The mission of the Chardon Local Schools is high achievement for all students where learning is our most important work.

Course of Study – MATH

Revised December 2021
KINDERGARTEN





COS — MATH — Revised December 2021		
Kindergarten		
Strand: Counting and Cardinality		
Learning Standard:	How Taught?	
Know number names and the count sequence	K.CC.1: Lessons 11-1, 11-2, 11-3, 11-4, 11-5	
 K.CC.1 Count to 100 by ones and by tens. K.CC.2 Count forward within 100 beginning from any given number other than 1. K.CC.3 Write numerals from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects). 	K.CC.2: Lessons 4-5, 9-5, 9-7, 11-1, 11-2, 11-4, 11-5	
	K.CC.3: Lessons 1-3, 1-6, 1-9, 3-2, 3-4, 3-6, 3-7, 3-2, 3-4, 3-6, 9-1, 9-2, 9-3, 9-4 direct instruction, active participation, classroom routine, drill and practice, cueing students, guided practice, modeling, monitoring and adjusting.	
Materials: Ohio Standards for Mathematics, Pearson materials, website, manual	How Assessed? Quarterly assessment, teacher observation, student performance	
	How Re-Taught? Small group intervention, assessment review, review games, center work	



COS — MATH — Revised December 2021			
Kindergarten			
Strand: Counting and Cardinality			
Learning Standard:	How Taught?		
Count to tell the number of objects. K.CC.4 Understand the relationship between numbers and quantities; connect counting to cardinality using a variety of objects including pennies. a. When counting objects, establish a one-to-one relationship by saying 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 and that 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. 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	 K.CC.4: Lessons 1.9, 1.1,1.4,1.7, 3.1, 3.5, 3.8, 1.2,1.5, 3.5,3.8, 1.10, 4.5, 9.5 K.CC.5 Lessons 1.1, 1.2, 1.4, 1.5, 1.7, 5.2, 9.1,9.2, 9.3, 9.4, 9.6, 9.7, 10.6 direct instruction, active participation, classroom routine, drill and practice, cueing students, guided practice, modeling, monitoring and adjusting. 		
Materials: Ohio Standards for Mathematics, Pearson materials, website, manual	How Assessed? Quarterly assessment, teacher observation, student performance		
	How Re-Taught? Small group intervention, assessment review, review games, center work		



COS — MATH — Revised December 2021 Kindergarten Strand: Operations and Algebraic Thinking How Taught? Learning Standard: **K.OA.1** Understand addition as putting together and Lessons: 6-1, 6-2, 6-3, 6-4, 6-5, 6-6, 6-7, 6-8, adding to, and understand subtraction as 7-1, 7-2, 7-3, 7-4, 7-5, 7-6, 7-7, 8-3 taking apart and taking from. **K.OA.2 K.OA.1** Represent addition and subtraction with objects, fingers, mental images, drawings, Lessons: sounds such as claps, acting out situations, 6-7, 6-8, 7-3, -7-7, 8-8 verbal explanations, expressions, or equations. Drawings need not show details, but should **K.OA.3** show the mathematics in the problem. (This Lessons: applies wherever drawings are mentioned in the 3-7, 3-8, 8-1, 8-5, 8-6, 8-7 Standards.) **K.OA.2** Solve addition and subtraction problems (written or oral), and add and subtract within 10 **K.OA.4** by using objects or drawings to represent the Lessons: problem. 8-9.8-10 **K.OA.3** Decompose numbers and record compositions for numbers less than or equal to **K.OA.5** 10 into pairs in more than one way by using Lessons: objects and, when appropriate, drawings or 7-7, 8-2 equations. **K.OA.4** For any number from 1 to 9, find the number that makes 10 when added to the given direct instruction, active participation, classroom number, e.g., by using objects or drawings, and routine, drill and practice, cueing students, record the answer with a drawing or, when guided practice, modeling, monitoring and appropriate, an equation. adjusting. K.OA.5 Fluently add and subtract within 5. How Assessed? Materials: Ohio Standards for Mathematics, Pearson Quarterly assessment, teacher observation, materials, website, manual student performance How Re-Taught? Small group intervention, assessment review, review games, center work



