Grade 7 Math

Correlation Guide

correlation guide overview

This correlation guide is designed to identify lead4ward mathmark activities that align with Bluebonnet Learning Modules and Topics. Brief descriptions, including activity type and instructional delivery method are also provided.

Note: mathmark activities were designed for TEKS Clusters (big concepts) that typically require additional time and focus in the curriculum; therefore, some Bluebonnet Modules or topics may not have mathmark activities listed.

Activity Type
One or more ways the activity could be used in instruction

Delivery
instructional delivery method applicable to activity

Bluebonnet Topic

mathmark Cluster and Subcluster
may include general topic for aligned acitivities

mathmark Activity Title Student Expectations	**mathmark Activity Topic**	**Type**			**Delivery**		
		new learning	intervention	practice	teacher-facilitated	small groups	stations
Bluebonnet Topic 1: Proportional Relationships							
TEKS Cluster: Proportional Reasoning **TEKS Subcluster**: Ratios/Rates/Percentages							
Solving Percent Problems 7.4(D)	**Use Multiple Models to Solve Percent Problems** Students use proportions and percent bars to solve percent problems. Scaffolding includes partially-filled-out proportions and percent bars.	✓	✓		✓		
Percents in the Real World 7.4(D), 7.13(A), 7.13(E)	**Solving Percent Problems** Students match solutions to problems and complete the solution including sales tax, interest, and part-whole-percent problems.	✓	✓		✓		
Percent Decrease 7.4(D)	**Understanding and Solving Percent Decrease Problems** Students use percent bars and proportions to solve percent decrease problems. They analyze the solutions to ensure that they understand all the numbers in the problem.	✓	✓		✓		
Percent Increase 7.4(D)	**Understanding and Solving Percent Increase Problems** Students use percent bars and proportions to solve percent increase problems. They analyze the solutions to ensure that they understand all the numbers in the problem.	✓	✓		✓		
What Went Wrong? 7.4(D)	**Solving Percent Increase and Decrease Problems** In this find-the-mistake activity, mistakes include using wrong numbers in the proportions. Students find the mistake and correct it so that the problems are solved correctly.		✓	✓		✓	
Answer the Right Question 7.4(D)	**Solving Percent Problems** Given the problem, proportion, and percent bars, students tell whether a problem is a percent increase or decrease problem. They tell the original amount, the amount of change, and the percent of increase or decrease.		✓	✓		✓	

mathmark activity title/SEs
includes title of mathmark activity and aligned SEs. Readiness standards in green

mathmark activity info
includes activity topic in **blue** with a brief description of the activity and content

Bluebonnet Learning – Grade 7 Module 1:
Thinking Proportionally

mathmark Activity Title Student Expectations	mathmark Activity Topic	Type			Delivery		
		new learning	intervention	practice	teacher-facilitated	small groups	stations
Bluebonnet Topic 1: Circles and Ratios							
TEKS Cluster: Geometry and Measurement **TEKS Subcluster:** Circles							
The Constant Pi 7.5(B)	**Circumference/Diameter = Pi** Students explore circles of all sizes to discover that the relationship between a circle's circumference and diameter is always a little more than 3 and write ratios that have an approximate value of pi.	✓			✓		
Area of a Circle 7.8(C)	**Model and Understand the Formula for Area of a Circle** Students make models to understand formula for area of a circle and calculate area.	✓	✓		✓		
Circumference of a Circle 7.8(C)	**Model the Circumference of a Circle** Students make models to understand formula for circumference of a circle and calculate circumference.	✓	✓		✓		
Circle Practice 7.9(B)	**Circumference and Area of a Circle** Students write formulas for area or circumference and solve. Scaffolding includes a step-by-step process for using formulas.		✓	✓		✓	
Circle Fun 7.9(B)	**Circumference and Area of a Circle** In this board game, students find circumference and area of circles. Scaffolding includes problems that rank from the simplest (find area or circumference given radius or diameter) to the most complicated (find the area given the circumference).		✓	✓		✓	
Bluebonnet Topic 2: Fractional Rates							
TEKS Cluster: Proportional Reasoning **TEKS Subcluster**: Constant Rate of Change							
Traveling with Gulliver 7.4(A), 7.4(B)	**Understand and Explore Constant Rate of Change** Using the context of *Gulliver's Travels* and movies where people grow and shrink, students explore proportionality through tables, graphs, equations, and verbal descriptions, working from input to output and output to input.	✓	✓		✓		
Unusual Speeds 7.4(A), 7.4(B)	**Explore Constant Rate of Change** Using the context of the speed of a bee, shark, and rhinoceros, students explore constant rate of change in tables, graphs, equations, and verbal descriptions, and analyze tables and graphs to develop understanding.	✓	✓		✓		

