Daily Routines: Hundreds Chart (daily)  <b>Teacher’s Guide p.60</b> - Daily Routines: Place Value (daily)  <b>Teacher’s Guide p. 81</b> - Count to Five</p>

	<b>Teacher's Guide pp. 84-85</b> - The Number Six <b>Starfall.com:</b> Math: Numbers <b>Starfall.com:</b> Math Songs
<b>Standard K.CC.5.</b> Use counting to answer questions about "how many." For example, 20 or fewer objects arranged in a line, a rectangular array, or circle; 10 or fewer objects in a scattered configuration. Using a number from 1–20, count out that many objects.	<b>Teacher's Guide p. 60</b> - Daily Routines: Number Line - "How Many Days Have We Been in School?" <b>Teacher's Guide p. 277</b> - Learning Centers: Race to 20 <b>Teacher's Guide pp. 354-356</b> - Arrays to 20 <b>Teacher's Guide pp. 357-359</b> - Subitizing and Array Review <b>Teacher's Guide p. 360</b> - Learning Center: Arrays

**Identify and compare quantities of objects and numerals (Standards K.CC.6–7).**

Utah Standards	Starfall Alignment
<b>Standard K.CC.6.</b> Use matching or counting strategies to identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group. Include groups with up to ten objects.	<b>Teacher's Guide p. 155</b> - Evaluate Most, Least, and Same <b>Teacher's Guide pp. 156-158</b> - Greater Than and Less Than <b>Teacher's Guide pp. 187-188</b> - Using Ten Frames to Demonstrate More <b>Teacher's Guide p. 189</b> - Number Line Riddles <b>Teacher's Guide p. 288</b> - One Less <b>Teacher's Guide p. 342</b> - One More/One Less <b>Teacher's Guide p. 415</b> - Pocket Chart Game <b>Teacher's Guide p. 490</b> - Creating Equal Groups <b>Teacher's Guide p. 633</b> - How Many More or Less? <b>Starfall.com:</b> Math: Greater Than/Less Than
<b>Standard K.CC.7.</b> Compare two numbers between 1 and 10 presented as written numerals using "greater than," "less than," or "equal to."	<b>Teacher's Guide p. 128</b> - Less Than <b>Teacher's Guide p. 132</b> - One More <b>Teacher's Guide p. 187</b> - "Thumbs Up/Thumbs Down" <b>Teacher's Guide p. 195</b> - Learning Centers: Banker, Customer - "High/Low" <b>Teacher's Guide p. 265</b> - Number Sense <b>Teacher's Guide p. 415</b> - Mystery Number Game <b>Starfall.com:</b> Math: Add & Subtract: Base Ten Practice

