

Kindergarten Overview

In Kindergarten, instructional time should focus on two areas: (1) developing a sound sense of numbers by representing and comparing numbers, initially using sets of objects; (2) recognizing and describing shapes and using spatial relations. More learning time in Kindergarten should be devoted to number than to any other topic. Please note that while every standard/topic in the grade level has not been included in this overview, all standards should be included in instruction.

1. Through their learning in the **Counting and Cardinality** and **Operations and Algebraic Thinking** domains, students:
 - develop a more formal sense of numbers;
 - use numbers, including written numerals, to represent quantities and to solve quantitative problems, such as counting objects in a set; counting out a given number of objects; comparing sets or numerals; and modeling simple joining and separating situations with sets of objects, or eventually with equations such as $5 + 2 = 7$ and $7 - 2 = 5$. *Note: Kindergarten students should see addition and subtraction equations, and student writing of equations in kindergarten is encouraged, but it is not required; and*
 - choose, combine, and apply effective strategies for answering quantitative questions, including quickly recognizing the cardinalities of small sets of objects, counting and producing sets of given sizes, counting the number of objects in combined sets, or counting the number of objects that remain in a set after some are taken away.
2. Through their learning in the **Geometry** and **Measurement and Data** domains, students:
 - describe their physical world using geometric ideas (e.g., shape, orientation, spatial relations) and appropriate vocabulary;
 - identify, name, and describe basic two-dimensional shapes, such as squares, triangles, circles, rectangles, and hexagons, presented in a variety of ways (e.g., with different sizes and orientations), as well as three-dimensional shapes such as cubes, cones, cylinders, and spheres;
 - use basic shapes and spatial reasoning to model objects in their everyday environment to create and compose more complex shapes; and
 - explore* coins and begin identifying of pennies and dimes.

**Note: Explore indicates that the topic is an important concept that builds the foundation for progression toward mastery in later grades. Repeated experiences with these concepts, with immersion in the concrete, are vital.*

Mathematical Practices

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| <ol style="list-style-type: none"> 1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. | <ol style="list-style-type: none"> 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning. |
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