Avon Community School Corporation

Grade 4 Mathematics Unit 4 Report

2016-2017

Student Name:_____

In this unit, students learned how to:

- Compare multi-digit numbers and identify the value of the digits in such numbers
- Use the standard algorithms for addition and subtraction
- Measure length, distance, liquid volume, time, mass, and weight
- Convert measurements from one unit to another within the same system (e.g., centimeters to meters but not centimeters to inches)

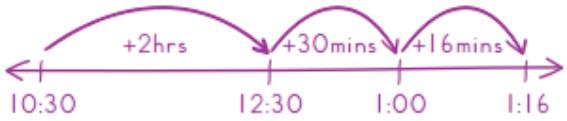
Unit 4 Preassessment Score: ____ /39

Well Below Basic	Below Basic	Basic	Proficient

Unit 4 Postassessment Score: ____ /39

Well Below Basic	Below Basic	Basic	Proficient

On the back are some examples of strategies and models used to develop these skills and concepts in this unit.

PROBLEM	COMMENTS
Gina and her mom are driving to see Gina's grandmother. They have to drive 703 miles altogether. So far they have driven 386 miles. How many more miles do they need to drive?  303 + 14 = 317 386 + 317 = 703 They need to drive 317 more miles.	The context of this problem lends itself nicely to a strategy that uses the number line to add up from the miles traveled so far to the total distance. Notice how the student added 14 to get to 400 and then saw that he could add 303 to get to 703. Students could certainly use the standard algorithm to arrive at the same answer. 6 9 1 7 0 3 − 3 8 6 3 1 7
Use an open number line to solve this problem. Manuel started a race at 10:30 am. He ran for 2 hours and 46 minutes. What time did he finish the race?  He finished at 1:16 pm.	The open number line can be a really useful tool for adding amounts of time. Students can use the number line to get to different landmark times (such as 12:30 and 1 in this example). Strategies like this help them keep track of the whole hours and the minutes.
Lance used the standard algorithm to solve the problem below. 564 + 837 13911 Did he use the algorithm correctly? Explain. No he didn't. He didn't carry when he added 4 and 7. He just wrote 11 and that messed up the place values. He should have done it like this. 1 1 564 + 837 1401	Students are expected to be able to use the algorithm fluently. Part of developing that fluency is understanding when and how the algorithm has been used incorrectly. Students can explain in a variety of ways how they know Lance used the algorithm incorrectly. Some might see that his answer must be wrong—and therefore that he did not use the algorithm correctly—because they estimated a reasonable answer (about 1400) and can see that Lance's final answer is quite unreasonable. Others might apply the algorithm and then compare their own work to Lance's.