Sequencing Rationale

This unit consists of three main subunits. They deal with whole numbers, decimals, and fractions. It is a logical progression and is building on the progression of basic facts. Students have a preview of whole numbers during the 4th grade curriculum, therefore the introduction would be minimal and a great place to start.

The starting point will be to expand the place value of whole numbers. When students know place values it will be easy for them to compare whole numbers. Following this, the students will be given addition problems with three or more digits. The next step would be subtraction of whole numbers. These will be related as opposites. Approaching this as opposites and carefully using correct terms will make transitions in higher level math easier. Once students master addition and subtraction, they will move to multiplication. Multiplication can be introduces as a natural progression from addition. Then the opposite of multiplication is division. Once these are mastered estimation will be introduced as well as problem solving. This should insure a great base to begin the understanding of decimals.

The next subunit will be on decimals. The place values will be expanded to include decimal numbers. This will then allow as before the comparison of decimal numbers and allow for ordering them from either least to greatest or greatest to least. The decimal progression will flow just as whole number, from addition to subtraction to multiplication to division to estimating and problem solving.

The final subunit consist of many new concepts and will be the most time consuming. To begin this unit we will use fraction models both bars and circles. Upon understanding fractions as a model we will develop the method for converting decimals to fractions and fractions to decimals. Then we will begin to add fractions. We will start with fractions that have like denominators. Then lead into unlike denominators. This will progress nicely into subtraction of like then unlike denominators. Because some of the addition will present improper fractions, the concept of mixed numbers will be generated. Once that has come to light we will add and subtract them as well. Finally problem solving with everyday uses of fractions will take shape.