

Wylie ISD Curriculum

Subject Area	Math	Bundle #:	1
Grade/Level	8 th grade	Weeks:	1-3
Overview			
Compare and Order Real Numbers, Order of Operations			
TEKS - Texas Knowledge & Skills			
Knowledge & Skill Statement	Student Expectation	Student Learning Outcome Clarification	
<p>8.1 Number, operation, and quantitative reasoning. The student understands that different forms of numbers are appropriate for different situations.</p>	<p>8.1A Compare and order rational numbers in various forms including integers, percents, and positive and negative fractions and decimals.</p>	<p>Including but not limited to:</p> <ul style="list-style-type: none"> • arranging on a number line • identifying equivalent forms • finding a rational number between two given rational numbers • use rational numbers in the forms of: <ul style="list-style-type: none"> ❖ fractions with like and unlike denominators- unit, proper, improper, mixed numbers ❖ percents- greater and less than 100% ❖ decimals and decimal fractions ❖ integers <p>*within a single problem use multiple forms</p>	
<p>8.2 Number, operation, and quantitative reasoning. The student selects and uses appropriate operations to solve problems and justify solutions.</p>	<p>8.1B Select and use appropriate forms of rational numbers to solve real-life problems including those involving proportional relationships.</p> <p>8.2A Select appropriate operations to solve problems involving rational numbers and justify the selections.</p>	<p>Including but not limited to:</p> <ul style="list-style-type: none"> • converting of percents greater and less than 100% • use rational numbers in the forms of: <ul style="list-style-type: none"> ❖ fractions ❖ mixed numbers, proper and improper fractions (with like and unlike denominators) ❖ decimals and decimal fractions ❖ evaluate expressions ❖ use formulas from TAKS chart <p>Including but not limited to:</p> <ul style="list-style-type: none"> • recognize correct order of operations • choose correct expression/equation for a problem situation • formulate equations with appropriate order of operations • explain which operation to use and justify its use 	

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<p>8.2 Number, operation, and quantitative reasoning. The student selects and uses appropriate operations to solve problems and justify solutions.</p>	<p>8.2B Use appropriate operations to solve problems involving rational numbers in problem situations.</p> <p>8.2C Evaluate a solution for reasonableness.</p>	<p>Including but not limited to:</p> <ul style="list-style-type: none"> • use multiple operations in a problem (order of operations) • solve multi-step problems • use all forms of fractions, decimals, percents and integers <p>Including but not limited to:</p> <ul style="list-style-type: none"> • discuss appropriate labels for solutions • use mathematical reasoning to justify solution • use of estimation throughout process • ranges of solutions
<p>8.14 The student applies Grade 8 mathematics to solve problems connected to everyday experiences, investigations in other disciplines, and activities in and outside of school.</p>	<p>8.14D Select tools including real objects, manipulatives, paper/pencil, and technology or techniques including mental math, estimation, and number sense to solve problems.</p>	<p>Including but not limited to:</p> <ul style="list-style-type: none"> • model problems with multiple representations • solve problems in using more than one tool • use tools to check reasonableness of answers

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Subject Area	Math	Bundle #:	2
Grade/Level	8 th grade	Weeks:	4-6
Overview			
Scientific Notation, 1-step Equations, 2-step Equations, Coordinate Plane			
TEKS - Texas Knowledge & Skills			
Knowledge & Skill Statement	Student Expectation	Student Learning Outcome Clarification	
8.1 Number, operation, and quantitative reasoning. The student understands that different forms of numbers are appropriate for different situations.	8.1D Express numbers in scientific notation, including negative exponents, in appropriate problem situation. <u>NOTE: Scientific notation is a new concept in 8th grade</u>	Including but not limited to: <ul style="list-style-type: none"> • convert between standard form, expanded form, and scientific notation • use positive or negative exponents • relate to multiplying and dividing by powers of ten 	
8.2 Number, operation, and quantitative reasoning. The student selects and uses appropriate operations to solve problems and justify solutions.	8.2B Use appropriate operations to solve problems involving rational numbers in problem situations.	Including but not limited to: <ul style="list-style-type: none"> • use multiple operations in a problem (order of operations) • all operations with integers • solve multi-step problems (1-step equations, 2-step equations) • use all forms of fractions, decimals, percents and integers 	
8.7 Geometry and spatial reasoning. The student uses geometry to model and describe the physical world.	8.2C Evaluate a solution for reasonableness. 8.7D Locate and name points on a coordinate plane using ordered pairs of rational numbers.	Including but not limited to: <ul style="list-style-type: none"> • use of estimation throughout process Including but not limited to: <ul style="list-style-type: none"> • use rational numbers in all four quadrants • use a variety of grids (using different incremental units) 	
8.14 The student applies Grade 8 mathematics to solve problems connected to everyday experiences, investigations in other disciplines, and activities in and outside of school.	8.14A Identify and apply mathematics to everyday experiences, to activities in and outside of school, with other disciplines, and with other mathematical topics.	Including but not limited to: <ul style="list-style-type: none"> • use of charts or visual of information • analysis of detailed written problem • data in a graph 	

