



Topic E

Two- and Three-Digit Measurement Addition Using the Standard Algorithm

3.2A, 3.4A, 3.4B, 3.2B, 3.2C, 3.7C, 3.7D, 3.7E

Focus Standards:	3.2A	Compose and decompose numbers up to 100,000 as a sum of so many ten thousands, so many thousands, so many hundreds, so many tens, and so many ones using objects, pictorial models, and numbers, including expanded notation as appropriate.
	3.4A	Solve with fluency one-step and two-step problems involving addition and subtraction within 1,000 using strategies based on place value, properties of operations, and the relationship between addition and subtraction.
	3.4B	Round to the nearest 10 or 100 or use compatible numbers to estimate solutions to addition and subtraction problems.
Instructional Days:	3	
Coherence -Links from:	G2–M2	Addition and Subtraction of Length Units
	G2–M5	Addition and Subtraction Within 1000 with Word Problems within 1,000
-Links to:	G4–M1	Place Value, Rounding, and Algorithms for Addition and Subtraction

In Topic E, students revisit the standard algorithm for addition, which was first introduced in Grade 2 (2.4C). In this topic, they add two- and three-digit metric measurements and intervals of minutes within 1 hour. Lesson 17 guides students to apply the place value concepts they practiced with rounding to model composing larger units once on the place value chart. They use the words *bundle* and *rename* as they add like base ten units, working across the numbers unit by unit (ones with ones, tens with tens, hundreds with hundreds). As the lesson progresses, students transition away from modeling on the place value chart and move toward using the standard algorithm.

Lesson 18 adds complexity to the previous day’s learning by presenting problems that require students to compose larger units twice. Again, students begin by modeling on the place value chart, this time renaming both the ones and tens places. Lesson 19 culminates the topic with applying addition involving renaming to solving measurement word problems. Students draw strip diagrams to model problems. They round to estimate the sums of measurements and then solve problems using the standard algorithm. By comparing their estimates with precise calculations, students assess the reasonableness of their solutions.

A Teaching Sequence Toward Mastery of Two- and Three-Digit Measurement Addition Using the Standard Algorithm

Objective 1: Add measurements using the standard algorithm to compose larger units once.
(Lesson 17)

Objective 2: Add measurements using the standard algorithm to compose larger units twice.
(Lesson 18)

Objective 3: Estimate sums by rounding and apply to solve measurement word problems.
(Lesson 19)