



Topic C

Addition Word Problems

1.OA.1, 1.OA.6, 1.OA.5

Focus Standard:	1.OA.1	Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart and comparing, with unknowns in all positions, e.g., by using objects, drawings and equations with a symbol for the unknown number to represent the problem.
	1.OA.6	Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).
Instructional Days:	5	
Coherence	-Links from: GK–M4	Number Pairs, Addition and Subtraction to 10
	-Links to: G2–M4	Addition and Subtraction Within 200 with Word Problems to 100

In Topic C, students develop a more robust understanding of addition word problems, moving beyond the Kindergarten problem types (**K.OA.2**) by reviewing *put together with result unknown* and *add to with result unknown* problems, and then moving to the more complex *change unknown* version of the earlier problem types.

In Lesson 9, students solve both *add to with result unknown* and *put together with result unknown* problems with their classmates. The lesson begins with a cadre of students engaged in a dance party, and then a number of students join them—how fun! Students then record this action-based problem as an equation, and move on to the *put together with result unknown* problem type, where they are faced with a set of students whose characteristics invite decomposition, much like in Topic B. Students end with a Debrief in which they explore the connections between these two problem types, ultimately understanding that they used the operation of addition to solve both problem types.

Lesson 10 has students using 5-group cards to solve *put together with result unknown* problems that are represented by stories stemming from pictures. The 5-group cards again make the expectation clear that students will be practicing counting on (Level 2 strategy), but may use the strategy of counting all (Level 1 strategy) if necessary.

The introduction of the *add to with change unknown* problem type (**1.OA.6**) occurs in Lesson 11. This lesson allows students explorations with problems where the *action*, which represents the *change*, is unknown. For example, “Ben has 5 pencils. He got some more from his mother. Now, he has 9 pencils. How many pencils did Ben get from his mother?” Students physically add more to the starting quantity, counting on until they reach the total; for the first time in Module 1, students simply must use the valuable Level 2 strategy of counting on in order to determine the unknown part.

Lesson 12 continues with solving *add to with change unknown* problems, as students use their 5-group cards to count on to find the unknown change in quantity. Throughout these two lessons, students explore the symbol for the unknown (**1.OA.1**) as both a question mark and an open box. The topic ends with students creating their own *put together with result unknown*, *add to with result unknown*, and *add to with change unknown* problems from equations, and then having their peers solve them through drawings and discussions. These problems set the foundation early in the module for relating addition to subtraction in Topic G (**1.OA.4**).¹

A Teaching Sequence Towards Mastery of Addition Word Problems

Objective 1: Solve *add to with result unknown* and *put together with result unknown* math stories by drawing, writing equations, and making statements of the solution.
(Lesson 9)

Objective 2: Solve *put together with result unknown* math stories by drawing and using 5-group cards.
(Lesson 10)

Objective 3: Solve *add to with change unknown* math stories as a context for counting on by drawing, writing equations, and making statements of the solution.
(Lesson 11)

Objective 4: Solve *add to with change unknown* math stories using 5-group cards.
(Lesson 12)

Objective 5: Tell *put together with result unknown*, *add to with result unknown*, and *add to with change unknown* stories from equations.
(Lesson 13)

¹ For an analysis of addition and subtraction word problem types used in Grades K–2 please refer to the Counting and Cardinality Progression, pages 7 and 9, and the Common Core State Standards, page 88.