

New Braunfels ISD Year at a Glance 2021-22		7th Grade Accelerated Mathematics							
Essential Resources		District Resources to Teach 100% of the TEKS located in the NBISD ECourse Resources, 7th Grade Online Textbook Link to TEKS: https://tea.texas.gov/curriculum/teks/							
Spiraled TEKS		Process Skills Embedded in All Lessons: 7.1(A) apply mathematics to problems arising in everyday life, society, and the workplace 7.1(B) use a problem solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem solving process and the reasonableness of the solution 7.1(C) select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems							
Timeline		1st Quarter Aug 23 - Oct 15, 2021 (39 Instructional Days)				2nd Quarter Oct 19 - Dec 17, 2021 (40 Days)			
Unit		Unit 01 Numbers and Operations	Unit 02 Proportional Reasoning (Part 1)	Unit 03 Similarity and Dilations		Unit 04 Equations and Inequalities	Unit 05 Linear Relationships		Unit 06 Semester Review and Testing
Big Idea	Current Grade	Classify sets and subsets of real numbers using a visual representation, Add, Subtract, multiply, and divide rational numbers in numerical and real world situation. Use the order of operations to simplify numeric expressions including expressions which are quotients and expressions containing exponents	Calculate unit rates, solve problems involving ratios and rates, convert between measurement systems, solve direct variation problems, and distinguish between proportional and non-proportional relationships	Generalize the critical attributes of similarity, solve mathematical and real world problems involving similar shape and scale drawings, understand that the ratio of corresponding sides of similar shapes are proportional, and use an algebraic representation to explain the effect of a given positive rational scale factor applied to two-dimensional figures on a coordinate plane with the origin as its center of dilation. Students should also be able to model the effect on linear and area measurements of dilated two-dimensional figures.		Determine if a given value makes an equation or inequality true. Model and solve 2 step equations and inequalities. Model and solve equations and inequalities with variables on both sides. Write and solve equations using geometric concepts, including the sum of the angles in a triangle, and angle relationships.	Students will understand that patterns provide insights into possible relationships. Students will understand that functions with a constant rate of change can be described by an equation in the form of $y = mx + b$ where m represents the constant rate of change and b represents the y-intercept.		All Semester 1 TEKS
	TEKS	Current Grade	7.2A, 7.3AB, 8.2A	7.4BD(no percent), 7.4E, 8.5 EH Spiraled TEKS: 7.3B	7.5AC, 8.3AC, 8.10D Spiraled: 7.3B, 7.4D, 8.5E		7.10ABC, 7.11AB, 8.8 C	7.4AC, 7.7A, 8.4C, 8.5ACFI, 8.9A	
Timeline		3rd Quarter Jan 4 - March 11, 2022 48 Instructional Days				4th Quarter March 21 - May 26, 2022 (48 Instructional Days)			
Unit		Unit 07 Percent	Unit 08 Probability	Unit 09 Angles and 2D Shapes		Unit 10 Volume and Surface Area	Unit 11 Data and Statistics	Unit 12 Financial Literacy	Unit 13 Assessment and Algebra Readiness
Big Idea	Current Grade	Solve problems involving percent increase and decrease, calculate the sales tax for a given purchase, calculate and compare simple and compound interest, analyze and compare monetary incentives including sales and coupons	Represent sample spaces for simple and compound events, make predictions and determine solutions using theoretical probability for simple and compound events, find the probability of a simple event and its complement and describe the relationship between the two, determine experimental and theoretical probability using data and sample spaces	Students will use informal arguments to establish facts about the angle sum and exterior angle of triangles, the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. Students will write and solve equations using geometry concepts, including the sum of the angles in a triangle, and angle relationships. Students will find the circumference and area of circles. Students will determine the area of composite figures containing combinations of rectangles, squares, parallelograms, trapezoids, triangles, semicircles, and quarter circles.		Solve problems involving the volume of prisms and pyramids, solve problems involving the lateral surface area of prisms and pyramids	Solve problems involving data represented in bar graphs, dot plots, and circle graphs. Compare two groups of numerical data, use data from a random sample to make an inference about a population, compare two populations based on data. Construct a scatter plot and determine whether the data is linear, non-linear, or no association. Use a trend line that approximates the relationship between two variables	Identify the components of a personal budget, create and organize a family budget estimator. Calculate and compare simple interest and compound interest earnings.	Use models and diagrams to explain the Pythagorean theorem, use the Pythagorean theorem and its converse to solve problems, determine the distance between two points on a coordinate plane using the Pythagorean theorem. Approximate the value of an irrational number. Convert between standard decimal notation and scientific notation.
	TEKS	Current Grade	7.4D, 7.13AF	7.6ACDEHI	7.11C, 7.5B, 7.9BC, 8.8D		7.9AD, 8.6A, 8.7A	7.6G, 7.12ABC, 8.5D, 8.11A	