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		new learning	intervention	practice	teacher-facilitated	small groups	stations
Bluebonnet Topic 2: Fractional Rates (cont'd.)							
TEKS Cluster: Proportional Reasoning **TEKS Subcluster**: Constant Rate of Change (cont'd.)							
Going the Distance 7.4(A), 7.4(B)	**Explore Constant Rate of Change** Students use tables and graphs to explore constant rate of change and speed. Contexts include why a student *wasn't* late to class and the Galapagos turtle.			✓		✓	
M-Athletes 7.4(A), 7.4(B)	**Understand, Calculate, and Represent Unit Rate** After performing three contests in one-minute increments, students use data from the contests to make tables, graphs, and learn the meaning of unit rate. Contests include jumping jacks, placing paper clips in a line, and writing a name as fast as possible.	✓			✓		
Zombie Attack 7.4(A), 7.4(B)	**Calculate and Represent Unit Rate** Using the context of collecting food during a zombie apocalypse, students use tables, graphs, and proportional reasoning to find unit rate and see if they can collect the food before the zombie catches them.			✓		✓	
TEKS Cluster: Proportional Reasoning **TEKS Subcluster**: Ratios/Rates/Percentages							
Solving Rate Problems 7.4(D)	**Use Multiple Models to Solve Rate Problems** Students use unit rate, tables of proportions, input-output tables, and proportions to solve rate problems. Scaffolding includes partially-filled-out proportions, input-output tables, and tables of proportions so that students understand how proportions and tables are related.	✓	✓		✓		
Solving Ratio Problems 7.4(D)	**Use Multiple Models to Solve Ratio Problems** Students use tables of proportions, input-output tables, and proportions to solve ratio problems. Scaffolding includes partially-filled-out proportions, input-output tables, and tables of proportions; however, they contain less information than those in Solving Rate Problems.	✓	✓		✓		
TEKS Cluster: Geometry and Measurement **TEKS Subcluster**: Conversions							
Measurement Mania 7.4(E)	**Perform Conversions Using Proportions and Unit Rate** Students explore conversions between measurement systems using unit rates, tables, equations, verbal descriptions, and proportions.	✓	✓		✓		
Which Is More? 7.4(E)	**Perform Conversions Using Proportions and Unit Rate in Tables** Students estimate, then perform conversions between measurement systems using tables and proportions.	✓			✓		

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Bluebonnet Topic 3: Proportionality							
TEKS Cluster: Proportional Reasoning **TEKS Subcluster:** Constant Rate of Change							
Heart Healthy? 7.4(A), 7.4(C)	**Understand Constant of Proportionality** Using the number of calories in a French fry order, students use ratios and tables to find constant of proportionality and analyze the tables to develop understanding.	✓			✓		
Soil Cleanup 7.4(A), 7.4(C)	**Constant of Proportionality** Using the context of environmental engineering, students use tables, graphs, equations, and verbal descriptions to find constant of proportionality and unit rate.	✓			✓		

