Sequencing Rationale

This decimal and fractions unit is designed with a simple logical sequencing in mind. Too often, it seems math curriculums separate related topics that could be better taught together in a single unit. For this reason, I believe a logical sequence provides the best design. A logical sequence gives students the opportunity to focus on one topic until it is mastered rather than being introduced to a topic and not seeing it again until several chapter later. Unit topics will always be reviewed throughout the year, but a consistent process of teaching the topic appears to the best practice. Decimals and fractions both represent parts of a whole, so it makes clear sense to incorporate both topics into one unit rather than teaching them separately.

I chose to begin with the Fractions subunit first because I believe that most students enter 6th grade with some substantial background knowledge of basic fractions. Based on the pre-assessment this would allow for instruction to begin with representing the various types of fractions such as basic fractions, mixed numbers, and improper fractions. Students would then continue to scaffold their learning of fractions by simplifying fractions using the greatest common factor and comparing and ordering fractions. They would then find equivalent fractions by finding common denominators. Finally students will apply all of the learned skills by completing mathematical operations involving basic fractions, mixed numbers, and improper fractions.

The fractions subunit will be followed by the decimals subunit. The decimals subunit is designed similarly to the fractions subunit as in each skill builds of the previous. The decimals subunit though begins at a slightly lower level than the fractions subunit due to a lower level of previous knowledge from previous grades. Therefore, the decimals subunit will begin by reading decimal numbers using place value and be followed by students representing decimals in three forms, standard form, word form, and expanded form. Students will then work to compare decimals, determine equivalent decimals, and calculate math problems involving decimals.

Both of these subunits are appropriate for student because of the real life context that decimals and fractions can and are applied. Students will contextually apply the skills and content learned in this unit when cooking, measuring, and shopping, among countless real life situations. This is a unit that students will easily be able to identify the value that it has to their own lives and how they will apply the skills on a daily basis.