Unit Title	Key Concepts	Related Concepts	Global Context	Statement of Inquiry	Approaches to Learning	Objectives	Content - Summary of Unit
Unit 1: Linear Relationships	Form	Change, Systems	Scientific and technical innovation Mathematical puzzles	Change and systems impact form, through scientific and technical innovation.	Thinking	A: Knowing and understanding: i, ii,iii D: Applying mathematics in real-life contexts; i, ii, iii, iv, v	This unit develops scholars understanding of writing and solving equations and inequalities to include equations and inequalities that require multiple steps to solve, as well as those that have variables on both sides of the equation or inequality. Scholars analyze descriptions of lines and write equations in different forms. As well as lines and linear equations as they learn methods to write, graph, and transform linear functions. Your student will also learn about absolute value functions and their graphs.
Unit 2: Relationships Between Quantities	Relationships	Space	Orientation in space and time Boundaries	Space and justification impact relationships improving boundaries.	Communication	B: Investigating Patterns: i, ii, iii C: Communicating: i, ii, iii, iv, v	In this unit, scholars will focus on extending their understanding of linear equations and inequalities to systems of linear equations and inequalities. Scholars learn methods to solve systems of linear equations and inequalities and identify when each solution method is most useful. Scholars will focus on extending their knowledge of functions to include the exponential function. Scholars learn to identify, write, and graph exponential functions, and use exponential functions to model real-world situations and make predictions.
Unit 3: Exponential & Quadratic Relationships	Relationships	Models, Representation	Identities and relationships Mathematical identities, modelling versus reality	Decision making can be improved by using a model to represent relationships through exploring mathematical identities.	Thinking	B: Investigating Patterns: i, ii, iii D: Applying mathematics in real-life contexts; i, ii, iii, iv, v	In this unit, scholars will focus on exploring their knowledge of quadratic functions. Students learn to solve quadratic equations using tables, graphs, and factoring. Students also solve quadratic equations using square roots, completing the square, and the quadratic formula. Scholars will extend their knowledge of functions to include radical functions, such as square root and cube root functions. Scholars Identify the key features of the graphs of radical and cubic functions. They also learn to transform functions, combine functions, and divide functions.
Unit 4: Application & Problem Solving	Logic	Representation, Simplification	Scientific and technical innovation Processes and solutions	Critical thinking involves representing and simplifying concepts to apply logic and fuel processes and solutions	Self-management	A: Knowing and understanding: i, ii,iii C: Communicating: i, ii, iii, iv, v	In this unit, your scholars will focus on developing their knowledge of line plots, box plots, and histograms. Scholars identify that the residuals of a scatter plot and margins of error are used to compare a specific value to other values. Scholars understand how to find joint, marginal, and relative frequencies, and they learn methods to interpret data displays and create inferences based on the data. Scholars preparing for EOC exam.