**5th Grade Math: Sequencing Rationale**

The 5th grade math curriculum is structured in a way where the concepts included are able to build off one another. For example, many of the concepts in the “Measurement” unit are elaborated upon in the “Geometry & Spatial Sense” unit. The units are best taught in this most logical order because it serves as a way to best fit student understanding.

The initial subunit “Number Sense & Operations” builds off of basic math skills that should have taught in previous grades. This unit adds more complex rules and properties to simple operations that include addition, subtraction, multiplication and division. For example, to turn a number that is in the form of a fraction into a decimal, one must perform the division operation. All in all, this unit provides a strong basis that is used all throughout the rest of the curriculum.

The second subunit “Measurement,” involves concepts taught in the “Number Sense & Operations.” However, the “Measurement” unit uses the concepts to add and calculate the measurements of different angles, perimeters, areas, surfaces, and volumes. This unit will help students recognize the importance of measurement in everyday activities.

The third subunit is titled “Geometry & Spatial Sense.” This unit builds off of the “Measurement” unit because it identifies and describes the definitions of the angles and lines (used for measuring) in that unit. This unit presents more abstract concepts to students because it elaborates on ideas like the coordinate system and the number line. However, more concrete ideas are touched upon when concepts like “nets” are taught in this unit as well. This unit provides a nice foundation for future abstract ideas that will be presented later on in their middle school and high school academic careers.

The next subunit “Algebra” give students a break from the ideas associated with the “Geometry & Spatial Sense” unit and takes them into a world of equations, unknown numbers, and inequalities. This unit may seem out of place in this curriculum, however, it serves as a stepping stone into what will be taught to students in their upcoming middle school and high school Algebra courses. Many basic computations will be made such as in the “Number Sense & Operations” unit, however they will include more detailed steps in order to find patterns and the unknown quantities of the involved variables.

The final subunit “Data Analysis & Probability” unit teaches students how to analyze all the data that can be found using the ideas associated with the four previous units. For examples, it teaches students how to compute and predict ratios, probabilities, and possible outcomes. This unit also entails teaching students how to select appropriate graphs to analyze certain information. This type of material is not only useful for math, but can also be used in other content areas such as science.