

CMP/TEKS CORRELATION

8th Grade

TEKS Description	CMP Unit	Investigation	Notes
8.01.(A) compare and order rational numbers in various forms including integers, percents, and positive and negative fractions and decimals			8.01.(A) is applied in Looking for Pythagoras and Samples and Populations. It is taught earlier in the curriculum in Bits and Pieces I and II and Accentuate the Negative.
8.01.(B) select and use appropriate forms of rational numbers to solve real-life problems including those involving proportional relationships	Growing, Growing, Growing	3.1 Follow-up 3.2 Investing for the Future 3.3 Making a Difference 4.1 Making Smaller Ballots 4.2 Follow-up	
8.01.(B) select and use appropriate forms of rational numbers to solve real-life problems including those involving proportional relationships	Samples and Populations	2.1 Asking About Honesty	
8.01.(B) select and use appropriate forms of rational numbers to solve real-life problems including those involving proportional relationships	Say It with Symbols	1.1 Follow-up	
8.01.(B) select and use appropriate forms of rational numbers to solve real-life problems including those involving proportional relationships	Thinking with Mathematical Models	3.1 Earning Interest 3.2 Pouring Water	
8.01.(C) approximate (mentally and with calculators) the value of irrational numbers as they arise from problem situations (π , the square root of two)	Looking for Pythagoras	2.2 Follow-up 2.3 Finding Lengths 2 ACE 3.1 Follow-up 3.2 Follow-up 3.3 Follow-up 4.1 Stopping Sneaky Sally 4.2 Analyzing Triangles 4.3 Finding the Perimeter 5.1 Follow-up	

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8.01.(D) express numbers in scientific notation, including negative exponents, in appropriate problem situations using a calculator	Growing, Growing, Growing	1.2 Requesting A Reward 1.3 Making a New Offer 2.1 Getting Costs in Line 2.2 Listening to the Queen 2.3 Growing Mold 3.1 Reproducing Rabbits	Embedded throughout the curriculum.
8.02.(A) select and use appropriate operations to solve problems and justify the selections	Growing, Growing, Growing	1.1 Making Ballots 1.2 Requesting a Reward	
8.02.(A) select and use appropriate operations to solve problems and justify the selections	Looking for Pythagoras	4.3 Finding the Perimeter 4 ACE	
8.02.(A) select and use appropriate operations to solve problems and justify the selections	Say It with Symbols	2.3 Diving In	
8.02.(A) select and use appropriate operations to solve problems and justify the selections	Thinking with Mathematical Models	2.3 Testing Whether Driving Fast Pays	
8.02.(B) add, subtract, multiply, and divide rational numbers in problem situations	Clever Counting	1.1 Making Faces 1.2 Checking Plate Numbers 2.1 Pushing Buttons 2.2 Dialing Combinations 2.3 Increasing Security 3.1 Making Rounds 4.1 Playing Dominoes	
8.02.(B) add, subtract, multiply, and divide rational numbers in problem situations	Frogs, Fleas, and Painted Cubes	2.1 Trading Land	
8.02.(B) add, subtract, multiply, and divide rational numbers in problem situations	Growing, Growing, Growing	1.1 Making Ballots 1.2 Requesting a Reward 3.1 Reproducing Rabbits 3.2 Investing for the Future 3.3 Making a Difference	
8.02.(B) add, subtract, multiply, and divide rational numbers in problem situations	Looking for Pythagoras	4.3 Finding the Perimeter 4 ACE	

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TEKS Description	CMP Unit	Investigation	Notes
8.02.(B) add, subtract, multiply, and divide rational numbers in problem situations	Samples and Populations	2.1 Asking about Honesty	
8.02.(B) add, subtract, multiply, and divide rational numbers in problem situations	Say It with Symbols	1.1 Adding and Multiplying 1.2 Dividing 1.3 Working with Exponents 2.3 Diving In 3.1 Walking Together 3.2 Estimating Profit 4.1 Comparing Costs 4.2 Solving Linear Equations 4.3 Reasoning with Symbols 4.4 Solving Quadratic Equations	
8.02.(B) add, subtract, multiply, and divide rational numbers in problem situations	Thinking with Mathematical Models	1.3 Finding Equation Models 1.4 Follow-up 1.5 Writing Equations for Lines 2.2 Follow-up 2.3 Testing Whether Driving Fast Pays 3.1 Earning Interest 3.2 Pouring Water	
8.02.(C) evaluate a solution for reasonableness	Say It with Symbols	1.1 Adding and Multiplying	Also see "Think about this!" in 1.1.
8.02.(D) use multiplication by a constant factor (unit rate) to represent proportional relationships; for example, the arm span of a gibbon is about 1.4 times its height, $a = 1.4h$	Say It with Symbols	1.1 Adding and Multiplying 1.2 Dividing 3.1 Walking Together 3.2 Estimating Profit 4.1 Comparing Costs	
8.02.(D) use multiplication by a constant factor (unit rate) to represent proportional relationships; for example, the arm span of a gibbon is about 1.4 times its height, $a = 1.4h$	Thinking with Mathematical Models	1.3 Finding Equation Models	