**Strand: OPERATIONS AND ALGEBRAIC THINKING (K.OA)**

**Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from (Standards K.OA.1–5).**

Utah Standards	Starfall Alignment
<p><b>Standard K.OA.1</b> Represent addition and subtraction with objects, fingers, mental images, simple drawings, or sounds. For example, use clapping, act out situations, and use verbal explanations, expressions, or equations.</p>	<p><b>Teacher's Guide p.112</b> - Story Problems  <b>Teacher's Guide p. 296</b> - Act It Out: Subtraction  <b>Teacher's Guide pp. 374-375</b> - Introduction to Addition  <b>Teacher's Guide p. 376</b> - Using Addition Strategies to Solve Equations  <b>Teacher's Guide pp. 379-380</b> - Using a Number Line to Add  <b>Teacher's Guide pp. 381-383</b> - Acting It Out  <b>Teacher's Guide p. 417</b> - Partner to Solve Subtraction Problems  <b>Teacher's Guide pp. 428-429</b> - Little Boy Blue Story Problems  <b>Teacher's Guide pp. 430-431</b> - Subtraction Story Problem  <b>Teacher's Guide pp. 457-458</b> - Subtraction  <b>Starfall.com:</b> Math: Add &amp; Subtract: Math Helpers</p>
<p><b>Standard K.OA.2</b> Solve addition and subtraction word problems within 10. Use objects or drawings to represent the problem.</p>	<p><b>Teacher's Guide pp. 377-378</b> - Using Counters and Ten-Frames  <b>Teacher's Guide pp. 382-383</b> - Create an Addition Story; Drawing Pictures  <b>Teacher's Guide p. 383</b> - Solve Number Stories  <b>Teacher's Guide p. 396</b> - Story Maps  <b>Teacher's Guide pp. 418-419</b> - Subtraction Practice  <b>Teacher's Guide pp. 420-421</b> - Five Little Teddy Bear Subtraction  <b>Teacher's Guide p. 422</b> - Learning Centers: Add and Subtract  <b>Starfall.com:</b> Math: Addition &amp; Subtraction: Addition Intro  <b>Starfall.com:</b> Math:Addition &amp; Subtraction: Addition Practice  <b>Starfall.com:</b> Math:Addition &amp; Subtraction: Addition Within 10  <b>Starfall.com:</b> Math:Addition &amp; Subtraction: Subtraction Intro  <b>Starfall.com:</b> Math:Addition &amp; Subtraction: Subtraction Within 10  <b>Starfall.com:</b> Math:Add &amp; Subtract: Word Problems  <b>Starfall.com:</b> Math: Addition &amp; Subtraction: Word Problems Add To: Change Unknown</p>
<p><b>Standard K.OA.3</b> Decompose numbers less than or equal to 10 into pairs in more than one way by using objects or drawings. Record each decomposition by a drawing or equation. For example, <math>5 = 2 + 3</math> and <math>5 = 4 + 1</math>.</p>	<p><b>Teacher's Guide pp. 350</b> - Number Bonds to 10  <b>Teacher's Guide pp. 351-352</b> - Review Number Bonds  <b>Teacher Guide p. 353</b> - Write Equations for Ten  <b>Teacher's Guide p. 377</b> - Using Counters and Ten-Frames  <b>Teacher's Guide p. 384</b> - Learning Centers: Shake, Spill, and Add  <b>Teacher's Guide p. 400</b> - Create Addition Problems to 10  <b>Teacher's Guide pp. 452-453</b> - Review Addition  <b>Teacher's Guide pp. 468-469</b> - Creating Addition and Subtraction Equations  <b>Teacher's Guide pp. 620-621</b> -Composing and Decomposing Numbers 6-10  <b>Starfall.com:</b> Math: Add &amp; Subtract: Compose/Decompose Tens and Ones  <b>Starfall.com:</b> Math: Add &amp; Subtract: Math Helpers</p>

<p><b>Standard K.OA.4</b> Make sums of 10 using any number from 1 to 9. For example, <math>2 + 8 = 10</math>. Use objects or drawings to represent and record the answer.</p>	<p><b>Teacher's Guide p. 352</b> - Hanger Activity to 10  <b>Teacher's Guide pp. 374-375</b> - Introduction to Addition  <b>Teacher's Guide pp. 381-383</b> - Act It Out!  <b>Teacher's Guide pp. 453-454</b> - Ways to Write an Addition Equation/Writing Equations/Solving Addition Equations  <b>Teacher's Guide p. 468</b> - Plus and Minus Game  <b>Teacher's Guide p. 474</b> - Addition and Subtraction Journal Page  <b>Teacher's Guide p. 508</b> - Missing Number  <b>Starfall.com:</b> Math: Add &amp; Subtract: Math Helpers  <b>Starfall.com:</b> Math: Add &amp; Subtract: Make 10 Numbers  <b>Starfall.com:</b> Math: Make 10 Objects</p>
<p><b>Standard K.OA.5</b> Fluently add and subtract using numbers within 5.</p>	<p><b>Teacher's Guide p. 466</b> - Addition and Subtraction Equation Cards  <b>Teacher's Guide p. 469</b> - What's My Sign?  <b>Teacher's Guide p. 475</b> - Learning Centers: Flash Card Game  <b>Teacher's Guide p. 622</b> - Addition Game Day  <b>Teacher's Guide p. 623</b> - Subtraction Ball Toss  <b>Teacher's Guide p. 625</b> - Play "What's the Operation?"  <b>Teacher's Guide p. 625</b> - What's the Operation?  <b>Teacher's Guide pp. 632-633</b> - Addition and Subtraction  <b>Starfall.com:</b> Math: Add &amp; Subtract: Addition Intro  <b>Starfall.com:</b> Math: Add &amp; Subtract: Addition Within 10  <b>Starfall.com:</b> Math: Add &amp; Subtract: Addition Practice  <b>Starfall.com:</b> Math: Add &amp; Subtract: Subtraction Intro  <b>Starfall.com:</b> Math: Add &amp; Subtract: Subtraction Within 10  <b>Starfall.com:</b> Math: Add &amp; Subtract: Subtraction Practice</p>

