



## Topic A

# Foundations for Fluency with Sums and Differences Within 100

**2.OA.2, K.OA.3, K.OA.4, K.NBT.1, 1.NBT.2b, 1.OA.5, 1.OA.6**

<b>Focus Standards:</b>	2.OA.2	Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.
<b>Instructional Days:</b>	2	
<b>Coherence -Links from:</b>	G1–M2	Introduction to Place Value Through Addition and Subtraction Within 20
	G1–M4	Place Value, Comparison, Addition and Subtraction to 40
	G1–M6	Place Value, Comparison, Addition and Subtraction to 100
<b>-Links to:</b>	G2–M4	Addition and Subtraction Within 200 with Word Problems to 100
	G3–M2	Place Value and Problem Solving with Units of Measure

In this first topic of Grade 2, students set the stage for fluency with sums and differences within 100 (**2.OA.2**) by focusing on three essential skills:

1. Knowing the decompositions of any number within 10 (**K.OA.3, 1.OA.6**),
2. Knowing partners to 10 (**K.OA.4**),
3. Knowing teen numbers as  $10 + n$  (**K.NBT.1, 1.NBT.2b**).

Topic A energetically revisits this familiar ground from Kindergarten and Grade 1 at a new pace.

In Lesson 1, targeted fluency work begins with ten-frame flashes where students review ways to make and take from ten (e.g.,  $9 + 1 = 10$ ,  $10 - 9 = 1$ ). Students practice Say Ten counting on the Rekenrek (eleven or “ten 1,” pictured to the right), and they become reacquainted with Sprints using a familiar  $10 + n$  Sprint. Finally, students decompose ten in different ways by rolling a die and recording number bonds within 10 in “Target Practice.”

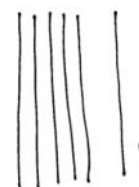
Lesson 2 follows a similar path as Lesson 1, with activities now extending to numbers within 100. Students review representations of two-digit numbers with quick tens and ones (see image to the right) in preparation for upcoming work within the module. Students build confidence and proficiency alternating between regular and Say Ten counting with the support of Hide Zero cards and a 100-bead Rekenrek, saying “6 tens 4” for 64. The final fluency in Lesson 2 focuses on making the next ten (e.g.,  $57 + 3 = 60$ ), which is foundational to the mastery of sums and differences to 100 (**2.NBT.5**).



Ten



Hide Zero



64

The Application Problem and Concept Development are intentionally omitted from this topic to devote time to reviewing foundational fluencies for sums and differences within 100. All the exercises herein should be included in future fluency work as necessary so that students enter Grade 3 having memorized their single-digit addition facts and demonstrated fluency with sums and differences within 100 (**2.NBT.5**).

### A Teaching Sequence Toward Mastery of Foundations for Fluency with Sums and Differences Within 100

**Objective 1: Practice making ten and adding to ten.**  
(Lesson 1)

**Objective 2: Practice making the next ten and adding to a multiple of ten.**  
(Lesson 2)