Sequencing Rationale

The sequence of the material taught is to help the students understand individual pieces at a time, while bringing the whole picture together at the end. Using subunits will help to make sure the students understand one piece to the puzzle before adding more pieces.

The subunit, how to determine if linear relationship exists, is the first piece. Introducing linear relationships allows the students to become familiar with the vocabulary while experimenting with data to allow them to see the connection to real life. This subunit also gives the students a chance to explore using graphs, tables and equations to determine if the linear relationship exists. Making sure the students understand this piece will lead them to success for the rest of the unit.

The second subunit, tools to show linear relationships, allows the students to use data collected and construct their own graphs, tables and equations to determine if a linear relationship exists. Not only will students explore construction of graphs and tables but also determine solutions to equations. Students will compare how to find solutions of equations by using tables and/or graphs. This subunit is another building block to demonstrate the tools to further their understanding of linear relationships.

The third subunit, connections, engages the students to take their knowledge and demonstrate it is various ways. Students are expected to explain how the starting point and y-intercept are the same vocabulary word. During this subunit, being able to identify the key vocabulary using any of the tools given is an important part of success. Students are also given real life situations and are asked to demonstrate their ability through the tool of their choice to determine an answer.

The final subunit, solving, asks the students to pull all their “tools” together to determine a final answer. Given real life situations, students must determine what information is given when two lines intersect. Students are asked to explore different strategies to solve linear equations. Their strategies must also demonstrate they understand the meaning of the property of equality or balancing. This topic is key to student success to being able to find solutions to a problem. The students will be engaged throughout the unit by integrating their personal walking rates or their walk-a-thon pledge plans. Using all the different methods and tools throughout this unit, students will be able to solve real life problems by using a variety of strategies.