



Topic F

Matching One Numeral with 0 up to 9 Objects

PK.CC.3ab, PK.CC.4

Focus Standard:	PK.CC.3ab	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. 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.
	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:	5	
Coherence -Links to:	GK–M1	Numbers to 10
	GK–M5	Numbers 10–20 and Counting to 100

Topic F follows the instructional path laid out in Topics B and D, with children matching groups of 0 and 9 objects to the numeral that tells *how many* (**PK.CC.4**). As in previous topics, the numerals are prewritten.

Lesson 26 introduces the numerals 0 and 9 as children practice decomposing and composing 9. First, they compose a tall tower by putting together 4- and 5-stick towers. Next, they count and see their new tall tower has 9 cubes. Then, they decompose their tower; e.g., "I broke my 9-tower into two parts. When I put them back together, I have 9 again!" The emphasis is not that 5 and 4 make 9 or that 9 can be decomposed into 6 and 3, rather, it is that 9 can be made by putting smaller parts together. Likewise, once composed, 9 can be broken down into smaller parts that, when reassembled, make 9 again.

In Lesson 27, children count up to 9 objects arranged in a circular configuration, carefully marking the start of their count, and choose the numeral that tells *how many*. Lesson 28 returns to the seeds context from Topic D and asks students to arrange up to 9 seeds in varied configurations and to find the matching numeral (**PK.CC.3b**). Students practice matching different configurations of 7, 8, and 9 to the corresponding numerals.

In Lesson 29, children again pretend they are waiters who use tallies to record how many flowers are being ordered at the Pollen Café (up to 9). Lesson 30 asks children to become chefs at the Pollen Café. This time, the chef sees the numeral and makes a batch of flowers to match the waiter’s request.

During Fluency Practice in Topic F, students practice rote counting through 10 and “touching and counting” up to 10 objects in varied configurations through engaging contexts. They continue their work with composing and decomposing and match numerals 0–9 to varied counts.

A Teaching Sequence Towards Mastery of Matching One Numeral with 0 up to 9 Objects

Objective 1: Compose 9, and decompose into two parts. Match numerals 0 and 9 to no objects and 9 objects.
(Lesson 26)

Objective 2: Count 9 objects in circular configurations.
(Lesson 27)

Objective 3: Arrange and count 9 objects in varied configurations.
(Lesson 28)

Objective 4: Tally 9 objects.
(Lesson 29)

Objective 5: Look at a numeral and count out a group of up to 9 objects.
(Lesson 30)