

GSD Parents' Guide for Kindergarten Utah Core State Standards for Mathematics



The Utah Core State Standards for Mathematics addresses *Standards for Mathematical Practice* and *Standards for Mathematical Content*. The standards stress not only procedural skill but also conceptual understanding, to make sure students are learning the critical information they need to succeed at higher levels.

By using the *Standards for Mathematical Practice*, students make sense of problems, persevere in solving them, and attend to precision. They look for and make use of structure and express regularity in repeated reasoning. They reason abstractly and quantitatively, and they construct viable arguments and critique the reasoning of others. Students model with mathematics and use appropriate tools strategically.

The following *Standards for Mathematical Content* define what students should understand and be able to do in their study of kindergarten mathematics:

Counting and Cardinality

- Count to 100 by ones and by tens.
- Count forward from any number within the range of 1-100 (instead of having to begin at 1).
- Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).
- Understand the relationship between numbers and quantities. Connect counting to cardinality.
- When counting objects, say the numbers names in order, pairing each object with one and only one number name and each number name with one and only one object.
- Understand that the last number said tells the number of objects counted. Understand that the number of objects remains the same regardless of their arrangement or the order in which they were counted.
- Understand that each successive number name refers to a quantity that is one larger.
- Count to answer “how many” questions for a group of up to 20 objects arranged in a line, a rectangular array, or a circle. Count to answer “how many” questions for a group of up to 10 objects in a scattered arrangement. Given a number from 1-20, count out that many objects.
- Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group.
- Compare two numbers between 1 and 10 presented as written numerals.

Operations and Algebraic Thinking

- Represent addition and subtraction with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations.
- Solve addition and subtraction word problems. Add and subtract within 10 using objects and drawings to represent the problem.
- Decompose numbers less than or equal to 10 into pairs in more than one way. *For example, $5 = 2 + 3$ and $5 = 4 + 1$.*
- Find the number that makes 10 when added to a given number from 1 to 9.
- Fluently add and subtract within 5.

Number and Operations in Base Ten

- Compose and decompose numbers from 11 to 19 into ten ones and some further ones.

Measurement and Data

- Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
- Directly compare two objects with a measurable attribute in common. Describe which object has “more of” or “less of” the measurable attribute. *For example, compare the heights of two children and describe one child as taller or shorter than the other.*
- Classify objects into given categories. Count the number of objects in each category and sort the categories by count.

Geometry

- Describe objects in the environment using names of shapes. Describe the relative positions of these objects using terms such as *above*, *below*, *beside*, *in front of*, *behind*, and *next to*.
- Correctly name shapes regardless of their orientations or overall size.
- Identify shapes as two-dimensional or three-dimensional.
- Analyze and compare two-dimensional and three-dimensional shapes. Use informal language to describe their similarities, differences, parts, and other attributes.
- Model shapes in the world by building shapes from components and drawing shapes.
- Compose simple shapes to form larger shapes. *For example, join two triangles to form a rectangle.*