Clarity for Learning	
Standard KY.HS.F.1 (Algebra 2) Understand properties and key features of functions and the different ways functions can be represented.	
Concepts (Nouns) function domain range input output function notation	**Skills (Verbs)** evaluate interpret relate compare

Learning Progressions

Prerequisites:

- Solve equations and inequalities
- Piecewise functions
- Transform linear functions
- Absolute value

Grade Level Skills:

- When a function models a relationship between two quantities use a verbal description and identify key features of the graph.
- Determine the domain of a function.
- Compare two functions algebraically, numerically, graphically, verbally.

Learning Intentions (I am learning to...)	Success Criteria (I know I'm successful when...)

| Understand the properties and key features of functions. | I can write the domain and range of functions using set-builder and interval notations. I can identify key features of a graph of a quadratic, polynomial, exponential, logarithmic function, including x-intercepts, y-intercepts, positive and negative intervals, and areas where the function is increasing or decreasing. I can graph a transformed function by identifying the effect on the graph of replacing $f(x)$ by $f(x) + k$, $kf(x)$, $f(kx)$, and $f(x + k)$ for specific values of k. I can write an equation of a transformed function from a graph. I can relate the domain of a function to its graph and the real-world situation it describes. |