



Topic E

Decontextualizing Subtraction Stories to Solve Using Fingers, Objects, and Drawings

PK.OA.1, PK.CC.2

Focus Standards:	PK.OA.1	Demonstrate an understanding of addition and subtraction by using objects, fingers, and responding to practical situations (e.g., if we have 3 apples and add two more, how many apples do we have all together?).
Instructional Days:	4	
Coherence -Links to:	GK–M1	Numbers to 10
	GK–M4	Number Pairs, Addition and Subtraction to 10

Topic E builds on the work of previous topics, providing opportunities for children to solve subtraction story problems with abstract representations (MP.4). As in Topic D, children decontextualize the story and use fingers, counters, and simple drawings to represent the objects in the story (**PK.OA.1**).

In Lessons 20 and 21, children use fingers to represent the stories and then subtract. For example, “There are 5 apples in a basket. Regina packed 2 apples in her lunchbox. How many apples are left?” Instead of acting out the story, children decontextualize, showing five fingers on one hand and hiding two fingers for the packed apples (shown at right). Students count their fingers to find how many are left and practice making subtraction statements without using the unit, “5 take away 2 is 3.” In Lesson 21, after again counting their fingers, students realize that the three remaining fingers represent, for example, the alligators in the story and re-contextualize the 3: “3 alligators were left” (MP.2).



$$5 - 2 = 3$$

Children decontextualize by using concrete objects like linking cubes to solve subtraction stories in Lesson 22. After they make a subtraction statement, e.g., “4 take away 1 equals 3,” students analyze what each numeral means, thus putting the numbers back into the context of the story.

In Lesson 23, children again practice making math drawings, this time decontextualizing by drawing quick representations of a subtraction story. To solve, children cross off the ones that *go away*. During the Debrief, the teacher takes student stories and turns them into more abstract questions, “4 take away 2 is...?” and writes the matching number sentence.

In Topic E Fluency Practice, students continue to sharpen their rote counting skills to 20. Every lesson in this topic includes the Find the Card activity whereby students read a written numeral 6–10 and match it with counting pictures arranged in varied formations. This activity reinforces another Pre-K core fluency skill, counting objects to 10.

A Teaching Sequence Toward Mastery of Decontextualizing Subtraction Stories to Solve Using Fingers, Objects, and Drawings

Objective 1: Solve subtraction story problems using fingers.
(Lessons 20–21)

Objective 2: Solve subtraction story problems with representative objects.
(Lesson 22)

Objective 3: Solve subtraction story problems with representative drawings.
(Lesson 23)