COS — MATH — <i>Revised December 2021</i> Kindergarten		
Strand: Number and Operations in Base Ten		
Learning Standard: Work with numbers 11–19 to gain foundations for place value. K.NBT.1 Compose and decompose numbers from 11 to 19 into a group of ten ones and some further ones by using objects and, when	How Taught? K.NBT.1 Lessons: 10-1, 10-2, 10-3, 10-4, 10-5, 10-7 direct instruction, active participation, demonstration, modeling, use of visuals, use of manipulatives, use of technology, metacognition, guided practice, higher level thinking skills, wait	
appropriate, drawings or equations; understand that these numbers are composed of a group of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.	time, hands-on activities	
Materials: Ohio standards for Mathematics, Pearson materials, website, manual	How Assessed? Quarterly assessment, teacher observation, student performance	
	How Re-Taught? Small group intervention, assessment review, review games, center work	



COS — MATH — <i>Revised December</i> 2021 <mark>Kindergarten</mark> Strand: Measurement and Data		
Learning Standard:	How Taught?	
 Identify, describe, and compare measurable attributes. K.MD.1 Identify and describe measurable attributes (length, weight, and height) of a single object using vocabulary terms such as long/short, heavy/light, or tall/short. K.MD.2 Directly compare two objects with a measurable attribute in common to see which object has "more of" or "less of" the attribute, and describe the difference. For example, directly compare the heights of two children, and describe one child as taller/shorter. 	K.MD.1 Lessons: 14-4, 14-5 K.MD.2 Lessons: 14-1, 14-2, 14-3, 14-6 direct instruction, active participation, demonstration, modeling, use of manipulatives, use of technology, student worksheets, hands-on activities, guided practice	
Materials: Ohio standards for Mathematics, Pearson materials, website, manual	How Assessed?Quarterly assessment, teacher observation, student performanceHow Re-Taught?Small group intervention, assessment review, review games, center work	



COS — MATH — <i>Revised December 2021</i> Kindergarten	
Strand: Measurement and Data	
Learning Standard:	How Taught?
Classify objects and count the number of objects in each category. K.MD.3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. The number of objects in each category should be less than or equal to ten. Counting and sorting coins should be limited to pennies.	K.MD.3 Lessons: 5-1, 5-2, 5-3, 5-4 direct instruction, active participation, demonstration, modeling, use of manipulatives, use of technology, student worksheets, hands-on activities, guided practice
Materials: Ohio Standards for Mathematics, Pearson materials, website, manual	How Assessed? Quarterly assessment, teacher observation, student performance. How Re-Taught?
	Small group intervention, assessment review, review games, center work.



COS — MATH — Revised December 2021

Kindergarten

Strand: Geometry	
Learning Standard:	How Taught?
 Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres). 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.1 Lessons: 12-6, 12-7 K.G.2 Lessons: 12-12, 12-3, 12-4, 12-5, 12-6 K.G.3 Lessons: 12-1, 12-6, 13-4 direct instruction, active participation, demonstration, modeling, use of manipulatives, use of technology, student worksheets, hands-on activities, guided practice
Materials: Ohio Standards for Mathematics, Pearson materials, website, manual	How Assessed? Quarterly assessment, teacher observation, student performance How Re-Taught? Small group intervention, assessment review, review games, center work



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Kindergarten

Strand: Geometry	
Learning Standard:	How Taught?
 Describe, compare, create, and compose shapes. K.G.4 Describe and compare two- or three-dimensional shapes, in different sizes and orientations, using informal language to describe their commonalities, differences, parts, and other attributes. 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 Combine simple shapes to form larger shapes. 	K.G.4 Lessons: 13-1, 13-2, 13-3, 13-4, 13-6 K.G.5 Lessons: 13-6, 13-7 K.G.6 Lessons: 13-5, 13-7 direct instruction, active participation, demonstration, modeling, use of manipulatives, use of technology, student worksheets, hands-on activities, guided practice
Materials: Ohio Standards for Mathematics, Pearson materials, website, manual	How Assessed? Quarterly assessment, teacher observation, student performance How Re-Taught? Small group intervention, assessment review, review games, center work