



Transitional Kindergarten Mathematics Scope and Sequence

Two Year Transitional Kindergarten Program

Purpose:

The Transitional Kindergarten Mathematics Scope and Sequence provides a Scope and Sequence of the California Common Core State Standards. The purpose of this document is to provide a sample pacing that indicates when students should master the California Common Core State Standards. The document is designed to work in conjunction with the Riverside County Transitional Kindergarten Mathematics Continuum.

How is the document organized?

- This document is designed for districts that use a **two year loop** for their Transitional Kindergarten program.
- The standards in the first year of this document are the developmentally appropriate components of the California Common Core State Standards. These align with the Riverside County Transitional Kindergarten Mathematics Continuum.
- The gray shaded areas represent the focus on Preschool Foundations in the first trimester of Transitional Kindergarten.
- The “I” represents introduction of the standard.
- The “X” represents instruction of the standard.
- The “M” represents the month a standard should be mastered by students.
- The “R” represents standards that should be continually reviewed.

How to use this document:

This document provides a suggested pacing guide for districts and should be used in conjunction with the Riverside County Transitional Kindergarten Mathematics Continuum when planning their instructional priorities and assessments. It is recommended that districts create a committee of administrators, traditional kindergarten teachers, transitional kindergarten teachers, and early childhood experts to review this document and make any adjustments based on the needs of their district.

Preschool Foundations - Year One of a Two Year Transitional Kindergarten Program

<i>Number Sense Preschool Foundations</i>	1	2	3	4	5	6	7	8	9	Assessment
	20	40	60	80	100	120	140	160	180	
1.0 Children expand their understanding of numbers and quantities in their everyday environment.	X	X	M							
1.1 Recite numbers in order to twenty with increasing accuracy.	X	X	M							
1.2 Recognize and know the name of some written numerals.	X	X	M							
1.3 Identify, without counting, the number of objects in a collection of up to four objects (i.e., subitize).	X	X	M							
1.4 Count up to ten objects, using one-to-one correspondence (one object for each number word) with increasing accuracy.	X	X	M							
1.5 Understand, when counting, that the number name of the last object counted represents the total number of objects in the group (i.e., cardinality).	X	X	M							
2.0 Children expand their understanding of number relationships and operations in their everyday environment.	X	X	M							
2.1 Compare, by counting or matching, two groups of up to five objects and communicate, “more,” “same as,” or “fewer” (or “less”).	X	X	M							
2.2 Understand that adding one or taking away one changes the number in a small group of objects by exactly one.	X	X	M							
2.3 Understand that putting two groups of objects together will make a bigger group and that a group of objects can be taken apart into smaller groups.	X	X	M							
2.4 Solve simple addition and subtraction problems with a small number of objects (sums up to 10), usually by counting.	X	X	M							
<i>Algebra and Functions</i>										
1.0 Children expand their understanding of sorting and classifying objects in their everyday environment.	X	X	M							
1.1 Sort and classify objects by one or more attributes, into two or more groups, with increasing accuracy (e.g., may sort first by one attribute and then by another attribute).	X	X	M							
2.0 Children expand their understanding of simple, repeating patterns.	X	X	M							
2.1 Recognize and duplicate simple repeating patterns.	X	X	M							
2.2 Begin to extend and create simple repeating patterns.	X	X	M							

Preschool Foundations - Year One of a Two Year Transitional Kindergarten Program

<i>Measurement</i>	1	2	3	4	5	6	7	8	9	Assessment
	20	40	60	80	100	120	140	160	180	
1.0 Children expand their understanding of comparing, ordering, and measuring objects.	X	X	M							
1.1 Compare two objects by length, weight, or capacity directly (e.g., putting objects side by side or indirectly (e.g., using a third object).	X	X	M							
1.2 Order four or more objects by size.	X	X	M							
1.3 Measure length using multiple duplicates of the same-size concrete units laid end to end.	X	X	M							
<i>Geometry</i>										
1.0 Children identify and use a variety of shapes in their everyday environment.	X	X	M							
1.1 Identify, describe, and construct a variety of different shapes, including variations of a circle, triangle, rectangle, square, and other shapes.	X	X	M							
1.2 Combine different shapes to create a picture of design.	X	X	M							
2.0 Children expand their understanding of positions in space.	X	X	M							
2.1 Identify positions of objects and people in space, including in/on/under, up/down, inside/outside, beside/between, and in front/behind.	X	X	M							
<i>Mathematical Reasoning</i>										
1.0 Children expand the use of mathematical thinking to solve problems that arise in their everyday environment.	X	X	M							
1.1 Identify and apply a variety of mathematical strategies to solve problems in their environment.	X	X	M							

Year One of a Two Year Transitional Kindergarten Program

<i>Counting and Cardinality</i>	1	2	3	4	5	6	7	8	9	Assessment
	20	40	60	80	100	120	140	160	180	
Know number names and the count sequence.										
T1. a. Count by ones. b. Count by tens.	I	X I	X X	X X	X X	X X	X X	X X	X X	
T2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1).			I	X	X	X	X	X	X	
T3. Write numbers from 0 – 20 (with 0 representing a count of no objects).		I	X	X	X	X	X	X	X	
Count to tell the number of objects.										
T4. 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.	I	X	X	X	M	R	R	R	R	
T5. Count to answer “how many?” questions about things arranged in a line, a rectangular array, or a circle, things in a scattered configuration; given a number, count out that many objects.	I	X	X	X	M	R	R	R	R	
Compare numbers.										
T6. 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.			I	X	X	M	R	R	R	
Operations and Algebraic Thinking										
Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.										
T1. Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations.	I	X	X	X	X	X	X	X	M	