**Strand: NUMBER AND OPERATIONS IN BASE TEN (K.NBT)**

**Compose and decompose numbers 11–19 to gain foundations for place value (Standard K.NBT.1).**

Utah Standards	Starfall Alignment
<p><b>Standard K.NBT.1</b> Compose and decompose numbers from 11–19 into ten ones and some further ones. Use objects or drawings and record each composition or decomposition by a drawing or equation. For example, <math>18 = 10 + 8</math>. Understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.</p>	<p><b>Teacher's Guide pp. 546-547</b> - Numbers 10-20  <b>Teacher's Guide pp. 548-549</b> - Recognize Numbers and Sets of 10 to 20  <b>Teacher's Guide pp. 550-551</b> - Teens Practice  <b>Teacher's Guide pp. 552-553</b> - Place Value  <b>Teacher's Guide p. 555</b> - Learning Centers: Summative Assessment  <b>Starfall.com:</b> Math: Add &amp; Subtract: Place Value  <b>Starfall.com:</b> Math: Add &amp; Subtract: Addition Within 20  <b>Starfall.com:</b> Math: Add &amp; Subtract: Subtraction: Within 20</p>

**Strand: MEASUREMENT AND DATA (K.MD)**

**Describe and compare measurable attributes of objects (Standards K.MD.1–2) and classify objects and count the number of objects in each category (Standard K.MD.3).**

Utah Standards	Starfall Alignment
<p><b>Standard K.MD.1</b> Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.</p>	<p><b>Teacher’s Guide pp.126-127</b> - Measurement  <b>Teacher’s Guide pp.132-133</b> - Sort by Attribute  <b>Teacher’s Guide pp. 508-509</b> - Measure Distance  <b>Teacher’s Guide pp. 510-511</b>- Classroom Size Comparison  <b>Teacher’s Guide pp. 512-514</b> - Comparing Surface Area  <i>Starfall.com</i>: Math: Geometry &amp; Measurement: Measurement  <i>Starfall.com</i>: Math: Geometry &amp; Measurement: Weight</p>
<p><b>Standard K.MD.2</b> Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. For example, directly compare the length of two pencils and describe one as shorter or longer.</p>	<p><b>Teacher’s Guide pp. 28-29</b> - Introduce Measuring with Rectangles, Match Lengths, Compare Rectangles  <b>Teacher’s Guide pp. 126 - 127</b> - Introduce Measurement  <b>Teacher’s Guide p. 268</b> - Taller or Shorter?  <b>Teacher’s Guide p. 284</b> - One Less  <b>Teacher’s Guide p. 285</b> - One More  <i>Starfall.com</i>: Math: Geometry &amp; Measurement: Measurement</p>
<p><b>Standard K.MD.3</b> Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. Limit the category counts to less than or equal to 10.</p>	<p><b>Teacher’s Guide pp. 36-37</b> - Explore Shapes  <b>Teacher’s Guide pp. 41-42</b> - Introduce Octagon and Review 2D Shapes  <b>Teacher’s Guide pp. 132-133</b> - Sort By Attribute  <b>Teacher’s Guide p. 134</b> - Learning Centers: Sorting Objects  <b>Teacher’s Guide pp. 288-289</b> - 3-D Shape Museum Day  <b>Teacher’s Guide p. 290</b> - Sorting Shapes  <b>Teacher’s Guide p. 624</b> - Pattern Using Coins  <i>Starfall.com</i>: Math: Geometry &amp; Measurement: Button Sort</p>

**Strand: GEOMETRY (K.G)**

**Identify and describe shapes, including squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres (Standards K.G.1–3). Analyze, compare, create, and compose shapes (Standards K.G.4–6).**

