

Ascension Parish Comprehensive Curriculum

Concept Correlations

Unit 8: Exponents, Exponential Functions, Nonlinear Graphs, Scientific Notation, and Radicals

Time Frame: Regular – 4 weeks

Block – 2 weeks

Big Picture: (Taken from Unit Description and Student Understanding)

- This unit is an introduction to exponential functions and their graphs.
- Special emphasis is given to examining their rate of change relative to that of linear equations.
- Focus is on the real-life applications of exponential growth and decay.
- Laws of exponents are introduced as well as the simplification of monomial expressions.
- Scientific notation is reviewed and basic operations with numbers in scientific notation are performed.
- Students need to be proficient in simplifying radicals.
- Students need to develop the understanding of exponential growth and its relationship to repeated multiplications, rather than additions, and its relationship to exponents and radicals.
- Students should be able to understand, recognize, graph, and write symbolic representations for simple exponential relationships of the form $a \cdot b^x$.
- They should be able to evaluate and describe exponential changes in a sequence by citing the rules involved.

Guiding Questions	Activities The essential activities are denoted by an asterisk.	GLEs	Documented GLEs		
			GLES Bloom's Level	GLES	Date and Method of Assessment
			Evaluate and write numerical expressions involving integer exponents (N-2-H)	2	