

Grade K

Adopted 2022

Nebraska Mathematical Processes

- 1. Make sense of problems and persevere in solving them.** MP.1

 - 2. Reason quantitatively and abstractly and consider the reasoning of others.** MP.2

 - 3. Create and use representations to organize, record, and communicate mathematical ideas.** MP.3

 - 4. Analyze mathematical relationships to connect mathematical ideas.** MP.4

 - 5. Explain and justify mathematical ideas using precise mathematical language in written or oral communication.** MP.5
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Kindergarten

Number

1. Solve problems and reason with number concepts using multiple representations, make connections within math and across disciplines, and communicate their ideas. **K.CS.1**
1. Subitizing: Students will quantify briefly shown collections and verbally label the arrangements without counting. **K.N.1**
 - a. Without counting, recognize and verbally label arrangements for briefly shown collections up to 10 (e.g., "I saw 5." "How did you know?" "I saw 3 and 2, that is 5." **K.N.1.A**
2. Counting and Cardinality: Students will understand the relationship between numbers and quantities. **K.N.2**
 - a. Use one-to-one correspondence when counting objects to show the relationship between numbers and quantities and understand the last number counted is a direct representation of the total objects in a given set. **K.N.2.A**
 - b. Understand that each successive number name refers to a quantity that is one larger. **K.N.2.B**
 - c. Count out the number of objects given a number from 1 to 20. **K.N.2.C**
 - d. Count up to 20 objects arranged in a line, a rectangular array, or a circle, and count up to 10 objects in a scattered configuration. **K.N.2.D**
 - e. Count verbally forward and backward from any given number within 20. **K.N.2.E**
 - f. Count verbally in sequential order by ones and by tens to 100, making accurate decade transitions (e.g., 89 to 90). **K.N.2.F**
 - g. Write and name numbers 0 to 20. Represent a number of objects with a written numeral 0 to 20. **K.N.2.G**
 - h. Compare the number of objects in two groups, up to 20, using the words fewer than, more than, the same as. **K.N.2.H**
3. Base Ten: Students will work with numbers 11 to 19 to gain a foundation for place value. **K.N.3**
 - a. Compose and decompose numbers from 11 to 19 into a group of ten ones and some more ones using a model, drawing, or equation. **K.N.3.A**
4. Number and Algebraic Relationships: Students will understand and demonstrate the meaning of addition and subtraction. **K.N.4**
 - a. Represent and explain addition and subtraction as part-whole relationships, with addition as putting together and/or adding to and subtraction as taking apart and/or taking from, using objects, drawings, numbers, and equations. **K.N.4.A**
 - b. Compose and decompose numbers less than or equal to 10 into pairs in more than one way using verbal explanations, objects, or drawings. **K.N.4.B**

- c. For any number from 1 to 9, find the number that makes 10 when added to the given number, sharing the answer with a model, drawing, or equation. **K.N.4.C**
 - d. Efficiently, flexibly, and accurately add and subtract within 5. **K.N.4.D**
 - e. Solve authentic problems that involve addition and subtraction within 10 (e.g., by using objects, drawings, and equations to represent the problem). **K.N.4.E**
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Geometry

- 2. Solve problems and reason with geometry using multiple representations, make connections within math and across disciplines, and communicate their ideas. **K.CS.2**
 - 1. Shapes and Their Attributes: Students will identify and represent the attributes of two-dimensional shapes and three-dimensional solids. **K.G.1**
 - a. Identify and name two-dimensional shapes including circles, triangles, squares, and rectangles regardless of orientation or size. **K.G.1.A**
 - b. Identify and name three-dimensional shapes including spheres, cubes, cylinders, and cones regardless of orientation or size. **K.G.1.B**
 - c. Describe the relative positions of shapes in relation to other objects or shapes using terms such as above, below, in front of, behind, and next to. **K.G.1.C**
 - d. Create shapes using given materials and describe one or more of the attributes such as number of sides/corners. **K.G.1.D**
 - e. Combine simple shapes to compose larger shapes. **K.G.1.E**
 - 2. Measurement: Students will describe and compare measurable attributes. **K.G.2**
 - a. Describe measurable attributes of authentic objects including length, capacity, and weight. **K.G.2.A**
 - b. Directly compare two objects with a measurable attribute in common to describe which object is longer/shorter, heavier/lighter, and has more/less-capacity. **K.G.2.B**
 - 3. Time and Money: Students will know coin names and values and tell time to the hour. **K.G.3**
 - a. Identify the name and value of pennies, nickels, and dimes. **K.G.3.A**
 - b. Identify the parts of digital and analog clocks. Tell and write time to the hour using digital clocks and analog clocks using only the hour hand. **K.G.3.B**

Data

3. Solve problems and reason with data/probability using multiple representations, make connections within math and across disciplines, and communicate their ideas. **K.CS.3**
1. Classification: Students will sort and classify objects using one or more attributes. **K.D.1**
 - a. Identify, sort, and classify objects by size, shape, color, and other attributes. **K.D.1.A**
 - b. Identify objects that do not belong to a particular group and explain the reasoning used. **K.D.1.B**