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<p>8.14 The student applies Grade 8 mathematics to solve problems connected to everyday experiences, investigations in other disciplines, and activities in and outside of school.</p>	<p>8.14B Use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness.</p>	<p>Including but not limited to:</p> <ul style="list-style-type: none">• use of charts or visual of information• analysis of detailed written problem• data in a graph <p>solve problem using several different models</p> <p>Including but not limited to:</p> <ul style="list-style-type: none">• model problems with multiple representations• solve problems in using more than one tool• use tools to check reasonableness of answers
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Subject Area	Math	Bundle #:	3
Grade/Level	8 th grade	Weeks:	7-9
Overview			
Representations of equations in 2 variables, Irrational numbers, Pythagorean Theorem, Squares and square roots			
TEKS - Texas Knowledge & Skills			
Knowledge & Skill Statement	Student Expectation	Student Learning Outcome Clarification	
8.4 Patterns, relationships, and algebraic thinking. The student makes connections among various representations of a numerical relationship.	8.4 The student is expected to generate a different representation of data given another representation of data (such as table, graph, equation, or verbal description).	Including but not limited to: <ul style="list-style-type: none"> • use multiple representations of a table, graph, equation, sequence or verbal description within a single context of a problem 	
8.5 Patterns, relationships, and algebraic thinking. The student uses graphs, tables, and algebraic representations to make predictions and solve problems.	8.5A Predict, find, and justify solutions to application problems using appropriate tables, graphs, and algebraic equations.	Including but not limited to: <ul style="list-style-type: none"> • use multiple representations of a table, graph, equation, sequence or verbal description within a single context of a problem • discuss trends in data • use one step equations • use two step equations with variables on one side 	
8.1 Number, operation, and quantitative reasoning. The student understands that different forms of numbers are appropriate for different situations.	8.1B Select and use appropriate forms of rational numbers to solve real-life problems including those involving proportional relationships.	Including but not limited to: <ul style="list-style-type: none"> • squares and square roots at least to $20^2 = 400$ 	
8.1 Number, operation, and quantitative reasoning. The student understands that different forms of numbers are appropriate for different situations.	8.1C Approximate (mentally and with calculators) the value of irrational numbers as they arise from problem situations (such as π , $\sqrt{2}$).	Including : <ul style="list-style-type: none"> • use geometric problems using the square root of a number • state answer as a range • convert between squares and square roots 	
8.7 Geometry and spatial reasoning. The student uses geometry to model and describe the physical world.	8.7B Use geometric concepts and properties to solve problems in fields such as art and architecture.	Including but not limited to: <ul style="list-style-type: none"> • Pythagorean theorem • Evaluate solutions for reasonableness. 	

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<p>8.9 Measurement. The student uses indirect measurement to solve problems.</p>	<p>8.7C Use pictures or models to demonstrate the Pythagorean Theorem.</p> <p>NOTE: Pythagorean Theorem is a new concept in 8th grade</p> <p>8.9A Use the Pythagorean Theorem to solve real-life problems.</p>	<p>Including but not limited to:</p> <ul style="list-style-type: none"> • illustrate the sum of the squares of the legs equals the hypotenuse using models • use pictures of right triangles with labels to show Pythagorean theorem • use problems to promote understanding of theorem not solving for a missing leg or hypotenuse <p>Including but not limited to:</p> <ul style="list-style-type: none"> • use real life pictorial examples • solve problems for missing leg or hypotenuse
<p>8.14 The student applies Grade 8 mathematics to solve problems connected to everyday experiences, investigations in other disciplines, and activities in and outside of school.</p> <p>8.14 The student applies Grade 8 mathematics to solve problems connected to everyday experiences, investigations in other disciplines, and activities in and outside of school.</p>	<p>8.14A Identify and apply mathematics to everyday experiences, to activities in and outside of school, with other disciplines, and with other mathematical topics.</p> <p>8.14C Select or develop an appropriate problem-solving strategy from a variety of different types, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem.</p>	<p>Including but not limited to:</p> <ul style="list-style-type: none"> • use of charts or visual of information • analysis of detailed written problem • data in a graph <p>Including but not limited to:</p> <ul style="list-style-type: none"> • use of charts or visual of information • analysis of detailed written problem • data in a graph • solve problem using several different models