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8.03.(A) compare and contrast proportional and non-proportional relationships	Frogs, Fleas and Painted Cubes	2.1 Follow-up 3.1 Follow-up 4.1 Follow-up 4.2 Follow-up 4.3 Putting It All Together 5.2 Follow-up	
8.03.(A) compare and contrast proportional and non-proportional relationships	Growing, Growing, Growing	1.1 Making Ballots 1.2 Requesting a Reward 1.3 Making a New Offer 2.1 Getting Costs in Line 2.2 Listening to the Queen 2.3 Growing Mold	
8.03.(A) compare and contrast proportional and non-proportional relationships	Thinking with Mathematical Models	1.3 Follow-up 1.5 Writing Equations for Lines 2.1 Testing Bridge Lengths 2.2 Keeping Things Balanced 3.1 Follow-up 3.2 Follow-up	
8.03.(B) estimate and find solutions to application problems involving percents and proportional relationships such as similarity and rates	Growing, Growing, Growing	2.1 Follow-up 2.2 Follow-up 3.1 Reproducing Rabbits 3.2 Investing for the Future 3.3 Making a Difference 4.1 Making Smaller Ballots 4.2 Fighting Fleas 4.3 Exploring Exponential Equations 4.4 Cooling Water	
8.03.(B) estimate and find solutions to application problems involving percents and proportional relationships such as similarity and rates	Say It with Symbols	1.1 Adding and Multiplying 1.2 Dividing 3.1 Walking Together 3.2 Estimating Profit 4.1 Comparing Costs	
8.03.(B) estimate and find solutions to application problems involving percents and proportional relationships such as similarity and rates	Thinking with Mathematical Models	3.1 Earning Interest	

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TEKS Description	CMP Unit	Investigation	Notes
8.04.The student is expected to generate a different representation given one representation of data such as a table, graph, equation, or verbal description.	Clever Counting	2.3 Increasing Security	
8.04.The student is expected to generate a different representation given one representation of data such as a table, graph, equation, or verbal description.	Frogs, Fleas and Painted Cubes	1.1 Staking a Claim 1.3 Writing an Equation 2.1 Trading Land 2.2 Changing One Dimension 2.3 Changing Both Dimensions 3.1 Counting Handshakes 3.2 Exploring Triangular Numbers 4.1 Tracking a Ball 4.2 Measuring Jumps 4.3 Putting It All Together 5.1 Analyzing Cube Puzzles 5.2 Exploring Painted Cube Patterns	
8.04.The student is expected to generate a different representation given one representation of data such as a table, graph, equation, or verbal description.	Growing, Growing, Growing	1.2 Follow-up 1.3 Making a New Offer 2.1 Getting Costs in Line 2.2 Listening to the Queen 2.3 Growing Mold 3.1 Reproducing Rabbits 3.2 Investing for the Future 3.3 Making a Difference 4.1 Follow-up 4.2 Fighting Fleas 4.4 Cooling Water	
8.04.The student is expected to generate a different representation given one representation of data such as a table, graph, equation, or verbal description.	Say It with Symbols	1.3 Working with Exponents 2.1 Tiling Pools 2.2 Follow-up 3.1 Walking Together 3.3 Finding the Area of a Trapezoid 3.4 Writing Quadratic Expressions 4.1 Comparing Costs 4.3 Follow-up 5.1 Stacking Rods	

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TEKS Description	CMP Unit	Investigation	Notes
8.04. The student is expected to generate a different representation given one representation of data such as a table, graph, equation, or verbal description.	Thinking with Mathematical Models	<ul style="list-style-type: none"> 1.1 Testing Paper Bridges 1.3 Finding Equation Models 1.4 Setting the Right Price 1.5 Writing Equation for Lines 2.1 Testing Bridge Lengths 2.2 Keeping Things Balanced 2.3 Testing Whether Driving Fast Pays 3.1 Follow-up 3.2 Pouring Water 4.1 Modeling Real-Life Events 4.2 Writing Stories to Match Graphs 4.3 Exploring Graphs 	
8.05.(A) estimate, find, and justify solutions to application problems using appropriate tables, graphs, and algebraic equations	Clever Counting	2.3 Increasing Security	
8.05.(A) estimate, find, and justify solutions to application problems using appropriate tables, graphs, and algebraic equations	Frogs, Fleas and Painted Cubes	<ul style="list-style-type: none"> 1.1 Staking a Claim 1.2 Reading a Graph 1.3 Writing an Equation 2.1 Trading Land 2.2 Changing One Dimension 3.1 Counting Handshakes 3.2 Exploring Triangular Numbers 4.1 Tracking a Ball 4.2 Measuring Jumps 5.1 Analyzing Cube Puzzles 5.2 Exploring Painted-Cubes Patterns 	

