

Data Modeling supports student development of conceptual understanding and problem solving ability as well as college and career readiness through utilization of the Common Core Standards for Mathematical Practice. Students are required to make sense of problems and persevere in solving them, reason abstractly and quantitatively, and construct viable arguments and critique the reasoning of others throughout all six units. A specific example includes the Unit 3: Modeling Data Using Linear Functions unit project which requires students to reason abstractly and quantitatively by determining the line of best fit for student selected data. Students then justify their groups work, demonstrate critical thinking by analyzing and critiquing the reasoning of others before and after student presentations. Units 3-6 emphasize modeling as a prominent theme of the unit with diverse scenarios and contexts. Students will use appropriate modes of technology (calculators, spreadsheets, and tablets/computers) throughout all units as evidenced by Unit 2 Interpreting Data to Make Decisions.

Additionally, throughout the course students will be thinking about different patterns in data and how that applies to many real world data sets. They will need to analyze the patterns they see to be able to pick an appropriate model. Information is presented using tables, graphs, words, and equations and students learn to move from one mode of presentations to another. As they discuss the meaning in context, students will need to make decisions about what makes sense in the context of the data.