Math for 7th Grade Summer Bridge Unit, Topic, and TEKS Alignment

Activity	Topic(s)	TEKS
Unit 1: "Survival" Set Up		
Survival Guidelines		**6.4 F** Represent benchmark fractions and percents such as 1%, 10%, 25%, 33 1/3%, and multiples of these values using 10 by 10 grids, strip diagrams, number lines, and numbers **6.5 C** Use equivalent fractions, decimals, and percents to show equal parts of the same whole
Acrostic You	Team builder	
Guild Selection		
Guild Team Banner		
Interactive Notebook	Structure of INB	
Program Goals		
Guild Challenge: Calendar Math	Collaborative problem-solving	
Costa's Levels of Thinking		
Fraction-Decimal-Percent Models		
Guild Challenge: Fraction-Decimal-Percent Match-Up		
The Importance of Official Math Language		
Exit Ticket	Reflections, remaining questions	
Unit 2: Ratios and Proportional Reasoning		
Warm-Up, Unit 2		**6.2C** Locate, compare, and order integers and rational numbers using a number line **6.4 C** Give examples of ratios as multiplicative comparisons of two quantities describing the same attribute **6.5 C** Use equivalent fractions, decimals, and percents to show equal parts of the same whole **7.4 D** Solve problems involving ratios, rates, and percents, including multi-step problems involving percent increase and percent decrease, and financial literacy problems
Word Break	Review of fractional parts	
Domino Conversion Match-Up	Fractions-decimals-percent	
Race to Equivalence	Conceptual understanding of fraction equivalence	
Compare and Order Rational Numbers: Focused Notes		
Snowball Fight: Vocabulary Activity	Fun vocab activity	
Guild Challenge: Triple Match	Fraction-decimal-percent	
Ratio and Proportion Review: Focused Notes		
Guild Challenge: Yucky Proportion Application	Ratio and proportion	
Guild Challenge: Order on the Line	Ordering fractions	
3-2-1 Reflection	Reflection on equivalence	
Unit 3: Rational Number Operations and Concepts, Fractions		
Warm-Up, Unit 3		**6.3 E** Multiply and divide positive rational numbers fluently **7.3 A** Add, subtract, multiply, and divide rational numbers fluently
Addition and Subtraction of Fractions: Focused Notes		
Guild Challenge: 10-Minute Madness	Operations with fractions	
Guild Challenge: Fraction Train	Solving fraction problems	
Guild Challenge: Multiplication Team Relay	Fun review of multiplication facts	
Multiplication of Fractions Using Models		
Brain Break: Charades Vocabulary Activity		
Guild Challenge: What's the Problem?	Numerical problems to word problems	
Math Task: Cups of Chocolate Chips	Application of fraction operations	
Unit 4: Rational Number Operations and Concepts, Fractions		
Warm-Up, Unit 4		**6.3 E** Multiply and divide positive rational numbers fluently **7.3 A** Add, subtract, multiply, and divide rational numbers fluently
Division of Fractions: What Does It Mean?		
