

Kindergarten Math Concepts by Quarter

This serves as a general sequence of math concepts for the school year. The concepts within a quarter are grouped by domain and may not be listed in the order they are taught. There may be slight variability across the district in order to meet specific needs of students.

1st Quarter	2nd Quarter
<p><u>Counting and Cardinality</u></p> <ul style="list-style-type: none"> ● Count to 100 by ones and tens (by end of 3rd Quarter) ● Read and write numbers from 0-20 (by end of 4th Quarter) ● Understand the connection between a quantity and a number (ie: count that there are 4 crayons) ● Understand the last number said when counting objects is how many there are ● Count objects to answer “how many?” up to 20 ● Determine if a group of objects (within 10) is greater than, equal to, or less than another group of objects ● Compare two numbers between 1-10 when presented as numerals <p><u>Measurement and Data</u></p> <ul style="list-style-type: none"> ● Describe measurable attributes of objects (ie: length and weight) ● Directly compare two objects with a measurable attribute in common to see which has more and which has less and describe the difference (ie: which object is taller/shorter?) ● Classify objects into given categories, count the number in each category, and sort categories by amount (limit to less than 10 in each) <p><u>Geometry</u></p> <ul style="list-style-type: none"> ● Describe objects in the environment using shape names and describe location of object using relative position (above, below, next to, etc) 	<p><u>Counting and Cardinality</u></p> <ul style="list-style-type: none"> ● Count to 100 by ones and tens (by end of 3rd Quarter) ● Count forward from a given number between 0-20 (ie: start at 5 and count to 20) ● Read and write numbers from 0-20 by (end of 4th Quarter) ● Understand the connection between a quantity and a number (ie: count that there are 4 crayons) ● Understand the last number said when counting objects is how many there are ● Count concrete and pictorial objects to answer the question “how many?” up to 20 ● Determine if a group of objects (within 10) is greater than, equal to, or less than another group of objects ● Compare two numbers between 1-10 when presented as numerals <p><u>Operations and Algebraic Thinking</u></p> <ul style="list-style-type: none"> ● Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (ie: claps), acting out, verbal explanations, expressions or equations ● Solve addition and subtraction word problems within 10 ● Decompose numbers multiple ways (ie: 4 red and 3 blue make 7 total; 5 red and 2 blue make 7 total) ● Fluently add and subtract within 5 <p><u>Measurement and Data</u></p> <ul style="list-style-type: none"> ● Describe measurable attributes of objects (ie: length and weight) ● Directly compare two objects with a measurable attribute in common to see which has more and which has less and describe the difference (ie: which object is taller/shorter?) ● Classify objects into given categories, count the number in each category, and sort categories by amount (limit to less than 10 in each) <p><u>Geometry</u></p> <ul style="list-style-type: none"> ● Describe objects in the environment using shape names and describe location of object using relative position (above, below, next to, etc) ● Correctly names shapes ● Identify shapes as 2-dimensional or 3-dimensional ● Analyze and compare two- and three-dimensional shapes to describe similarities and differences ● Build and draw shapes

3rd Quarter

Counting and Cardinality

- Count to 100 by ones and tens
- Count forward from a given number between 0-20 (ie: start at 5 and count to 20)
- Read and write numbers from 0-20 (by end of 4th Quarter)
- Understand the connection between a quantity and a number (ie: count that there are 4 crayons)
- Understand the last number said when counting objects is how many there are
- Represent a number of objects with a written numeral
- Count to answer the question “how many?” up to 20

Operations and Algebraic Thinking

- Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (ie: claps), acting out, verbal explanations, expressions or equations
- Solve addition and subtraction word problems within 10
- Decompose numbers multiple ways (ie: 4 red and 3 blue make 7 total; 5 red and 2 blue make 7 total)
- For any number 1-9 find the number to pair with it that makes 10 (ie: 4 and 6)

Geometry

- Describe objects in the environment using shape names and describe location of object using relative position (above, below, next to, etc)
- Correctly names shapes
- Build and draw shapes
- Compose simple shapes from other, smaller shapes (ie: use two triangles to make a rectangle)

4th Quarter

Counting and Cardinality

- Count to 100 by ones and tens
- Read and write numbers 0-20
- Count concrete and pictorial objects to answer the question “how many?” up to 20

Operations and Algebraic Thinking

- Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (ie: claps), acting out, verbal explanations, expressions or equations
- Solve addition and subtraction word problems within 10
- Decompose numbers multiple ways (ie: 4 red and 3 blue make 7 total; 5 red and 2 blue make 7 total)
- Fluently add and subtract within 5

Numbers in Base Ten

- Compose and decompose numbers from 11-19 into 10 ones and other ones (ie: 18 is 1 ten and 8 ones)

Geometry

- Correctly names shapes
- Identify shapes as 2-dimensional or 3-dimensional
- Build and draw shapes
- Compose simple shapes from other, smaller shapes (ie: use two triangles to make a rectangle)
- Classify objects into given categories, count the number in each category, and sort categories by amount (limit to less than 10 in each)

For more information visit [KSDE Parent Guide to the Standards](#)

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