



## Topic D

# Matching One Numeral with up to 8 Objects

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

<b>Focus Standard:</b>	PK.CC.3ab	Understand the relationship between numbers and quantities to 10; connect counting to cardinality. <ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>
	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.
<b>Instructional Days:</b>	5	
<b>Coherence -Links to:</b>	GK–M1	Numbers to 10
	GK–M5	Numbers 10–20 and Counting to 100

Topic D follows the instructional path laid out in Topic B, matching a group of up to 8 objects to the numeral that tells *how many* (PK.CC.4). The pre-written numeral is introduced in Topic D so that students have plenty of time to touch and count to 8 before matching the count to the abstract numeral.

Lesson 16 introduces the numeral 8 as children practice decomposing and composing 8. Again, children see that there are familiar numbers inside 8: “We love 4, and know it so well. When we put these 4-sticks together, we have 1 longer stick. The longer stick has 1, 2, 3, 4, 5, 6, 7, 8. 8 cubes!”

In Lesson 17, children count up to 8 objects arranged in a circular configuration, carefully marking the start of their count, and they choose the numeral that tells *how many*. In Lesson 18, they arrange up to 8 seeds in varied configurations, and then choose the matching numeral (PK.CC.3b). As in Topic B, although the configurations look different, both the last number said and the numeral that matches how many are the same!

In Topic B, children learned to create tally marks to represent groups of up to 7 objects. In Lesson 19, they extend this ability to match tallies to the number 8, tracking how many flowers (up to 8) the bees order at the Pollen Café. In Lesson 20, again contextualized in the Pollen Café, children make a bouquet of up to 8 flowers

after seeing a numeral. At this point, rote counting to 10 should be easy enough for children that they can remember their target number (8) and stop when they reach it: "...6, 7, 8. I counted 8 flowers."

In preparation for the second half of the module, Topic D Fluency Practice focuses on rote counting to 9 and 10 through energizing movement activities. Children also have many opportunities to touch and count as well as to compose and decompose number towers of 8.

#### A Teaching Sequence Towards Mastery of Matching One Numeral with up to 8 Objects

**Objective 1: Compose 8, and then decompose into two parts. Match to the numeral 8.**  
(Lesson 16)

**Objective 2: Count 8 objects in circular configurations.**  
(Lesson 17)

**Objective 3: Arrange and count 8 objects in varied configurations.**  
(Lesson 18)

**Objective 4: Tally 8 objects.**  
(Lesson 19)

**Objective 5: Look at a numeral and count out a group of up to 8 objects.**  
(Lesson 20)