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		new learning	intervention	practice	teacher-facilitated	small groups	stations
Bluebonnet Topic 1: Proportional Relationships							
TEKS Cluster: Proportional Reasoning **TEKS Subcluster**: Ratios/Rates/Percentages							
Solving Percent Problems 7.4(D)	**Use Multiple Models to Solve Percent Problems** Students use proportions and percent bars to solve percent problems. Scaffolding includes partially-filled-out proportions and percent bars.	✓	✓		✓		
Percents in the Real World 7.4(D), 7.13(A), 7.13(E)	**Solving Percent Problems** Students match solutions to problems and complete the solution including sales tax, interest, and part-whole-percent problems.	✓	✓		✓		
Percent Decrease 7.4(D)	**Understanding and Solving Percent Decrease Problems** Students use percent bars and proportions to solve percent decrease problems. They analyze the solutions to ensure that they understand all the numbers in the problem.	✓	✓		✓		
Percent Increase 7.4(D)	**Understanding and Solving Percent Increase Problems** Students use percent bars and proportions to solve percent increase problems. They analyze the solutions to ensure that they understand all the numbers in the problem.	✓	✓		✓		
What Went Wrong? 7.4(D)	**Solving Percent Increase and Decrease Problems** In this find-the-mistake activity, mistakes include using wrong numbers in the proportions. Students find the mistake and correct it so that the problems are solved correctly.		✓	✓		✓	
Answer the Right Question 7.4(D)	**Solving Percent Problems** Given the problem, proportion, and percent bars, students tell whether a problem is a percent increase or decrease problem. They tell the original amount, the amount of change, and the percent of increase or decrease.		✓	✓		✓	

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Bluebonnet Topic 1: Proportional Relationships (cont'd.)							
TEKS Cluster: Geometry and Measurement **TEKS Subcluster**: Similarity							
Which Are Similar? 7.5(A)	**Understand the Attributes of Similar Figures** In this PowerPoint-driven activity, students cut out figures and use them to understand similarity, the relationships between the sides of similar figures, and angle congruence. Then they use proportions to find the lengths of sides.	✓	✓		✓		
Similar Figures and Proportional Sides 7.5(A), 7.5(C)	**Find Lengths of Similar Figures** This activity focuses on different proportions that may be used to find the length of sides of similar figures. Students tell why or why not a proportion can be used to find lengths.	✓	✓		✓		
Choose and Solve 7.5(C)	**Find the Lengths of Sides of Similar Figures** Students tell which proportions may be used to find the missing side of similar figures and solve the lengths.		✓	✓		✓	
Scaling the Animal Kingdom 7.5(C)	**Use Scale Drawings to Find Dimensions** Students find dimensions of scale models or real-life animals.	✓	✓		✓		
Texas Is BIG! 7.5(C)	**Use Scale to Find Distance on a Map** Students calculate distances between cities and relate the distances to cities across the United States.	✓	✓		✓		
Bluebonnet Topic 2: Financial Literacy: Interest and Budgets							
TEKS Cluster: Proportional Reasoning **TEKS Subcluster**: Ratios/Rates/Percentages							
Percents in the Real World 7.4(D), 7.13(A), 7.13(E)	**Solving Percent Problems** Students match solutions to problems and complete the solution including sales tax, interest, and part-whole-percent problems.	✓	✓		✓		

