

*CCSSM and Storybooks that can be used to Teach Mathematical Concepts*

Grade Level	CCSS	Book/ Author
K	KCC.1 Count to 100 by ones and by tens.	<i>Adding it Up</i> by Rosemary Wells
K	K.OA. 2 Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.	<i>10 Little Hot Dogs</i> by John Himmelman
1	1.OA.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2)	<i>How Many Feet in the Bed?</i> by Diane Johnson Hamm
1	1.G.1. Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size) ; build and draw shapes to possess defining attributes.	<i>The Greedy Triangle</i> by Marilyn Burns  <i>Color Farm</i> by Lois Ehlert
1	1.OA.1. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.	<i>Guinea Pigs Add Up</i> by Margery Cuyler  <i>Cats Add Up!</i> by Dianne Ochiltree  <i>Caps for Sale</i> by Esphyr Slobodkina
2	2.MD.1 Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.	<i>Measuring Penny</i> by Loreen Leedy  <i>How Big is a Foot?</i> by Rolf Myller
2	2.G.1 Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.5 Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.	<i>Shapes, Shapes, Shapes</i> by Tana Hoban  <i>Greedy Triangle</i> by Marilyn Burns
3	3.OA.1 Interpret products of whole numbers, e.g., interpret $5 \times 7$ as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as $5 \times 7$ .	<i>Two of Everything</i> by Lily Hong
3	3.G.1. Understand that shapes in different categories (e.g., rhombuses, rectangles, and	<i>The Greedy Triangle</i> by Marilyn Burns

	<p>others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.</p>	<p><i>Shapes, Shapes, Shapes</i> by Tana Hoban</p>
4	<p>4.OA.2 Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.</p>	<p><i>One Hundred Hungry Ants</i> or <i>A Remainder of One</i> – both by Elinor Pinczes</p> <p><i>Amanda Bean’s Amazing Dream</i> by Marilyn Burns</p>
4	<p>4.MD.3. Apply the area and perimeter formulas for rectangles in real world and mathematical problems. <i>For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.</i></p>	<p><i>Chickens on the Move</i> by Pam Pollack and Meg Belviso</p> <p><i>City Green</i> by DyAnne DiSalvo</p>
5	<p>5.NF.3. Interpret a fraction as division of the numerator by the denominator (<math>a/b = a \div b</math>). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. <i>For example, interpret <math>\frac{3}{4}</math> as the result of dividing 3 by 4, noting that <math>\frac{3}{4}</math> multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size <math>\frac{3}{4}</math>. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?</i></p>	<p><i>The Doorbell Rang</i> by Pat Hutchins</p> <p><i>Give me Half</i> by Stuart Murphy</p>
5	<p>5.MD.1. Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.</p>	<p><i>Measuring Penny</i> by Loreen Leedy</p> <p><i>The Budding Builder</i> by Laura Laxton</p>

*Resources to Locate Story Books Related to Mathematical Concepts*

Knowledgeable Personnel	General education teachers, School librarian Mathematics curriculum specialist
Published Resources	<i>Math Through Children's Literature: Making the NCTM Standards Come Alive</i> (Braddon, Hall, & Taylor, 1993); <i>How To Use Children's Literature to Teach Mathematics</i> (Welchman-Tischler, 1992); <i>Exploring Mathematics through Literature: Articles and Lessons for Prekindergarten through Grade 8</i> (Thiessen, 2004); <i>Math and Literature: Grades K-1</i> (Burns & Sheffield, 2004); and <i>Math and Literature: Grades 2-3</i> (Burns & Sheffield, 2004); Mathematics textbook with explicit examples of literature connections: <i>Elementary and middle school mathematics: Teaching developmentally</i> (8 <sup>th</sup> ed.) (Van de Walle, Karp, & Bay-Williams, 2013)
Websites	<a href="http://sci.tamucc.edu/~eyoung/literature.html">http://sci.tamucc.edu/~eyoung/literature.html</a> , <a href="http://www.scholastic.com/teachers/lesson-plan/three-lessons-using-storybooks-teach-math">http://www.scholastic.com/teachers/lesson-plan/three-lessons-using-storybooks-teach-math</a> , <a href="http://k6educators.about.com/cs/math/a/mathbooks.htm">http://k6educators.about.com/cs/math/a/mathbooks.htm</a> , <a href="http://www.goodreads.com/shelf/show/math-stories">http://www.goodreads.com/shelf/show/math-stories</a>