Connecticut Office of Early Childhood

Excerpt - Appendix B

This document is an excerpt from CT ELDS Main: What Children Birth to 5 Should Know and Be Able To Do

Connecticut Office of Early Childhood, 2014

Appendix B: CT ELDS to Common Core State Standards Alignment — Mathematics

Mathematics Early Learning and Development Standards			Common Core State Standards in Mathematics
	3 to 4 years	4 to 5 years	Kindergarten
Strand A: Understand Counting and Cardinality			
Number Names	M.48.1 Say or sign the number sequence up to at least 10	M.60.1 Say or sign the number sequence up to at least 20	K.CC.1. Count to 100 by ones and by tens. K.CC.2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
Cardinality	M.48.2 Count up to at least five objects using one-to-one correspondence, using the number name of the last object counted to represent the total number of objects in a set	M.60.2 Count up to 10 objects using one-to-one correspondence, regardless of configuration, using the number name of the last object counted to represent the total number of objects in a set	K.CC.4. Understand the relationship between numbers and quantities; connect counting to cardinality a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted c. Understand that each successive number name refers to a quantity that is one larger
	M.48.3 Count out a set of objects up to 4	M.60.3 Count out a set of objects up to 5	K.CC.5. Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects
Written Numerals	M.48.4 Recognize written numerals up to at least five	M.60.4 Recognize written numerals up to at least 10	K.CC.3. Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects)
Recognizing Quantities	M.48.5 Recognize and name, without counting, the number of objects in small groups of at least 3 or 4 objects	M.60.5 Quickly recognize and name, without counting, the number of objects in collections of up to at least five items	K.Introduction. Students 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
Comparison	M.48.6 Compare sets of 1-5 objects using a visual matching or counting strategy and describing the comparison as more, less than or the same	M.60.6 Compare sets of up to 10 objects using a visual matching or counting strategy and describing the comparison as more, less than or the same	K.CC.6. Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies* (* Include groups with up to ten objects) K.CC.7. Compare two numbers between 1 and 10 presented as written numerals

Strand B: Understand and describe relationships to solve problems (operations and algebraic thinking)			
Number Operations	M.48.7 Understand that adding to (or taking away) one or more objects from a group will increase or decrease the objects in the group	M.60.7 Use real-world situations and concrete objects to model and solve addition (e.g., putting together) and subtraction (e.g., taking away) problems up through 5 M.60.8 Recognize and describe parts contained in larger numbers by composing number combinations up to at least five (e.g., recognize how many have been secretly taken away from a group of five objects)	K.NBT.1. Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., 18 = 10 + 8); understand that these numbers are composed by ten ones and one, two, three, four, five, six, seven, eight, or nine ones K.OA.1. Represent addition and subtraction with objects, fingers, mental images, drawings*, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations * Drawings need not show details, but should show the mathematics in the problem (This applies wherever drawings are mentioned in the Standards.) 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 K.OA.3. Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5 = 2 + 3 and 5 = 4 + 1) K.OA.4. For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation K.OA.5. Fluently add and subtract within 5
Strand C: Understand the attributes and relative properties of objects (measurement and data)			
Measurement	M.48.8 Recognize measurable attribute of an object such as length, weight or capacity	M.60.9 Compare the measurable attributes of two or more objects (e.g., length, weight and capacity) and describe the comparison using appropriate vocabulary (e.g., longer, shorter, same length, heavier, lighter, same weight, holds more, holds less, holds the same amount) M.60.10 Begin to use strategies to determine measurable attributes (length or capacity of objects). May use comparison, standard or non-standard measurement tools	K.MD.1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object K.MD.2 Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter
Data	M.48.9 Sort objects into two groups, counts and compares the quantity of the groups formed (e.g., indicates which is more)	M. 60.11 Represent data using a concrete object or picture graph according to one attribute	
Sorting and Classifying	M.48.10 Sort and classify objects by one attribute into two or more groups (e.g., color, size, shape)	M.60.12 Sort and classify a set of objects on the basis of one attribute independently and describe the sorting rule. Can re-sort and classify the same set of objects based on a different attribute	K.MD.3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by\ count ** ** Limit category counts to be less than or equal to 10

Strand D: Understand shapes and spatial relationships (geometry and spatial sense)			
Spatial Relationships	M.48.11 Use positional vocabulary (e.g., up/down, in/out, on/off, under) to identify and describe the location of an object	M.60.13 Use relational vocabulary of proximity (e.g., beside, next to, between, above, below, over and under) to identify and describe the location of an object	K.G.1. Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to K.G.2. Correctly name shapes regardless of their orientations or overall size K.G.3. Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid") K.G.4. Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length)
Identifying Shapes	M.48.12 Identify 2- dimensional shapes (starting with familiar shapes such as circle and triangle) in different orientations and sizes	M.60.14 Identify and describe a variety of 2- dimensional and 3- dimensional shapes with mathematical names (e.g., ball/sphere, box/rectangular prism, can/cylinder) regardless of orientation and size	
Composing Shapes	M.48.13 Combine two or more shapes to create a new shape or to represent an object in the environment	M.60.15 Complete a shape puzzle or a new figure by putting multiple shapes together with purpose	K.G.5. Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes K.G.6. Compose simple shapes to form larger shapes. For example, "Can you join these two triangles with full sides touching to make a rectangle?"