

KIWI - Grade 1

- **Common Core Standards from previous grades are reviewed in early Cycles.**
- **Common Core Standards from the current grade are reviewed in later Cycles.**

Writing Numbers
Basic Facts
Whole Numbers
Comparing Numbers
Place Value
Fractions
Basic Operations
Algebra
Time & Money
Measurement
Geometry
Data
Vocabulary & Symbols
Problem Solving

Counting and Cardinality		K.CC							
Know number names and the count sequence		Cycle 1	Cycle 2	Cycle 3	Cycle 4	Cycle 5	Cycle 6	Cycle 7	Cycle 8
1	Count to 100 by ones and by tens.	●		●					
2	Count forward beginning from a given number within the known sequence (instead of having to begin at 1).		●		●				
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).	●	●	●					
Count and tell the number of objects		Cycle 1	Cycle 2	Cycle 3	Cycle 4	Cycle 5	Cycle 6	Cycle 7	Cycle 8
4	Understand the relationship between numbers and quantities; connect counting to cardinality.	●	●		●				
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.		●	●	●				
Compare numbers.		Cycle 1	Cycle 2	Cycle 3	Cycle 4	Cycle 5	Cycle 6	Cycle 7	Cycle 8
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.)	●							
7	Compare two numbers between 1 and 10 presented as written numerals.		●	●	●				

Operations and Algebraic Thinking		K.OA							
Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.		Cycle 1	Cycle 2	Cycle 3	Cycle 4	Cycle 5	Cycle 6	Cycle 7	Cycle 8
1	Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.	●	●						
2	Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.	●	●	●	●				
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 $5 = 4 + 1$).			●					
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.				●				
5	Fluently add and subtract within 5.		●	●	●	●	●	●	●

Operations and Algebraic Thinking

1.OA

Represent and solve problems involving addition and subtraction.		Cycle 1	Cycle 2	Cycle 3	Cycle 4	Cycle 5	Cycle 6	Cycle 7	Cycle 8
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.					●	●	●	●
2	Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.					●	●	●	●
Understand and apply properties of operations.		Cycle 1	Cycle 2	Cycle 3	Cycle 4	Cycle 5	Cycle 6	Cycle 7	Cycle 8
3	Apply properties of operations as strategies to add and subtract. Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.)						●		●
4	Understand subtraction as an unknown-addend problem. For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8.					●			
Add and subtract within 20		Cycle 1	Cycle 2	Cycle 3	Cycle 4	Cycle 5	Cycle 6	Cycle 7	Cycle 8
5	Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).		●				●		●
6	Add and subtract within 20, demonstrating fluency for addition and subtraction within 10.			●	●	●	●	●	●
Work with addition and subtraction equations		Cycle 1	Cycle 2	Cycle 3	Cycle 4	Cycle 5	Cycle 6	Cycle 7	Cycle 8
7	Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.				●			●	
8	Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = \square - 3$, $6 + 6 = \square$.					●	●	●	●

Measurement and Data		K.MD							
Describe and compare measurable attributes.		Cycle 1	Cycle 2	Cycle 3	Cycle 4	Cycle 5	Cycle 6	Cycle 7	Cycle 8
1	Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.								
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.	●	●	●	●				
Classify objects and count the number of objects in each category.		Cycle 1	Cycle 2	Cycle 3	Cycle 4	Cycle 5	Cycle 6	Cycle 7	Cycle 8
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)	●	●	●					

Measurement and Data		1.MD							
Measure lengths indirectly and by iterating length units.		Cycle 1	Cycle 2	Cycle 3	Cycle 4	Cycle 5	Cycle 6	Cycle 7	Cycle 8
1	Order three objects by length; compare the lengths of two objects indirectly by using a third object.					●		●	
2	Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.						●		●
Tell and write time.		Cycle 1	Cycle 2	Cycle 3	Cycle 4	Cycle 5	Cycle 6	Cycle 7	Cycle 8
3	Tell and write time in hours and half-hours using analog and digital clocks.					●	●	●	●
Represent and interpret data.		Cycle 1	Cycle 2	Cycle 3	Cycle 4	Cycle 5	Cycle 6	Cycle 7	Cycle 8
4	Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.				●	●	●	●	●
Work with money.		Cycle 1	Cycle 2	Cycle 3	Cycle 4	Cycle 5	Cycle 6	Cycle 7	Cycle 8
5	Identify the values of all U.S. coins; know their comparative values, e.g., a dime is of greater value than a nickel. Find equivalent values, e.g., a nickel is equivalent to 5 pennies. Use appropriate notation (e.g., 69¢). Use the value of coins in the solution of problems.					●	●	●	●

Geometry		K.G							
Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).		Cycle 1	Cycle 2	Cycle 3	Cycle 4	Cycle 5	Cycle 6	Cycle 7	Cycle 8
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.	●	●	●	●	●	●	●	●
2	Correctly name shapes regardless of their orientations or overall size.	●		●					
3	Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).	●		●					
Analyze, compare, create, and compose shapes.		Cycle 1	Cycle 2	Cycle w3	Cycle 4	Cycle 5	Cycle 6	Cycle 7	Cycle 8
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).		●						
5	Model shapes in the world by building shapes from components (e.g. sticks and clay balls) and drawing shapes.						●		
6	Compose simple shapes to form larger shapes. For example, “Can you join these two triangles with full sides touching to make a rectangle?”				●				

Geometry		1.G							
Reason with shapes and their attributes		Cycle 1	Cycle 2	Cycle 3	Cycle 4	Cycle 5	Cycle 6	Cycle 7	Cycle 8
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 that possess defining attributes.					●	●	●	
2	Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape. (students do not need to know formal names such as “right rectangular prism.”)						●		●
3	Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.			●	●	●		●	●