Functions: Key Concepts

 One of the main goals for all functions is for the students to understand that the graph, table, and rule represent the same thing.

I. Linear Functions

 A. Dependent and Independent variables

 B. Function Rules

 C. Making Tables

 D. Making Graphs

 E. Vectors

 F. Rates of Change

 G. The definition of a Function – Only one output for every input

 H. Domain and Range

II. Quadratic Functions

 A. Quadratic Equation – ax2 + bx + c

 B. Exponents

 C. Square Root

 D. Quadratic Function – Graphing, standard form, properties

 E. Parabolic Motion

 F. Simplifying Radicals

 G. Discriminate

 H. Real world Applications – word problems

III. Exponential Functions

 A. Exponents -

 B. Exponential Functions – graphing, standard form, properties

 C. Exponential Growth

 D. Exponential Decay

 E. Base

 F. Power

 G. Growth Factor

 H. Initial Amount

 I. Scientific Notation