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TEKS Description	CMP Unit	Investigation	Notes
8.05.(A) estimate, find, and justify solutions to application problems using appropriate tables, graphs, and algebraic equations	Growing, Growing Growing	1.1 Making Ballots 1.2 Requesting a Reward 1.3 Making a New Offer 2.1 Getting Costs in Line 2.2 Listening to the Queen 2.3 Growing Mold 3.1 Reproducing Rabbits 3.2 Investing in the Furture 3.3 Making a Difference 4.1 Making Smaller Ballots 4.2 Fighting Fleas 4.4 Cooling Water	
8.05.(A) estimate, find, and justify solutions to application problems using appropriate tables, graphs, and algebraic equations	Say It with Symbols	1.1 Adding and Multiplying 1.2 Dividing 1.3 Working with Exponents 2.1 Tiling Pools 3.1 Walking Together 4.1 Comparing Costs 5.1 Stacking Rods	
8.05.(A) estimate, find, and justify solutions to application problems using appropriate tables, graphs, and algebraic equations	Thinking with Mathematical Models	1.1 Testing Paper Bridges 1.2 Drawing Graph Models 1.4 Setting the Right Price 2.1 Nonlinear Models 2.2 Keeping Things Balanced 3.1 Earning Interest 3.2 Pouring Water	
8.05.(B) use an algebraic expression to find any term in a sequence	Frogs, Fleas and Painted Cubes	2.1 Trading Land 3.1 Counting Handshakes 3.2 Exploring Triangular Numbers	
8.05.(B) use an algebraic expression to find any term in a sequence	Growing, Growing, Growing	1.2 Requesting a Reward 1.3 Making a New Offer 2.1 Getting Costs in Line 2.2 Listening to the Queen 3.1 Reproducing Rabbit 3.3 Making a Difference 4.4 Cooling Water	

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TEKS Description	CMP Unit	Investigation	Notes
8.06.(A) generate similar shapes using dilations including enlargements and reductions	Growing, Growing, Growing	3 ACE (11) 4 ACE (4)	This is covered in the 7th grade unit Stretching and Shrinking. It is applied in Comparing and Scaling, Filling and Wrapping, and Growing, Growing, Growing.
8.06.(A) generate similar shapes using dilations including enlargements and reductions			This is covered in the 7th grade unit Stretching and Shrinking. It is applied in Comparing and Scaling, Filling and Wrapping, and Growing, Growing, Growing.
8.06.(B) graph dilations, reflections, and translations on a coordinate plane	Kaleidoscopes, Hubcaps, and Mirrors	2 ACE (21-22) 3.1 Writing Rules for Reflections 3.2 Writing Rules for Translations	Note: not dilations, just reflections and translations.
8.07.(A) draw solids from different perspectives			This is covered in the 6th grade unit Ruins of Montarek and the 7th grade unit Filling and Wrapping.
8.07.(B) use geometric concepts and properties to solve problems in fields such as art and architecture	Frogs, Fleas and Painted Cubes	1.1 Staking a Claim	
8.07.(B) use geometric concepts and properties to solve problems in fields such as art and architecture	Kaleidoscopes, Hubcaps, and Mirrors	Unit Project: Creating Tessellations	
8.07.(B) use geometric concepts and properties to solve problems in fields such as art and architecture	Looking for Pythagoras	1.3 Planning Parks 3.4 Follow-up 3 ACE (27) 4.1 Stopping Sneaky Sally	
8.07.(C) use pictures or models to demonstrate the Pythagorean Theorem	Looking for Pythagoras	1.2 Planning Emergency Routes (informally) 3.1 Discovering the Pythagorean Theorem 3.2 Puzzling Through a Proof 3.3 Finding Distances 3.4 Measuring the Egyptian Way	
8.07.(D) locate and name points on a coordinate plane using ordered pairs of rational numbers	Kaleidoscopes, Hubcaps, and Mirrors	3.1 Writing Rules for Reflections 3.2 Writing Rules for Translations 3.3 Writing Rules for Rotations	

