

Algebra Readiness Summer Bridge Unit, Topic, and TEKS Alignment

Activity	Topic(s)	TEKS
Unit 1: "Survival" Set Up		
Survival Guidelines		5.4 B Represent and solve multi-step problems involving the four operations with whole numbers using equations with a letter standing for the unknown quantity; 5.4 H Represent and solve problems related to perimeter and/or area and related to volume. 6.7 B Distinguish between expressions and equations verbally, numerically, and algebraically 6.8 D Determine solutions for problems involving the area of rectangles, parallelograms, trapezoids, and triangles and volume of right rectangular prisms where dimensions are positive rational numbers.
Vocabulary: The Importance of Official Math Language		
Equation Name Plate		
Tribal Selection		
The Interactive Notebook	Structure of INB	
Tribe Flag		
Word Break	Review of fractional parts	
Costa's Levels of Thinking		
Costa's Card Sort	Identifying levels of questions	
Brain Break: Stand Up and Be Counted	Team builder	
Tribal Challenge Calendar Math	Collaborative problem-solving	
Exit Ticket	Reflections, remaining questions	
Unit 2 - Rational Numbers: Fractions		
Warm-Up, Unit 2		6.5 C Use equivalent fractions, decimals, and percents to show equal parts of the same whole 7.3 A Add, subtract, multiply, and divide rational numbers fluently 7.3 B Apply and extend previous understandings of operations to solve problems using addition, subtraction, multiplication, and division of rational numbers.
Program Goals		
Acrostic You	Team builder	
Vocabulary	Review of vocabulary	
Fractions: Cornell Notes		
Birthday Human Number Line Challenge	Team builder	
Teach and Go, Part 1	Demonstrate understanding of operations and concepts	
Tribal Challenge: Multiplication Team Relay	Fun review of multiplication facts	
Teach and Go, Part 2	Student-to-student teaching	
Summarization	Writing summaries	
Tribal Challenge: 5 Minute Madness	Rational number challenge	
The Parking Lot	Questions for the teacher	
Unit 3 - Rational Numbers: Square Roots		
Warm-Up, Unit 3		6.2 B Identify a number, its opposite, and its absolute value; 6.2 C Locate, compare, and order integers and rational numbers using a number line 6.5 C Use equivalent fractions, decimals, and percents to show equal parts of the same whole. 8.2 B Approximate the value of an irrational number, including π and square roots of numbers less than 225, and locate that rational number approximation on a number line
Domino Conversion Match Up	Fractions-decimals-percents	
Modeling Squares and Square Roots		
Word Hunt	Interactive solving integer problems	
Tribal Challenge: Square Roots and the Number Line		
Reflection: Squares and Square Roots		
SWAT Vocabulary Game		
Inequalities Cornell Notes		
Human Number Line (My number is)	Operations with integers	
Team Challenge: Crossing the River	Team builder	
Unit 4 - Rational Numbers: Integers		
Warm-Up, Unit 4		6.3 C Represent integer operations with concrete models and connect the actions with the models to standardized algorithms; 6.3 D Add, subtract, multiply, and divide integers fluently 6.3 E Multiply and divide positive rational numbers fluently 6.7 A Generate equivalent numerical expressions using order of operations, including whole number exponents and prime factorization; 7.3 A Add, subtract, multiply, and divide rational numbers fluently
Quickwrite: Integers	"Brain dump" on integers	
Zero Pair	Additive inverse, absolute values	
Rules to Tools	Conceptualization of zero pairs	
Brain Break: Act It Out	Team builder	
Who's the Greatest?	Integer operations card games	
Integer Train/Relay Game	Integer operations	
Tribal Challenge: SWAT Take 2-Integers	Vocabulary involving integers	
Reflection: Learning Log		

Unit 5 - Algebraic Concepts: Transformations and Expressions		
Warm-Up, Unit 5		<p>6.7 A Generate equivalent numerical expressions using order of operations, including whole number exponents and prime factorization;</p> <p>6.7 D Generate equivalent expressions using the properties of operations: inverse, identity, commutative, associative, and distributive properties</p> <p>8.10 A Generalize the properties of orientation and congruence of rotations, reflections, translations, and dilations of two-dimensional shapes on a coordinate plane</p> <p>8.10 B Differentiate between transformations that preserve congruence and those that do not</p> <p>8.10 C Explain the effect of translations, reflections over the x- or y-axis, and rotations limited to 90°, 180°, 270°, and 360° as applied to two-dimensional shapes on a coordinate plane using an algebraic representation</p>
Transformation Exploration Part 1 SLAP	Congruence and similarity Integer card games	
Transformation Exploration Part 2	Congruence and similarity, student presentations and explanations	
Transformation Exploration Sort and Summary	Summary activity	
Expression-Problem Match		
Substitution Crossword	Algebraic crossword puzzle	
See Run Do	Algebra equations and vocabulary	
Exit Ticket		
Unit 6 - Algebraic Concepts: Equations		
Warm-Up, Unit 6		<p>6.7 C Determine if two expressions are equivalent using concrete models, pictorial models, and algebraic representations</p> <p>6.7 D Generate equivalent expressions using the properties of operations: inverse, identity, commutative, associative, and distributive properties</p> <p>6.9 A Write one-variable, one-step equations and inequalities to represent constraints or conditions within problems</p> <p>6.10 A Model and solve one-variable, one-step equations and inequalities that represent problems, including geometric concepts</p> <p>7.10 A Write one-variable, two-step equations and inequalities to represent constraints or conditions within problems</p> <p>7.11 A Model and solve one-variable, two-step equations and inequalities</p> <p>8.8 A Write one-variable equations or inequalities with variables on both sides that represent problems using rational numbers and constants</p> <p>8.8 C Model and solve one-variable equations with variables on both sides of the equal sign that represent mathematical and real-world problems using rational number coefficients and constants</p>
Combining Like Terms	Interactive discovery activity	
Distributive Property	Interactive discovery activity	
Brain Break: Last Detail	Team builder; attention to detail	
Independent Practice	Like terms; distributive property	
What's Your Fav, Part 1	Word problems → algebraic equations	
Modeling Solving Equations	Modeling with manipulatives	
Tribal Challenge: Balance	Graphics → algebraic equations	
What's Your Fav, Part 2	Solving equations	

Units 14 and 15 - Test Review		
Warm -Up, Units 14 and 15		All TEKS previously listed
Gallery Walk Exam Review	Content review for end-of-bridge exam; gallery walk format	
End-of-Bridge Exam		
Money Challenge (optional)	Challenge problems	
Bridge Commercial (optional)		
Thank-you Note (optional)		
Partner to Partner (optional)	Team builder	
Hand Jive (optional)	Team builder	
Brain Break: Funny Fruits and Vegetables (optional)	Team builder	
Missing Link Puzzle Page (optional)	Review challenge	
Celebrate Good Times (optional)		