Putting It All Together	Operations with fractions	
Teach and Go Activity, Part 1	Demonstrate understanding of operations and concepts	
SWAT Vocabulary Game		
Teach and Go Activity, Part 2	Student-to-student teaching	
Summarization	Writing summaries	
Fraction Operations BINGO		
Guild Challenge: 10-Minute Madness	Fraction operations	
Unit 5: Rational Number Operations & Concepts, Integers		
Warm-up, Unit 5		**6.3 C** Represent integer operations with concrete models and connect the actions with the models to standardized algorithms **6.3 E** Multiply and divide positive rational numbers fluently **7.3 A** Add, subtract, multiply, and divide rational numbers fluently
Everything Has Its Place	Place value, prime numbers	
Decimal Partner Review	Decimals ↔ words	
Add, Subtract, Multiply, and Divide Decimals: Folding Organizer		
Decimal Scavenger Hunt	Interactive solving decimal problems	
Guild Challenge: Decimals	Solving decimal problems	
Snake and Humans Story Time	(+) and (-) integers	
Mini Lesson Using 2- Color Counters	Integer problems	
Add and Subtract Integers: Focused Notes		
Integer Conga Line	Oral explanations of integer rules	
Snakes and Humans Integer Practice	Operations and number lines	
Reflection: Decimals and Integers		
Unit 6: Rational Number Operations & Concepts, Integers		
Warm-up Unit 6		**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
Human Number Line	Operations with integers	
Integer Card Game		
Multiply and Divide Integers: Modeling and Rules		
Brain Break: Choice	Team builder	
Integer Practice	(+) and (-) integers	
Who's the Greatest?	Integer operations card games	

Integer Relay Race	(+) and (-) integers	
Reflection: Learning Log		
Unit 7: Rational Number Operations & Concepts, Order of Operations		
Warm-up Unit 7		**6.3 D** Add, subtract, multiply, and divide integers 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
Back Me Up: Vocabulary	Vocabulary game	
Order of Operations Review: Focused Notes		
Does Your Guild Operate with Order?	Explaining steps in operations	
Word Hunt	Interactive solving integer problems	
Guild Challenge: Think, Think, Think!	Critical thinking; justifications	
SLAP	Integer operations	
Brain Break: Human Knot	Team builder	
Guild Challenge: Order of Operations Trasketball	Multistep integer problems (game)	
Guild Challenge: Mistaken Mike	Error analysis	
Unit 8: Algebraic Concepts, Expressions		
Unit Plan		**6.7 A** Generate equivalent numerical expressions using order of operations, including whole number exponents and prime factorization **6.7 B** Distinguish between expressions and equations verbally, numerically, and algebraically **6.10 A** Model and solve one-variable, one-step equations and inequalities that represent problems, including geometric concepts **7.11 A** Model and solve one-variable, two-step equations and inequalities
Warm-up for unit 8		
Writing Algebraic Expressions: Focused Notes		
Lost in Translation	Matching algebra verbal and symbolic and expressions	
Expression-Problem Match		
Substitution Crossword	Algebraic crossword puzzle	
Reflection: Snowball Fight	Interactive translation of verbal and symbolic expressions	
Reverse Frayer Vocabulary Activity	Representing math vocabulary	
Equations with Cups and Counters	Alg equations with manipulatives	
Exit Ticket	Reflections, remaining questions	
Unit 9: Algebraic Concepts, Equations		
Algebra One- and Two-Step Equations: Focused Notes		**6.9 B** Represent solutions for one-variable, one-step equations and inequalities on number lines **6.10 A** Model and solve one-variable, one-step equations and inequalities that represent problems, including geometric concepts **6.11** The student applies mathematical process standards to use coordinate geometry to identify locations on a plane. The student is expected to graph points in all four quadrants using ordered pairs of rational numbers.