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8.07.(D) locate and name points on a coordinate plane using ordered pairs of rational numbers	Looking for Pythagoras	1.1 Driving Around Euclid 1.2 Planning Emergency Routes 1.3 Planning Parks	
8.08.(A) find surface area of prisms and cylinders using concrete models and nets (two-dimensional models)	Say It with Symbols	5.1 Stacking Rods	
8.08.(B) connect models to formulas for volume of prisms, cylinders, pyramids, and cones			This is in the 7th grade unit Filling and Wrapping.
8.08.(C) estimate answers and use formulas to solve application problems involving surface area and volume	Frogs, Fleas, and Painted Cubes	5 ACE (9-10)	
8.08.(C) estimate answers and use formulas to solve application problems involving surface area and volume	Say It with Symbols	1 ACE (34-39) 5.1 Stacking Rods	
8.09.(A) use the Pythagorean Theorem to solve real-life problems	Looking for Pythagoras	3 ACE (8-11, 27) 4.1 Stopping Sneaky Sally 4 ACE	
8.09.(B) use proportional relationships in similar shapes to find missing measurements			This is covered in the 7th grade units Stretching and Shrinking, Comparing and Scaling, and Filling and Wrapping.
8.10.(A) describe the resulting effects on perimeter and area when dimensions of a shape are changed proportionally	Frogs, Fleas and Painted Cubes	Inv. 1.1 Staking a Claim Inv. 1.2 Reading a Graph Inv. 1.3 Writing an Equation	This is also covered in the 6th grade unit Covering and Surrounding. The investigations in Frogs, Fleas and Painted Cubes cover changes in dimensions that are both proportional and non-proportional.
8.10.(B) describe the resulting effect on volume when dimensions of a solid are changed proportionally	Frogs, Fleas and Painted Cubes	5 ACE (9)	
8.11.(A) find the probabilities of compound events (dependent and independent)			This is covered in the 7th grade unit What Do You Expect. Warm-ups could also be used to address 8.11.(A).

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8.11.(B) use theoretical probabilities and experimental results to make predictions and decisions	Clever Counting	3.1 Making Rounds 4 ACE (4) 5.1 Follow-up	
8.11.(B) use theoretical probabilities and experimental results to make predictions and decisions	Samples and Populations	4.2 Simulating Cookies	
8.11.(C) select and use different models to simulate an event	Clever Counting	3.2 Networking 3.3 Designing Networks	
8.11.(C) select and use different models to simulate an event	Frogs, Fleas, and Painted Cubes	3.1 Counting Handshakes	
8.11.(C) select and use different models to simulate an event	Samples and Populations	3.2 Selecting a Random Sample 3.3 Choosing a Sample Size 4.2 Simulating Cookies	
8.12.(A) select the appropriate measure of central tendency to describe a set of data for a particular purpose	Samples and Populations	1.1 Comparing Quality Ratings 1.3 Comparing Prices 3.2 Selecting a Random Sample 3.3 Choosing a Sample Size 4.1 Solving an Archaeological Mystery 4.2 Simulating Cookies	
8.12.(B) draw conclusions and make predictions by analyzing trends in scatterplots	Samples and Populations	1.5 Comparing Quality and Price	
8.12.(B) draw conclusions and make predictions by analyzing trends in scatterplots	Thinking with Mathematical Models	1.1 Testing Paper Bridges 1.2 Drawing Graph Models 1.3 Finding Equation Models 1.4 Detting the Right Price 2.1 Testing Bridge Lengths 2.2 Keeping Thing Balanced	
8.12.(C) construct circle graphs, bar graphs, and histograms, with and without technology	Samples and Populations	4.2 Simulating Cookies	

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8.13.(A) evaluate methods of sampling to determine validity of an inference made from a set of data	Samples and Populations	2.1 Asking About Honesty 2.2 Selecting a Sample 2.3 Asking the Right Questions 3.2 Selecting a Random Sample 3.3 Choosing a Sample Size 4.1 Solving an Archaeological Mystery	
8.13.(B) recognize misuses of graphical or numerical information and evaluate predictions and conclusions based on data analysis	Samples and Populations	1.3 Comparing Prices 1.4 Making a Quality Choice 1.5 Comparing Quality and Price 2.1 Asking About Honesty 4.1 Solving an Archaeological Mystery	
8.13.(B) recognize misuses of graphical or numerical information and evaluate predictions and conclusions based on data analysis	Thinking with Mathematical Models	1.2 Foliow-up	