New York State Common Core



Mathematics Curriculum



Topic G *How Many* Questions with up to 10 Objects

PK.CC.1, PK.CC.3abc, PK.CC.4

Focus Standard:	PK.CC.1	Count to 20.
	PK.CC.3abc	Understand the relationship between numbers and quantities to 10; 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.
		 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.
		 Understand that each successive number name refers to a quantity that is one larger.
	PK.CC.4	Count to answer "how many?" questions about as many as 10 things arranged in a line, a rectangular array, or a circle, or as many as 5 things in a scattered configuration; given a number from 1–10, count out that many objects.
Instructional Days:	4	
Coherence -Links to:	GK–M1	Numbers to 10
	GK–M5	Numbers 10–20 and Counting to 100

Topic G continues the pattern established in Topics A, C, and E. Lesson 31 begins with students counting out 9 orange slices in horizontal 5-group formation. They get 1 more orange slice, and then touch and count 10 slices (**PK.CC.3c**). When the orange slices are put away, the children count 0 orange slices.

Lesson 32 uses the explorer crossing the creek context one last time. Students see that they need more rocks to cross this time, as opposed to the 2 rocks in Topic A, because these rocks are smaller. As students proceed to Lesson 33, they now count from 0 to 10 from left to right on the fingers using the familiar chick-hatching context.

In Lesson 34, children work with arrays in the context of sorting laundry. First, they arrange 8 socks in a 4 by 2 array. Next, they add a pair of socks to form another row, counting to 10 in a 5 by 2 array. Finally, students work with 5-groups as an array configuration and practice





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counting by "feeding" each animal (with a linking cube) on an array card.

Throughout Topic G, children develop fluency counting with one-to-one correspondence through 10, experiencing numbers 6 through 10 in relationship to 5. In anticipation of Module 5's work with addition and subtraction, students continue to play with decomposing and composing numbers to 10. They also work to find *1 more* and *1 less* within 8.

A Teaching Sequence Towards Mastery of How Many Questions with up to 10 Objects			
Objective 1: Introduce 10, and relate 10 to 9 and <i>1 more</i> . (Lesson 31)			
Objective 2: Use linear configurations to count 10 in relation to 5. (Lesson 32)			
Objective 3: Count from 0 to 10 from left to right on the fingers. (Lesson 33)			
Objective 4: Count 10 objects in array configurations. (Lesson 34)			



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