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Subject Area	Math	Bundle #:	4
Grade/Level	8 th grade	Weeks:	10-12
Overview			
Patterns, sequences, unit rates, and proportions			
TEKS - Texas Knowledge & Skills			
Knowledge & Skill Statement	Student Expectation	Student Learning Outcome Clarification	
8.4 Patterns, relationships, and algebraic thinking. The student makes connections among various representations of a numerical relationship.	8.4 The student is expected to generate a different representation of data given another representation of data (such as table, graph, equation, or verbal description).	Including but not limited to: <ul style="list-style-type: none"> • use multiple representations of a table, graph, equation, sequence or verbal description within a single context of a problem 	
8.5 Patterns, relationships, and algebraic thinking. The student uses graphs, tables, and algebraic representations to make predictions and solve problems.	8.5A Predict, find, and justify solutions to application problems using appropriate tables, graphs, and algebraic equations.	Including but not limited to: <ul style="list-style-type: none"> • use multiple representations of a table, graph, equation, sequence or verbal description within a single context of a problem • discuss trends in data • use two step equations with variables on one side 	
	8.5B Find and evaluate an algebraic expression to determine any term in an arithmetic sequence (with a constant rate of change).	Including but not limited to: <ul style="list-style-type: none"> • use expressions in which the constant rate of change is expressed as a fraction or a decimal • determine the nth term in a pattern in table or list • connect term number with the position in the sequence. • use the nth term to find a specific term • generate an expression to describe a sequence 	
8.3 Patterns, relationships, and algebraic thinking. The student identifies proportional or non-proportional linear relationships in problem situations and solves problems.	8.3B Estimate and find solutions to application problems involving percents and other proportional relationships such as similarity and rates.	Including but not limited to: <ul style="list-style-type: none"> • ratios in multiple forms • find the unit rate • solve a proportion 	

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	<p>8.3B Estimate and find solutions to application problems involving percents and other proportional relationships such as similarity and rates.</p>	<p>Including but not limited to:</p> <ul style="list-style-type: none"> • set up a proportion problem from a verbal description and solve • use data in a table • use standard and metric units • apply unit conversions • include real world situations such as speed, density, price, recipes, and student-teacher ratio • discuss appropriate labels/units
<p>8.14 The student applies Grade 8 mathematics to solve problems connected to everyday experiences, investigations in other disciplines, and activities in and outside of school.</p>	<p>8.14A Identify and apply mathematics to everyday experiences, to activities in and outside of school, with other disciplines, and with other mathematical topics.</p> <p>8.14B Use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness.</p> <p>8.14C Select or develop an appropriate problem-solving strategy from a variety of different types, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem.</p>	<p>Including but not limited to:</p> <ul style="list-style-type: none"> • use of charts or visual of information • analysis of detailed written problem • data in a graph <p>Including but not limited to:</p> <ul style="list-style-type: none"> • use of charts or visual of information • analysis of detailed written problem • data in a graph • solve problem using several different models <p>Including but not limited to:</p> <ul style="list-style-type: none"> • use of charts or visual of information • analysis of detailed written problem • data in a graph • solve problem using several different models <p>Including but not limited to:</p> <ul style="list-style-type: none"> • model problems with multiple representations • solve problems in using more than one tool • use tools to check reasonableness of answers

