Topic G

Subtraction from 9 and 10

K.OA.1, K.OA.2, K.OA.3

Focus Standards:	K.OA.1	Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. (Drawings need not show details, but should show the mathematics in the problem. This applies wherever drawings are mentioned in the Standards.)
	K.OA.2	Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.
	K.OA.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).
Instructional Days:	4	
Coherence -Links from:	GPK–M5	Addition and Subtraction Stories and Counting to 20
-Links to:	G1–M1	Sums and Differences to 10

Topic G provides additional practice with formal subtraction concepts, including writing and solving number sentences with totals of 9 or 10.

Lesson 33 moves quickly through concrete and pictorial representations of subtraction with students representing *take from* equations (C − B = A) with no unknown for totals to 10. "There were 10 cars in the parking lot. 2 of them drove away. Now there are 8 cars left in the parking lot."

In Lesson 34, students solve subtraction story problems by breaking off, crossing out, and hiding a part and show their strategies with drawings and number sentences (**MP.5**). "I have 9 pencils. I'm going to hide 3 pencils in a box. How many pencils are not in the box?"

Lessons 35–36 focus on decompositions of 9 and 10 using 5-groups, which are recorded as number sentences (**K.OA.3**). These decompositions differ from those in Topic F because they are represented as subtraction number sentences (C – B = A) instead of addition sentences (C = __ + __).

Students continue to focus on the grade level fluency goal during Fluency Practice, improving the speed and accuracy with which they add and subtract numbers to 5 (**K.OA.5**).

A Teaching Sequence Toward Mastery of Subtraction from 9 and 10

Objective 1: Solve *take from* equations with no unknown using numbers to 10. (Lesson 33)

Objective 2: Represent subtraction story problems by breaking off, crossing out, and hiding a part. (Lesson 34)

Objective 3: Decompose the number 9 using 5-group drawings, and record each decomposition with a subtraction equation. (Lesson 35)

Objective 4: Decompose the number 10 using 5-group drawings, and record each decomposition with a subtraction equation. (Lesson 36)