Guild Challenge: Equation Train	Solve equations using substitution	
Human Number Line	Rational numbers	
Algebra One- and Two-Step Inequalities: Focused Notes		
Human Inequalities Graphing	Interactive, physical representation of inequalities	
Coordinate Graphing Review		
Coordinate Graphing SWAT	Graphing review game	
Walking on Sunshine: Coordinate Graphing Picture	Practice on graphing	**7.11 A** Model and solve one-variable, two-step equations and inequalities
Reflection: Algebraic Equations	Oral explanations of equations	
Unit 10: Algebraic Concepts, Proportionality		
Warm-Up, Unit 10		**6.4 A** Compare two rules verbally, numerically, graphically, and symbolically in the form of y = ax or y = x + a in order to differentiate between additive and multiplicative relationships **6.6 A** Identify independent and dependent quantities from tables and graphs **6.6 B** Write an equation that represents the relationship between independent and dependent quantities from a table **6.6 C** Represent a given situation using verbal descriptions, tables, graphs, and equations in the form y = kx or y = x + b **6.10 A** Model and solve one-variable, one-step equations and inequalities that represent problems, including geometric concepts **7.4 A** Represent constant rates of change in mathematical and real- world problems given pictorial, tabular, verbal, numeric, graphical, and algebraic representations, including d = rt **7.7 A** Expressions, equations, and relationships. The student applies mathematical process standards to represent linear relationships using multiple representations. The student is expected to represent linear relationships using verbal descriptions, tables, graphs, and equations that simplify to the form y = mx + b. **7.11 A** Model and solve one-variable, two-step equations and inequalities
Who Dunnit Murder Mystery Game	Solving algebraic equations	
Set the Table, Part 1	Rate of change; proportional relationships	
Brain Break: Crazy Strips	Team builder	
Set the Table, Part 2	Graphical proportional and non-proportional relationships	
4 Corners	Multiple representations of algebraic equations	
Guild Challenge: 4 Corners		
Unit 11: Algebraic Concepts, Measurement		
Warm-up, Unit 11		**6.8 B** Model area formulas for parallelograms, trapezoids, and triangles by decomposing and rearranging parts of these shapes **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 **6.11** The student applies mathematical process standards to use coordinate geometry to identify locations on a plane. The student is expected to graph points in all four quadrants using ordered pairs of rational numbers.
From Here to There: Vocabulary Review		
Guild Battleship™	Coordinate graphing game	
Measurement and Formulas People Hunt: Give One, Get One	Measurement conversions and formulas	
I See Shapes and Area	Review of 2-D figures	
Decomposing Area	Area of polygons	
Brain Break: Last Detail	Team builder; attention to detail	
Finding Perimeter and Area		
Reflection: Measurements		
Unit 12: Algebraic Concepts, Measurement		

Warm-up Unit 12		**6.8 C** Write equations that represent problems related to the area of rectangles, parallelograms, trapezoids, and triangles and volume of right rectangular prisms where dimensions are positive rational numbers **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
Measurement Stations	Polygons; area, perimeter	
Area and Perimeter Super Shapes	Polygons; area, perimeter	
Guild Challenge: Mr. Math's Fantastic Yard	Polygons; compound shapes	
SWAT Formulas & Symbols	Review game	
Exploring Volume (Philosophical Chairs)	Volume and area of rectangular prism; structured class debate	
Guild Challenge: What's Your Grind?	Volume and surface area	
Exit Ticket: 3-D Measurements	Reflection on measurements	
Unit 13: Summer Bridge Review		
Warm-up, Unit 13		**6.5 C** Use equivalent fractions, decimals, and percents to show equal parts of the same whole **6.8 B** Model area formulas for parallelograms, trapezoids, and triangles by decomposing and rearranging parts of these shapes **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 **7.3 A** Add, subtract, multiply, and divide rational numbers fluently **7.11 A** Model and solve one-variable, two-step equations and inequalities
Hot Seat	Vocabulary game	
Horse Race: Interactive Notebook Review	Review of program content	
Brain break: Scrabble Challenge	Team builder	
Around the World	Math problem competition	
Partner to Partner (optional)	Team builder	
Puzzling Problems	Math problem competition	
Project Polygon	Measurement design project	
Vocabulary Relay Race (optional)		
Units 14 and 15: Closure and End-of-Bridge Exam		
Warm-Up, Unit 14		All TEKS previously listed
Treasure Hunt	Content review: game format	
End of Bridge Exam		
Warm-Up, Unit 15 Money Challenge		
Bridge Commercial (optional)		
Brain Break- Group Juggle (optional)	Team builder	
Thank-you Note (optional)		
Hand Jive (optional)	Team builder	
Learning Log (optional)		
Brain Break: Funny Fruits and Vegetables (optional)	Team builder	
Missing Link Puzzle Page (optional)	Review challenge	
Celebrate Good Times (optional)		