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Bluebonnet Topic 1: Operating with Rational Numbers							
Bluebonnet Topic 2: Two-Step Equations and Inequalities							
TEKS Cluster: Equations and Inequalities **TEKS Subcluster**: Representations and Solutions of Equations/Inequalities							
Keep It Balanced 7.10(B), 7.11(A), 7.11(B)	**Solve Equations Using a Balance Scale** Students solve equations and record their solutions. Scaffolding includes problems with positive numbers only for use with chips and cubes and for students who are struggling with the process of solving equations.	✓			✓		
Balance the Algebra Tiles 7.11(A), 7.11(B)	**Solve Equations Using Algebra Tiles** Students solve equations with integers using algebra tiles and record actions.	✓			✓		
Solve the Equations 7.10(B), 7.11(A)	**Solve and Graph Two-Step Equations** Students analyze two-step equations to determine the best or easiest way to solve, solve and graph the equations. Some problems include fractions.	✓	✓		✓		
Find the Number 1 7.11(A), 7.11(B)	**Solve Two-Step Equations** In this stations activity, students draw a number and place it in a partially-filled-out solution to an equation. They determine if the equation is solved correctly.		✓	✓		✓	
Solve the Inequalities 1 7.10(B), 7.11(A), 7.11(B)	**Solve and Graph Two-Step Inequalities** Students solve inequalities and represent them on a number line. Inequalities include positive coefficients only.	✓	✓		✓		
Solve the Inequalities 2 7.10(B), 7.11(A), 7.11(B)	**Solve and Graph Two-Step Inequalities** Students solve and represent inequalities on a number line. Inequalities include positive and negative coefficients.	✓	✓		✓		
Find the Number 2 7.11(A), 7.11(B)	**Solve Two-Step Inequalities** In this stations activity, students draw a number and place it in a partially filled out solution to an equation. They determine if the equation is solved correctly.	✓	✓		✓		

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Bluebonnet Topic 2: Two-Step Equations and Inequalities (cont'd.)							
TEKS Cluster: Equations and Inequalities **TEKS Subcluster**: Applications of Equations/Inequalities							
From Word Problems to Equations to Solutions 7.11(A), 7.10(A)	**Write and Solve Equations to Match Word Problems** Students choose an equation to represent a problem, solve the problem, and check to see if the solution makes sense.	✓	✓		✓		
Find the Matches 1 7.10(C)	**Match Word Problems and Equations** This activity includes four sets of equations and word problems. Each set uses the same numbers so students must rely on the meaning of the problem, not the numbers, to find the matches. Students also write equations to match word problems.		✓	✓		✓	
Greater Than or Less Than 7.10(A)	**Use Inequalities to Represent Word Problems** In this PowerPoint-driven activity, students learn to build inequalities from word problems.	✓	✓		✓		
Find the Matches 2 7.10(C)	**Match Word Problems and Inequalities** This activity includes four sets of inequalities and word problems. Each set uses the same numbers so students must rely on the meaning of the problem, not the numbers, to find the matches. Students also write inequalities to match word problems.		✓	✓		✓	
Bluebonnet Topic 3: Multiple Representations of Equations							
TEKS Cluster: Proportional Reasoning **TEKS Subcluster**: Conceptual Development of Non-Proportional Reasoning							
Representing Linear Relationships 7.7(A)	**Introduction to Non-Proportional Situations** Students use a pictorial model to understand a problem situation, then make a table and graph, write an equation, and answer questions to demonstrate their understanding.	✓	✓		✓		
Situations, Tables, Graphs, and Equations 7.7(A)	**Representing Linear Relationships** Students use a pictorial model to understand a problem situation, then make a table and graph, write equation, and answer questions that focus on the meaning of specific points on the graph.		✓	✓		✓	
Matching Situations, Tables, Graphs, and Equations 7.7(A)	**Representing Linear Relationships** Students match problem situations, tables, graphs, and equations. They use the process column in the table to ensure the matches are correct.		✓	✓		✓	

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		new learning	intervention	practice	teacher-facilitated	small groups	stations
Bluebonnet Topic 1: Introduction to Probability							
Bluebonnet Topic 2: Compound Probability							
Bluebonnet Topic 3: Drawing Inferences							

