

Next Steps and Instructional Moves

The intended purpose of this document is to provide teachers with a tool to determine student understanding and suggest instructional moves that may help guide a student forward in their learning of a particular concept or standard. This guide is not an exhaustive list of strategies.

Second Grade: Cluster 5 Adding and Subtracting within 1,000

This list includes standards addressed in this cluster, but not necessarily mastered, since all standards are benchmarks for the end of the year. Note recommendations in the [Important Considerations section in Cluster 5 of the Instructional Frameworks](#) for more information.

NC.2.NBT.6 (sums greater than 100 are possible) Add up to three two-digit numbers using strategies based on place value and properties of operations.

NC.2.NBT.7 Add and subtract, within 1,000, relating the strategy to a written method, using:

- Concrete models or drawings
- Strategies based on place value
- Properties of operations
- Relationship between addition and subtraction

NC.2.NBT.8 Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.

NC.2.OA.1 Represent and solve addition and subtraction word problems, within 100, with unknowns in all positions, by using representations and equations with a symbol for the unknown number to represent the problem, when solving:

- One-Step problems:
 - Add to/Take from - Start Unknown
 - Compare - Bigger Unknown
 - Compare - Smaller Unknown

Not Yet

Students that are consistently scoring “Not Yet” could have a variety of errors. These errors may include not yet being able to accurately add or subtract within 50, especially in cases where they have to reorganize tens and ones. Students scoring “Not Yet” may also struggle when solving change unknown and start unknown problems.

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Next Steps:

For students who are not yet able to consistently add and subtract within 50 (2.NBT.6, 2.NBT.7):

- pose tasks to students that allow them to use base ten blocks to support their work
- consider the progression of the types of numbers in tasks:
 - two-digit number and a two-digit number that is a multiple of ten (e.g., $36+20$ or $36 - 20$)
 - two-digit number and a two-digit number where the sum or difference does not require the reorganizing/regrouping of tens and ones (e.g., $36 + 22$ or $36 - 22$)
 - two-digit number and a two-digit number where the sum or difference require the reorganizing/regrouping of tens and ones (e.g., $36 + 27$ or $36 - 27$)
- use the hundreds board as a tool to support students' addition and subtraction work

For students who are not yet able to determine whether they should add or subtract numbers in a word problem (2.OA.1, 2.NBT.5, 2.NBT.6):

- have students describe the action in the word problems. Avoid key words and using isolated words to determine which operation to use. Key words are distracting. Example: fewer does not always mean subtract. *Susan has 4 pens. She has 3 fewer pens than Tomika. How many pens does Tomika have?*
- use strategies such as part-part-whole mats or model drawing to support students' exploration of word problems. Example: There are some birds on the fence. If 15 birds leave and there are 18 birds still there, how many birds were first there?

Birds who left (18)	Birds still there (15)
Birds first there (18+15)	

For students who are not yet able to mentally add or subtract 10 from a given number (2.NBT.8):

- Pose tasks: Pull two number cards and make a two-digit number. What number is 10 more? What number is 10 less? Provide access to hundreds boards and/or base ten blocks to support students.

For students who are not yet fluent with addition and subtraction combinations within 10:

- Play fluency games: Game [file](#) from NCDPI, Domino derby [game](#)
- Close to 10: Each student gets 6 cards. They use 2 or 3 cards to get as close to 10 as possible. Their score is the difference between the sum of the cards and 10. The goal is to get the lowest possible score. Keep score and continue to play more rounds. Each round begins with each student having 6 cards.

Progressing

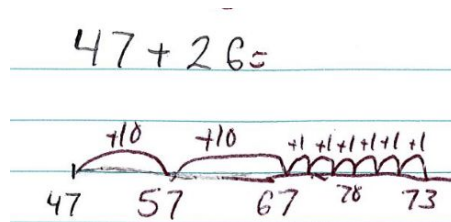
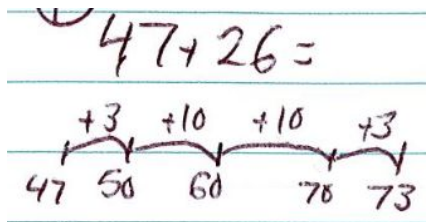
Students that are consistently scoring “Progressing” may have errors with telling time to the 5 minutes, occasional errors skip counting by 5s or 10s, and/or misconceptions related to counting objects in an array.