Utah Standards	Starfall Alignment
<p><b>Standard K.G.1</b> Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.</p>	<p><b>Teacher’s Guide pp. 128-129</b> - Ordinal Numbers  <b>Teacher’s Guide pp. 152-153</b> - Introduce Positional Words  <b>Teacher’s Guide p. 160</b> - Positional Words  <b>Teacher’s Guide p. 623</b> - Position Words</p>
<p><b>Standard K.G.2</b> Correctly name shapes regardless of their orientations or overall sizes.</p>	<p><b>Teacher’s Guide pp. 18-19</b> - Review One, Preview Two (Properties of a circle)  <b>Teacher’s Guide pp. 21-22</b> - Preview Three (Properties of a Triangle)  <b>Teacher’s Guide pp. 24-25</b> - Preview Four (Properties of a rectangle and square)  <b>Teacher’s Guide p. 134</b> - Computer Center  <b>Teacher’s Guide p. 150</b> - Identify shapes in the Environment  <b>Teacher’s Guide pp. 265-266</b> - Shape Properties  <b>Starfall.com:</b> Math - Geometry and Measurement: Triangles &amp; Make Shapes  <b>Starfall.com:</b> Math - Geometry and Measurement: Puzzles  <b>Starfall.com:</b> Math - Geometry and Measurement: 2D/3D Shapes</p>
<p><b>Standard K.G.3</b> Identify shapes as two-dimensional ("flat") or three-dimensional ("solid").</p>	<p><b>Teacher’s Guide pp. 265-267</b> - Shape Properties  <b>Teacher’s Guide pp. 268-269</b> - Introduce Cube  <b>Teacher’s Guide pp. 271-273</b> - Introduce the Rectangular Prism  <b>Teacher’s Guide pp. 274-275</b> - Introduce the Cone  <b>Teacher’s Guide pp. 282-283</b> - Introduce the Cylinder  <b>Teacher’s Guide p. 284</b> - Introduce the Sphere  <b>Teacher’s Guide pp. 286-287</b> - Introduce the Square Pyramid  <b>Teacher’s Guide p. 302</b> - Sorting 2D and 3D Shapes  <b>Starfall.com:</b> Math: Geometry and Measurement: 2D/3D Sort  <b>Starfall.com:</b> Math: Geometry and Measurement: 2-D/3D Shapes  <b>Starfall.com:</b> Math: Geometry and Measurement: 3D Space</p>

**(Analyze, compare, create, and compose shapes (Standards K.G.4–6)).**

Utah Standards	Starfall Alignment
<p><b>Standard K.G.4</b> Analyze, compare, and sort two- and three-dimensional shapes and objects, in different sizes and orientations, using informal language to describe their similarities, differences, and</p>	<p><b>Teacher’s Guide pp. 265-266</b> - Shape Properties  <b>Teacher’s Guide p. 269</b> - Introduce the Math Net  <b>Teacher’s Guide p. 272</b> - Introduce the Rectangular Prism Math Net  <b>Teacher’s Guide p. 275</b> - Introduce the Cone Math Net</p>

<p>other attributes (for example, color, size, shape, number of sides).</p>	<p><b>Teacher's Guide p. 282</b> - Introduce the Cylinder Math Net  <b>Teacher's Guide p. 283</b> - Properties of a Cylinder  <b>Teacher's Guide p. 285</b> - Compare Circles and Spheres  <b>Teacher's Guide p. 287</b> - Introduce the Square Pyramid Math Net  <b>Teacher's Guide p. 289</b> - Sort Items Into Groups  <b>Teacher's Guide p. 301</b> - Graphing 3-D Shapes  <b>Teacher's Guide p. 303</b> - Distinguishing 2D and 3D Shapes  <b>Teacher's Guide p. 296-297</b> -Backpack Bear's Treasure Hunt</p>
<p><b>Standard K.G.5</b> Model and create shapes from components such as sticks and clay balls.</p>	<p><b>Teacher's Guide p. 151</b> - Draw Shapes  <b>Teacher's Guide p. 267</b> - Draw Shapes with Shaving Cream  <b>Teacher's Guide p. 276</b> - Learning Centers: Play Dough Shape Town  <b>Teacher's Guide p. 297</b> - Draw Shapes  <b>Teacher's Guide p. 304</b> - Learning Centers:Play Dough 3-D Shapes  <b>Teacher's Guide p. 304</b> - Learning Centers: Constructing 3-D Shapes</p>
<p><b>Standard K.G.6</b> Compose simple shapes to form larger shapes. For example, "Can you join these two triangles with full sides touching to make a rectangle?"</p>	<p><b>Teacher's Guide p. 134</b> - Computer Center  <b>Teacher's Guide pp. 265-266</b> - Shape Properties  <b>Teacher's Guide p. 273</b> - Cubes and Rectangular Prisms  <b>Starfall.com:</b> Math: Geometry and Measurement: Triangles &amp; Make Shapes  <b>Starfall.com:</b> Math: Geometry and Measurement: Puzzles</p>

\*The standards in this document were copied directly from Utah's Core State Standards for Mathematics.

**\*\*Publisher's Note:** The citations included in this alignment represent a sampling of the Starfall Kindergarten Math Curriculum. Each standard is covered in depth throughout the curriculum. Additional Starfall standards may be found in the Teacher's Guide.