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Bluebonnet Topic 1: Angle Relationships							
TEKS Cluster: Geometry and Measurement **TEKS Subcluster**: Angle Relationships							
Angle Relationships 7.11(C)	**Solve Equations Using Angle Measurements** Students determine equality from a diagram, write an equation, solve it, and find the measures of the angle. The problems include the angles in triangle, vertical, complementary, supplementary, and adjacent angles.	✓	✓		✓		
What's My Angle? 7.11(C)	**Solve Equations Using Angle Measurements** Students match diagrams and equations, solve the equations, and find the matching solution. The problems include angles in an isosceles triangle, vertical, supplementary, and complementary angles, the angles in a triangle.		✓	✓		✓	
Bluebonnet Topic 2: Area, Surface Area, and Volume							
TEKS Cluster: Geometry and Measurement **TEKS Subcluster**: Area							
Different Shapes, Different Formulas 7.9(C)	**Use Formulas to Find Area** Students draw diagrams, write formulas, fill in the formulas, and calculate area.	✓	✓		✓		
Composite Figures 7.9(C)	**Area of Composite Figures** Students create figures that have a given composite area.			✓		✓	
Measuring All the Parts 7.9(C)	**Area of Composite Figures** Students find the composite area. Scaffolding includes composite figures with different levels of difficulty, two of which are relatively simple and two that are more complex.			✓		✓	
Do You See Them? 7.9(C)	**Area of Composite Figures** Students decompose composite figures on a grid and find the composite area.			✓		✓	
Can You Make Them? 7.9(D)	**Create Nets to Understand Surface Area** Students use nets to make 3-dimensional figures and derive a formula for surface area.	✓	✓		✓		

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		new learning	intervention	practice	teacher-facilitated	small groups	stations
Bluebonnet Topic 2: Area, Surface Area, and Volume (cont'd.)							
TEKS Cluster: Geometry and Measurement **TEKS Subcluster**: Area (cont'd.)							
Prisms vs. Pyramids 7.9(D)	**Find Surface Area** Students find surface area of prisms and pyramids. Scaffolding includes a step-by-step process to find surface area including matching nets to a three-dimensional figure, drawing the net, the base, and the lateral faces. They compute area of the base, area of the lateral faces, and total surface area.		✓	✓		✓	
Surface Area Puzzles 7.9(D)	**Find Surface Area** Students fold nets to make figures. Then given area of the bases or faces, they find area of each face and total surface area.	✓				✓	
Find the Mistake: Surface Area 7.9(D)	**Correct Mistakes and Solve with Surface Area** In this find-the-mistake activity, mistakes include using wrong dimension in calculations, omitting one of the bases when finding total surface area, and finding total surface area instead of lateral surface area.		✓	✓		✓	
TEKS Cluster: Geometry and Measurement **TEKS Subcluster**: Volume							
How Many Prisms Can You Make? 7.9(A)	**Volume of Rectangular Prisms** Given the volume or the volume and one dimension, students find possible dimensions of prisms.	✓	✓		✓		
Triangular Prisms and Volume 7.9(A)	**Volume of Triangular Prisms** Students understand the use of *B* in the volume formula and find volume.	✓	✓		✓		
Solve 'Em and Match 'Em 7.9(A)	**Volume of Rectangular and Triangular Prisms** Students find volume or missing dimension in prisms. They compare volumes and dimensions to draw conclusions.			✓		✓	
Discovering the Formula for Volume of a Pyramid 7.8(A), 7.8(B)	**Concrete Model of Volume of a Pyramid** Students build models that demonstrate the relationship between a rectangular pyramid and a rectangular prism with the same height and base to understand the formula for volume of a pyramid.	✓			✓		

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		new learning	intervention	practice	teacher-facilitated	small groups	stations
Bluebonnet Topic 2: Area, Surface Area, and Volume (cont'd.)							
TEKS Cluster: Geometry and Measurement **TEKS Subcluster**: Volume (cont'd)							
Volume of Pyramids 7.9(A)	**Volume of Pyramids** Students draw a pyramid and its base with dimensions. They find area of the base and volume. Scaffolding includes a step-by-step process for using formulas.	✓	✓		✓		
What's the Same, What's Different? 7.9(A)	**Volume of Prisms and Pyramids** Students find missing dimensions of prisms and pyramids given the volume.			✓		✓	