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Subject Area	Math	Bundle #:	6
Grade/Level	8 th grade	Weeks:	16-18
Overview			
Similar figures and scale factor			
TEKS - Texas Knowledge & Skills			
Knowledge & Skill Statement	Student Expectation	Student Learning Outcome Clarification	
8.3 Patterns, relationships, and algebraic thinking. The student identifies proportional or non-proportional linear relationships in problem situations and solves problems.	8.3A Compare and contrast proportional and non-proportional linear relationships.	Including but not limited to: <ul style="list-style-type: none"> represent ratios that may not be in lowest terms in a table, graph, equation, verbal description or geometric representations set up a proportion problem from a verbal description use data in a table dilation of geometric figures use standard and metric units 	
	8.3B Estimate and find solutions to application problems involving percents and other proportional relationships such as similarity and rates.	Including but not limited to: <ul style="list-style-type: none"> set up a proportion problem from a verbal description and solve use data in a table use standard and metric units discuss appropriate labels/units 	
8.9 Measurement. The student uses indirect measurement to solve problems.	8.9B Use proportional relationships in similar two-dimensional figures or similar three-dimensional figures to find missing measurements.	Including but not limited to: <ul style="list-style-type: none"> set up proportions to find missing measurements use a scale factor to find missing measurements identify the corresponding sides of similar figures when the figure is rotated and/or not rotated 	
	<u>NOTE: Finding missing measures in similar figures is a new concept in 8th grade</u>		

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Subject Area	Math	Bundle #:	7
Grade/Level	8 th grade	Weeks:	19-21
Overview			
Surface Area, Volume of prisms and cylinders			
TEKS - Texas Knowledge & Skills			
Knowledge & Skill Statement	Student Expectation	Student Learning Outcome Clarification	
<p>8.7 Geometry and spatial reasoning. The student uses geometry to model and describe the physical world.</p> <p>8.8 Measurement. The student uses procedures to determine measures of three-dimensional figures.</p> <p>8.8 Measurement. The student uses procedures to determine measures of three-dimensional figures.</p>	<p>8.7B Use geometric concepts and properties to solve problems in fields such as art and architecture.</p> <p>8.8A Find lateral and total surface area of prisms, pyramids, and cylinders using concrete models and nets (two-dimensional models).</p> <p>8.8B Connect models of prisms, cylinders, pyramids, spheres, and cones to formulas for volume of these objects.</p> <p>8.8C Estimate measurements and use formulas to solve application problems involving lateral and total surface area and volume.</p> <p><u>NOTE: Determining surface area is a new concept in 8th grade</u></p>	<p>Including but not limited to:</p> <ul style="list-style-type: none"> • use given data to solve for volume or find a missing dimension <p>Including but not limited to:</p> <ul style="list-style-type: none"> • use formula chart to solve problems • match nets and models to appropriate formulas to problem solve • use Real-world models • identify area of the base as "B" and perimeter of the base as "P" <p>Including but not limited to:</p> <ul style="list-style-type: none"> • match nets and models to appropriate volume formulas to problem solve for prisms and cylinders (volume continued in Bundle 8) • use Real-world models • identify area of the base as "B" <p>Including but not limited to:</p> <ul style="list-style-type: none"> • use metric and customary units in problems • use compatible numbers to estimate • estimate surface area and volume before calculating • use Real-world models 	
<p>8.14 The student applies Grade 8 mathematics to solve problems connected to everyday experiences, investigations in other disciplines, and activities in and outside of school.</p>	<p>8.14A Identify and apply mathematics to everyday experiences, to activities in and outside of school, with other disciplines, and with other mathematical topics.</p>	<p>Including but not limited to:</p> <ul style="list-style-type: none"> • use of charts or visual of information • analysis of detailed written problem • data in a graph 	

