Sequencing Rationale

The unit on numbers, and operations in base ten follow the progress of the Common Core. The Common Core is the mandated set of standards that teachers are to follow in the district, and in the state of Ohio. The sequence if topics are important because it lays the foundation for more challenging skills. This unit will take up to two quarters of the school year, and begin in August. Math is about practice, and the more opportunities students have to practice, the more proficient they will become. Students entering first grade should already have basic knowledge about numbers, counting to 120, and basic addition and subtraction.

Students will begin with the basic skill of counting to 120 in August. The teacher is able to assess understanding, and reteach if necessary. Students will spend one week on counting to 120, putting an emphasis on number order, number characters, and the transition from 100 to 101, 109 to 110, 110 to 111, and 119 to 120.

After the initial week spent on counting, the teacher will move into single digit addition. Addition is a foundational skill to subtraction, and double and triple digit addition and subtraction. The teacher will spend two week teaching students addition strategies such as counting on, using a number line, drawing pictures, and counting all. Ninety percent of students need to show proficiency before moving on.

By mid September students will begin single subtraction. The teacher will teach students strategies such as counting on, counting back, pictures, and using a number line. The teacher will spend two weeks on single digit subtraction. Ninety percent of teachers need to show proficiency before moving on.

In October students will start learning about place value. The teacher will begin with the ones and tens columns. Students will use base 10 blocks to help with understanding. Students

will learn about groups of 10s. After one week spent on ones and tens, students will begin to learn about the hundreds place. Students will begin to construct numbers made out of base 10 blocks and fill in the different place values on a place value placemat.

At the end of October students will begin comparing numbers, learning about the bigger than, less than, and equal to signs. Students will compare single, double, and triple digit numbers using the comparative signs.

In November students will begin to learn about double-digit addition. The teacher will begin with a review of single digit addition, but move into double-digit addition without regrouping. After students show proficiency, students will begin to learn about double digit addition with regrouping. Students will use base 10 blocks to assist with understanding. By the end of November students will begin to learn about triple digit addition, with regrouping in the tens column.

In December students will begin to learn about double-digit subtraction without regrouping. Students will learn to use base 10 blocks to increase understanding. Once students have shown proficiency in subtraction without regrouping they will move into subtraction with regrouping. Once students have a concrete understanding, they will move into triple digit subtraction with and without regrouping.