



## Kindergarten

## Parent Guide for Understanding the Math Common Core

	Counting and Cardinality	Operations and Algebraic Thinking	Number and Operations in Base Ten	Measurement and Data	Geometry
<b>Students will be able to:</b>	<ul style="list-style-type: none"> <li>Count to 100 by ones and by tens.</li> <li>Count forward from any given number within 100, not just from 1.</li> <li>Use numbers to describe how many objects are in a set.</li> <li>Model, compare and describe numbers (e.g., 5 is one more than 4).</li> <li>Understand that the name of a number corresponds to a quantity of objects.</li> </ul>	<ul style="list-style-type: none"> <li>Model putting numbers together and taking them apart.</li> <li>Represent addition and subtraction of numbers.</li> <li>Solve addition and subtraction word problems.</li> <li>Fluently add and subtract within 5.</li> </ul>	<ul style="list-style-type: none"> <li>Take apart numbers from 11 – 19 creating a group of ten ones and the rest.</li> <li>Put a group of ten together with some more ones to make a new number from 11 – 19.</li> </ul>	<ul style="list-style-type: none"> <li>Compare and describe the properties of objects (e.g., length or weight).</li> <li>Tell time of everyday events.</li> <li>Know the days of the week.</li> </ul>	<ul style="list-style-type: none"> <li>Identify shapes in pictures and in the environment.</li> <li>Compare 2 and 3 dimensional shapes</li> <li>Describe the relative positions of objects (e.g., behind, below, left)</li> <li>Build new shapes from smaller shapes.</li> </ul>
<b>Schools will support by providing opportunities to:</b>	<ul style="list-style-type: none"> <li>Count in sequence while matching each word with a concrete object.</li> <li>Reason with manipulatives and written numbers to determine the relationship between two numbers.</li> <li>Compare and contrast the relationship between numbers and quantities.</li> <li>Answer “how many” questions of up to 20 objects.</li> <li>Use vocabulary to share their thinking.</li> </ul>	<ul style="list-style-type: none"> <li>Find multiple ways to make and take apart numbers.</li> <li>Show different ways to make 10 (e.g. 6 and 4 is the same as 10, 7 and 3 is the same as 10) using drawings, manipulatives, hand claps or other methods.</li> <li>Add and subtract objects, making sense of putting together or taking apart.</li> <li>Use vocabulary to share their thinking.</li> </ul>	<ul style="list-style-type: none"> <li>Use manipulatives such as base-ten blocks, ten frames and place value cards to represent numbers from 11-19 in order to model the relationship between a group of ten and ones.</li> <li>Use objects, drawings and equations to describe, explore and explain how the numbers from 11 - 19 are patterned as a group of ten and ones.</li> </ul>	<ul style="list-style-type: none"> <li>Compare similar objects and describe their differences (e.g., Micah is shorter than Julio).</li> <li>Classify and sort objects such as color tiles or pattern blocks and count the items in each category.</li> <li>Use a play clock to practice telling the time.</li> <li>Use a calendar to learn the days of the week.</li> </ul>	<ul style="list-style-type: none"> <li>Identify 2 and 3 dimensional objects by name (e.g. rectangle, circle sphere and cone).</li> <li>Use math vocabulary to tell why a shape is a rectangle, triangle, or something else.</li> <li>Make drawings or use objects to build shapes.</li> </ul>
<b>Parents can support by providing opportunities to:</b>	<ul style="list-style-type: none"> <li>Collect and count household items such as beans or buttons.</li> <li>Count the number of steps from the kitchen to the bedroom.</li> <li>Tell your child a number and have them tell you the number before or after.</li> <li>Play number games with your child (e.g., Go Fish, Crazy Eights or Concentration).</li> </ul>	<ul style="list-style-type: none"> <li>Use groups of objects to make five or 10 (e.g., I have “3 apples and seven apples”).</li> <li>Use two different counters such as coins and buttons to determine all the possible combinations of a given number.</li> <li>Ask “how many more/less than” questions (e.g., shopping, cooking, cleaning up toys).</li> </ul>	<ul style="list-style-type: none"> <li>Play “Find the 10” by grouping more than 10 items and have your child separate them into a group of 10 and ones.</li> </ul>	<ul style="list-style-type: none"> <li>Compare size and weight of similar items found around the house, like fruit, books, stuffed animals.</li> <li>Sort and classify items like coins, buttons or types of beans by size, shape or color.</li> <li>Review the time of regular events with your child (e.g., dinnertime, bedtime, story time).</li> <li>Go over a calendar with your child to learn days and months.</li> </ul>	<ul style="list-style-type: none"> <li>Ask your child to find objects shaped like circles, rectangles and triangles.</li> <li>Have your child describe the shape he or she is drawing.</li> <li>Answer questions about 2 dimensional or 3 dimensional objects Identify shapes in their own drawings.</li> </ul>

### Kindergarten Students:

- Count to 100 by tens and ones.
- Understand that the name of an object corresponds to the amount of objects.
- Extend their understanding of number relationships by putting together and taking apart numbers up to 20.
- Make groups of ten to develop foundations for understanding the base-ten system and place value.
- Solve addition and subtraction word problems using objects, pictures, and symbols.
- Describe, compare, and identify shapes and objects.

### Resources:

*Sacramento City Unified School District*

<http://www.scusd.edu/commoncoredept>

- ✓ Links to documents for California (CCS) Common Core Standards, including videos for the Standards for Mathematical Practice

*Parent-Teacher Association*

<http://www.pta.org/446.htm>

- ✓ Parent Guides including key items that children should be learning in mathematics in each grade.

*California Department of Education*

<http://www.cde.ca.gov/re/cc/index.asp>

- ✓ Informational flyers provide overviews and highlights of the Math CCS
- ✓ Handouts for parents on transitioning to CCS
- ✓ Link to *Council of Great City Schools Parent Roadmaps*
- ✓ Links to *Smarter Balanced Assessments*

### How Parents Can Support:

- Around the dinner table, ask your child for three events of the day in the order in which they occurred.
- When washing hands, count to ten or higher with your child.
- Read math related books with your child.
- Play games with your child such as cards, Hi-Ho-Cherry-O, Candy Land, Memory, or other board games.
- Put away dishes, socks or toys in groups of ten with your child.
- Share how you use math in your daily life.
- Encourage your child to be persistent if a problem seems difficult.
- When your child gets stuck on homework, some questions to ask are:
  - 1) Can you tell me what you know now?
  - 2) What do you need to find out?
  - 3) Can you make a drawing or picture to get started?
  - 4) Can you show me what you did that didn't work?

*Created by Sacramento City Unified School District*

### How Things Have Changed:

Expectations of students have changed a great deal with the adoption of the Common Core State Standards in Mathematics. While getting the right answer is still a great achievement, students are now required to think mathematically, communicate their thinking, and justify their reasoning while continuing to develop a greater level of understanding of how math works.

### Previous California Standards Assessment:

Teacher shows a number line and asks students to “count” to six.

Students recite, “1, 2, 3, 4, 5, 6”

### Common Core Standards Assessment:

Teacher shows a picture of four dots and says, “I wish I had six dots. Think about how many more dots I need.” (Think time given)

Teacher says, “Talk to a neighbor about how many more dots I need”.

Teacher has students share their strategies for finding how many dots were needed.