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	<p>8.14C Select or develop an appropriate problem-solving strategy from a variety of different types, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem.</p>	<p>Including but not limited to:</p> <ul style="list-style-type: none">• use of charts or visual of information• analysis of detailed written problem• data in a graph• solve problem using several different models
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Subject Area	Math	Bundle #:	8
Grade/Level	8 th grade	Weeks:	22-24
Overview			
Volume, Changing dimensions (effects on perimeter, area, and volume using scale factor), Transformations, Sketching 3-Dimensional figures			
TEKS - Texas Knowledge & Skills			
Knowledge & Skill Statement	Student Expectation	Student Learning Outcome Clarification	
<p>8.7 Geometry and spatial reasoning. The student uses geometry to model and describe the physical world.</p> <p>8.8 Measurement. The student uses procedures to determine measures of three-dimensional figures.</p> <p>8.10 Measurement. The student describes how changes in dimensions affect linear, area, and volume measures.</p> <p>8.10 Measurement. The student describes how changes in dimensions affect linear, area, and volume measures.</p>	<p>8.7B Use geometric concepts and properties to solve problems in fields such as art and architecture.</p> <p>8.8B Connect models of prisms and cylinders, pyramids, spheres, and cones to formulas for volume of these objects.</p> <p>8.8C Estimate measurements and use formulas to solve application problems involving lateral and total surface area and volume. <u>NOTE: Determining surface area is a new concept in 8th grade</u></p> <p>8.10A Describe the resulting effects on perimeter and area when dimensions of a shape are changed proportionally. <u>Note: Dimensional change is a new concept for 8th grade.</u></p> <p>8.10B Describe the resulting effect on volume when dimensions of a solid are changed proportionally. <u>Note: Dimensional change is a new concept for 8th grade.</u></p>	<p>Including but not limited to:</p> <ul style="list-style-type: none"> • use given data to solve for volume or find a missing dimension <p>Including but not limited to:</p> <ul style="list-style-type: none"> • match nets and models to appropriate volume formulas for pyramids, cones, and spheres to problem solve • use Real-world models • identify area of the base as "B" <p>Including but not limited to:</p> <ul style="list-style-type: none"> • use metric and customary units in problems • use compatible numbers to estimate • estimate surface area and volume before calculating • use Real-world models <p>Including but not limited to:</p> <ul style="list-style-type: none"> • use a scale factor to change shape dimensions (all dimensions changed by same scale factor) • find missing dimensions on changed shape • generalize the effects on perimeter and area if the dimensions are changed by the same scale factor • create a pattern, table or list to support results • Evaluate reasonableness of solutions. <p>Including but not limited to:</p> <ul style="list-style-type: none"> • use a scale factor to change shape dimensions • find missing dimensions on changed shape • generalize the effects on volume if the dimensions are changed by the same scale factor • create a pattern, table or list to support results 	

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Subject Area	Math	Bundle #:	10
Grade/Level	8 th grade	Weeks:	28-30
Overview			
Real number computations and Solving equations			
TEKS - Texas Knowledge & Skills			
Knowledge & Skill Statement	Student Expectation	Student Learning Outcome Clarification	
<p><i>8.4 Patterns, relationships, and algebraic thinking. The student makes connections among various representations of a numerical relationship.</i></p> <p><i>8.5 Patterns, relationships, and algebraic thinking. The student uses graphs, tables, and algebraic representations to make predictions and solve problems.</i></p>	<p>8.4A The student is expected to generate a different representation of data given another representation of data (including table, graph, equation, or verbal description).</p> <p>8.5A Predict, find, and justify solutions to application problems using appropriate tables, graphs, and algebraic equations.</p>	<p>Including but not limited to:</p> <ul style="list-style-type: none"> • use multiple representations of an equation, sequence or verbal description within a single context of a problem <p>Including but not limited to:</p> <ul style="list-style-type: none"> • use multiple representations of a table, graph, equation, sequence or verbal description within a single context of a problem • discuss trends in data • use two step equations with variables on one side • Combine like terms to simplify expressions • Distributive Property • Model the properties using manipulatives including algebra tiles • Use properties in algebraic expressions, equations, and numerical expressions 	
<p>8.14 The student applies Grade 8 mathematics to solve problems connected to everyday experiences, investigations in other disciplines, and activities in and outside of school.</p> <p>8.15 The student communicates about Grade 8 mathematics through informal and mathematical language, representations, and models.</p>	<p>8.14D Select tools including real objects, manipulatives, paper/pencil, and technology or techniques including mental math, estimation, and number sense to solve problems.</p> <p>8.15B Evaluate the effectiveness of different representations to communicate ideas.</p>	<p>Including but not limited to:</p> <ul style="list-style-type: none"> • model problems with multiple representations • solve problems in using more than one tool • use tools to check reasonableness of answers <p>Including but not limited to:</p> <ul style="list-style-type: none"> • determining reasonableness of representation • model problems with multiple representations 	