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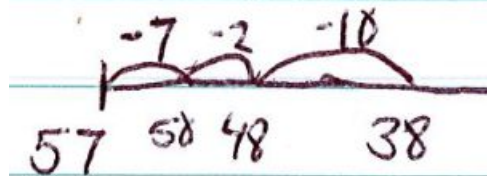
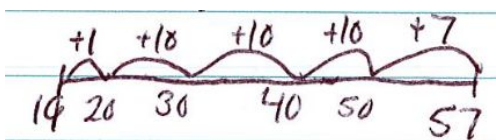
Next Steps:

For students who are progressing at consistently adding and subtracting within 100 (2.NBT.6, 2.NBT.7):

- pose tasks to students that allow them to use representations to support their work. These could include drawings of base ten blocks (flats, rods, and units), tens and ones charts, and adding and subtracting in parts using drawings or a number line.
- Adding in parts may look like one of the following strategies:
 - In the one on the left the student breaks 26 into $3+10+10+3$. The student first adds 47 and 3 to land on 50, a decade number (multiple of ten), then adds the 2 tens and then adds the last 3 to reach 73.
 - In the strategy on the right the student breaks 26 into $10+10+1+1+1+1+1+1$. They start by skip counting off the decade from 47 by adding 2 groups of 10 to land on 67. They then add 6 ones to reach 73.



- Subtracting in parts may look like one of the following strategies:
 - In the strategy on the left the student starts at the number being subtracted, 19, and adds up in parts to reach the start number, 57. The student adds 1 to land on 20, a decade number, and then adds tens to get into the 50s. The student then adds 7 to move from 50 to 57. Their answer is the sum of all of the numbers added $1+10+10+10+7 = 38$.
 - In the strategy on the right the number line is written backwards. The student started at 57 and subtracted in parts 19. 19 was broken into $7+2+10$. By subtracting 7 from 57 the student lands on 50, a decade number, and then subtracts 2 to reach 48 and then 10 to reach 38. The answer is 38, the number they land on.
 - As students work on adding and subtracting in parts students should be encouraged to think strategically about how much is added and subtracted. Landing on decade numbers and then adding or subtracting multiples of 10 and 100 makes the computational work easier for students.



- Consider the progression of the types of numbers in tasks:
 - two-digit number and a two-digit number that is a multiple of ten (e.g., $36+20$ or $36 - 20$)

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- two-digit number and a two-digit number where the sum or difference require the reorganizing/regrouping of tens and ones (e.g., $36 + 27$ or $36 - 27$)

For students who are progressing towards being able to determine whether they should add or subtract numbers in a word problem (2.OA.1, 2.NBT.5, 2.NBT.6):

- have students describe the action in the word problems. Avoid key words and using isolated words to determine which operation to use. Key words are distracting. Example: fewer does not always mean subtract. *Susan has 4 pens. She has 3 fewer pens than Tomika. How many pens does Tomika have?*
- use strategies such as part-part-whole mats or model drawing to support students' exploration of word problems. Example: There are some birds on the fence. If 15 birds leave and there are 18 birds still there, how many birds were first there?

Birds who left (18)	Birds still there (15)
Birds first there (18+15)	

For students who are progressing towards being able to determine 10 more or 10 less than a number (2.NBT.8)

- Pose tasks: Pull two number cards and make a two-digit number. What number is 10 more? What number is 10 less? Provide access to hundreds boards and/or base ten blocks to support students.

For students who are progressing towards fluency with addition and subtraction combinations within 20:

- Play fluency games: Game [file](#) from NCDPI
- Close to 15: Each student gets 6 cards. They use either 3 or 4 cards to get as close to 20 as possible. Their score is the difference between the sum of the cards and 20. The goal is to get the lowest possible score. Keep score and continue to play more rounds. Each round begins with each student having 6 cards.

Meets Expectation	Students that are consistently scoring “Meets Expectation” in this cluster are able to meet each standard consistently with evidence that they can solve tasks and explain their reasoning.
	<p><u>Next Steps:</u></p> <p>For students who are able to add and subtract numbers within 999 using models and drawings (2.NBT.6, 2.NBT.7):</p> <ul style="list-style-type: none"> ● Continue to pose three-digit tasks to students, including two-step problems. Students in Grade 2 should use manipulatives or make drawings for all problems. <p>For students who have demonstrated fluency with addition and subtraction combinations within 20:</p> <ul style="list-style-type: none"> ● Encourage students to think flexibly about combinations and think of combinations in multiple ways. Example: $7 + 5$ could be thought of $5+5+2$. $5+5 = 10$ then $10+2 = 12$. It

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	could also be thought of as $7+3+2$. $7+3 = 10$ then $10+2 = 12$. It could also be thought of as $6+5+1$. $6+5 = 11$, and $11+1 = 12$.
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