Year One of a Two Year Transitional Kindergarten Program

<i>Operations and Algebraic Thinking cont.</i>	1	2	3	4	5	6	7	8	9	Assessment
	20	40	60	80	100	120	140	160	180	
T2. Solve addition and subtraction word problems, and add and subtract, e.g., by using objects or drawings to represent the problem.	I	X	X	X	X	X	X	X	X	
T3. Decompose numbers into pairs in more than one way.				I	X	X	X	X	M	
T4. Fluently add and subtract within 5.				I	X	X	X	X	M	
Measurement and Data										
Describe and compare measurable attributes.										
T1. Describe measurable attributes of objects, such as length or weight.	I	X	X	M	R	R	R	R	R	
T2. 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.	I	X	X	X	X	M	R	R	R	
T3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.	I	X	X	X	X	M	R	R	R	
T4. Demonstrate an understanding of concepts of time (e.g., morning, afternoon, evening, today, yesterday, tomorrow, week, year) and tools that measure time (e.g., clock, calendar). a. Name the days of the week.	I	X	X	X	X	X	X	X	M	
	I	X	X	X	M	R	R	R	R	
Geometry										
Identify and describe shapes (squares, circles, triangles, rectangles, hexagons).										
T1. a. Describe objects in the environment using names of shapes. b. Describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.	I	X	X	X	M	R	R	R	R	
	I	X	X	X	X	X	X	X	M	
T2. Correctly name shapes.	I	X	X	X	X	X	X	X	M	

Year Two of a Two Year Transitional Kindergarten Program

<i>Counting and Cardinality</i>	1	2	3	4	5	6	7	8	9	Assessment
	20	40	60	80	100	120	140	160	180	
Know number names and the count sequence.										
T1. a. Know number names and the count sequence. b. Count to 100 by ones and by tens.	I	X I	X X	X X	X X	X X	X X	X X	M M	
T2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1).			I	X	X	X	X	X	M	
T3. Write numbers from 0 – 20 (with 0 representing a count of no objects).	I	X	X	X	X	X	M	R	R	
Count to tell the number of objects.										
T4. 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	R	R	R	R	R	R	R	R	
	M	R	R	R	R	R	R	R	R	
	M	R	R	R	R	R	R	R	R	
T5. 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 to 20, count out that many objects.	I	X	X	X	M	R	R	R	R	
Compare numbers.										
T6. 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.	M	R	R	R	R	R	R	R	R	
T7. Compare two numbers between 1 and 10 presented as written numerals.			I	X	X	X	M	R	R	

Year Two of a Two Year Transitional Kindergarten Program

<i>Operations and Algebraic Thinking</i>	1	2	3	4	5	6	7	8	9	Assessment
	20	40	60	80	100	120	140	160	180	
Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.										
T1. Represent addition and subtraction with: a. Objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations. b. Expression or equations.	R	R	R	R	R	R	R	R	R	
	I	X	X	X	X	X	X	X	M	
T2. Solve addition and subtraction word problems, and add and subtract, within ten e.g., by using objects or drawings to represent the problem.	I	X	X	X	X	M	R	R	R	
T3. 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 $5 = 4 + 1$).	I	X	X	X	M	R	R	R	R	
T4. Fluently add and subtract within 5.	R	R	R	R	R	R	R	R	R	
<i>Number and Operations in Base Ten</i>										
Work with numbers 11-19 to gain foundation for place value.										
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 of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.				I	X	X	X	X	M	
<i>Measurement and Data</i>										
Describe and compare measurable attributes.										
T1. Describe measurable attributes of objects, such as length or weight.	I	X	X	X	X	X	X	X	M	
T2. 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.										
T3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.	R	R	R	R	R	R	R	R	R	

Year Two of a Two Year Transitional Kindergarten Program

<i>Measurement and Data cont.</i>	1	2	3	4	5	6	7	8	9	Assessment
	20	40	60	80	100	120	140	160	180	
T4. Demonstrate an understanding of concepts of time (e.g., morning, afternoon, evening, today, yesterday, tomorrow, week, year) and tools that measure time (e.g., clock, calendar). <ul style="list-style-type: none"> a. Name the days of the week. b. Identify the time (to the nearest hour) of everyday events (e.g., lunch time is 12 o'clock, bedtime is 8 o'clock at night). 	I R	X R	X R	X R	X R	X R	X R	X R	M R	
Geometry										
Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).				I	X	X	X	X	M	
T1. <ul style="list-style-type: none"> a. Describe objects in the environment using names of shapes. b. Describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to. 	I R	X R	X R	X R	M R	R R	R R	R R	R R	
T2. Correctly name shapes regardless of their orientations or overall size.	I	X	X	X	X	X	X	X	M	
T3. Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).	I	X	X	X	M	R	R	R	R	
Analyze, compare, create, and compose shapes.										
T4. 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).		I	X	X	X	X	X	X	M	
T5. Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.		I	X	X	X	X	X	X	M	
T6. Compose simple shapes to form larger shapes. For example, “Can you join these two triangles with full sides touching to make a rectangle?”		I	X	X	X	X	X	X	M	