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Subject Area	Math	Bundle #:	11
Grade/Level	8 th grade	Weeks:	31-33
Overview			
Graphing Calculator Skills			
TEKS - Texas Knowledge & Skills			
Knowledge & Skill Statement	Student Expectation	Student Learning Outcome Clarification	
<i>8.12 Probability and statistics. The student uses statistical procedures to describe data.</i>	8.12C Select and use an appropriate representation for presenting and displaying relationships among collected data, including line plots, line graphs, stem and leaf plots, circle graphs, bar graphs, box and whisker plots, histograms, and Venn diagrams, with and without the use of technology.	Including but not limited to: <ul style="list-style-type: none"> • use data in tables to create displays • create more than one display of the data when applicable 	
<i>8.14 Underlying processes and mathematical tools. The student applies Grade 8 mathematics to solve problems connected to everyday experiences, investigations in other disciplines, and activities in and outside of school.</i>	8.14D Select tools including real objects, manipulatives, paper/pencil, and technology or techniques including mental math, estimation, and number sense to solve problems.	Including but not limited to: <ul style="list-style-type: none"> • model problems with multiple representations • solve problems in using more than one tool • use tools to check reasonableness of answers <p style="text-align: center;">Note: See p. T695 in 8th grade math text book.</p>	

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Subject Area	Math	Bundle #:	12
Grade/Level	8 th grade	Weeks:	34-36
Overview			
Measurement Labs			
TEKS - Texas Knowledge & Skills			
Knowledge & Skill Statement	Student Expectation	Student Learning Outcome Clarification	
<p>8.8 Measurement. The student uses procedures to determine measures of three-dimensional figures.</p>	<p>8.8A Find lateral and total surface area of prisms, pyramids, and cylinders using concrete models and nets (two-dimensional models).</p> <p>8.8B Connect models of prisms, cylinders, pyramids, spheres, and cones to formulas for volume of these objects.</p> <p>8.8C Estimate measurements and use formulas to solve application problems involving lateral and total surface area and volume.</p> <p><u>NOTE: Determining surface area is a new concept in 8th grade</u></p>	<p>Including but not limited to:</p> <ul style="list-style-type: none"> • build models to connect two-dimensions to the three-dimensional figure • use tools on formula chart to solve problems <p>Including but not limited to:</p> <ul style="list-style-type: none"> • match nets and models to appropriate formulas to problem solve • use Real-world models • identify area of the base as "B" <p>Including but not limited to:</p> <ul style="list-style-type: none"> • use metric and customary units in problems • use compatible numbers to estimate • estimate surface area and volume before calculating • use Real-world models • create nets to find lateral and total surface area 	
<p>8.10 Measurement. The student describes how changes in dimensions affect linear, area, and volume measures.</p>	<p>8.10A Describe the resulting effects on perimeter and area when dimensions of a shape are changed proportionally.</p> <p><u>Note: Dimensional change is a new concept for 8th grade.</u></p>	<p>Including but not limited to:</p> <ul style="list-style-type: none"> • use a scale factor to change shape dimensions • find missing dimensions on changed shape • generalize the effects on perimeter and area if the dimensions are changed by the same scale factor • create a pattern, table or list to support results 	

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<p>8.10 Measurement. The student describes how changes in dimensions affect linear, area, and volume measures.</p>	<p>8.10B Describe the resulting effect on volume when dimensions of a solid are changed proportionally.</p> <p><u>Note: Dimensional change is a new concept for 8th grade.</u></p>	<p>Including but not limited to:</p> <ul style="list-style-type: none"> • use a scale factor to change shape dimensions • find missing dimensions on changed shape • generalize the effects on volume if the dimensions are changed by the same scale factor • create a pattern, table or list to support results
<p>8.14 The student applies Grade 8 mathematics to solve problems connected to everyday experiences, investigations in other disciplines, and activities in and outside of school.</p>	<p>8.14A Identify and apply mathematics to everyday experiences, to activities in and outside of school, with other disciplines, and with other mathematical topics.</p> <p>8.14C Select or develop an appropriate problem-solving strategy from a variety of different types, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem.</p> <p>8.14D Select tools including real objects, manipulatives, paper/pencil, and technology or techniques including mental math, estimation, and number sense to solve problems.</p>	<p>Including but not limited to:</p> <ul style="list-style-type: none"> • use of charts or visual of information • analysis of detailed written problem • data in a graph <p>Including but not limited to:</p> <ul style="list-style-type: none"> • use of charts or visual of information • analysis of detailed written problem • data in a graph • solve problem using several different models <p>Including but not limited to:</p> <ul style="list-style-type: none"> • model problems with multiple representations • solve problems in using more than one tool • use tools to check reasonableness of answers