Grade 3

Unit	Unit Title	Lesson	Day
4.4	Computation – Fluency in Addition and Subtraction to 1,000	1	1 - 8

Lesson Focus

1. Standards Addressed	2. Content to be Learned	3. Mathematical Practices	4. Essential Question
3.NBT.2 Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or relationship between addition and subtraction.	•Use place value understanding, properties of operations, and/or relationship between addition and subtraction to perform multi-digit arithmetic.[4] [4]A range of algorithms may be used. •Recognize that it is sometimes necessary to compose or decompose tens and hundreds. •Explain why addition and subtraction strategies work. •Understanding how regrouping works and when it is appropriate. •Relate strategies to a written method. •Explain your strategy, understand the strategy of others. •"Trick" to subtract from multiples of 10 or 100! •Fluently add and subtract within 1000.	**SMP6** Attend to precision. **SMP7** Look for and make use of structure. **SMP8** Look for and express regularity in repeated reasoning.	•How can your understanding of addition help you with subtraction? •When is it appropriate to use regrouping? •What is the sum of (__ + __)? Explain how you know your answer is right. •What is the difference (__- __)? Explain how you found your answer. •Do you understand the strategy that "John" used? If yes, please explain it in your own words. •What strategy "trick" have you used to subtract from multiples of 10 or 100?
5. Prerequisite Knowledge	**6. Essential Vocabulary**	**7. Possible Misconceptions**	**8. Necessary Materials**
Add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or relationship between addition and subtraction.		Regrouping Subtracting from zero	***Strategy Sheet:*** Subtraction from Multiples of 10 or "9's+1" **K-5 Math Resource (revisit)** 3 Digit Addition Split ***Additional Worksheets:*** Subtraction w/Zeros Subtraction w/o Zeros Addition & Subtraction Word Problems

Instruction

9. Instruction Practices (What are the teachers doing)	10. Learning Practices (What are the students doing)
Teachers will guide students to fluently add and subtract within 1000 (3.NBT.2) and explain why addition and subtraction strategies work, using place value and the properties of operations. Teachers will become familiar with and share with the students the subtraction strategy when subtracting from multiples of 10 we call "9's + 1" (see Necessary Materials). Teachers will help students understand how regrouping works and when it is appropriate to use. They will encourage students to explain their strategy and to understand the strategies of others. It is important that teachers understand that "fluently" does not necessary mean fast and know from memory. Fluently means: "*Regardless of the particular method used, students should be able to explain their method, understand that many exist, and see the usefulness of methods that are efficient, accurate and general.*"	Students will fluently add and subtract within 1000 and explain why addition and subtraction strategies work, using place value and the properties of operations. They will understand why regrouping works and when it is appropriate to use. They will use the "9's + 1" subtraction strategy when subtracting from multiples of 10. They will be able to explain their strategies as will as understand the strategies of others. Students will become faster and more confident at knowing their math facts and with mental addition and subtraction, but this is not a requirement for them to be fluent. Being fluent means that, "*Regardless of the particular method used, students should be able to explain their method, understand that many exist, and see the usefulness of methods that are efficient, accurate and genera*