

Grade 6 Curriculum and Instructional Gap Analysis Implementation Year 2014-2015

Revised TEKS (2012) Strands	Curriculum Gap Analysis	Instructional Gap Analysis
Number and operations	<p><i>What new content moves into the grade 6 curriculum in 2014-2015?</i></p> <ul style="list-style-type: none"> Use a visual representation to describe the relationship between whole numbers, integers, and rational numbers. 6(2)(A) Compare and order rational numbers including integers and negative fractions and decimals with and without a number line. Identify absolute value. 6(2)(B), 6(2)(C), 6(2)(D) Extend representations for division to include fraction notation such as a/b represents the same number as $a \div b$ where $b \neq 0$. 6(2)(E) Add, subtract, multiply, and divide integers with and without models. 6(3)(C), 6(3)(D) Multiply and divide positive rational numbers. This includes fractions and decimals. 6(3)(A), 6(3)(B), 6(3)(E) 	<p><i>Considering previous years of instruction, what student expectations will a grade 6 student not have experienced by 2014-2015?</i></p> <ul style="list-style-type: none"> Solve with proficiency for quotients of up to 4 digit dividends by a 2 digit divisor. 5(3)(C) Represent and solve for products of decimals to the hundredths. 5(3)(D), 5(3)(E) Represent and solve for quotients of decimals to the hundredths. 5(3)(F), 5(3)(G) Represent and solve multiplication of a whole number and a fraction. 5(3)(I) Represent and solve with fluency addition and subtraction of fractions with unequal denominators. 5(3)(H), 5(3)(K) Represent and divide whole numbers by unit fractions and unit fractions by whole numbers. 5(3)(J), 5(3)(L)
Proportionality	<ul style="list-style-type: none"> Use multiple representations to differentiate additive vs. multiplicative relationships. 6(4)(A) Apply qualitative and quantitative reasoning to solve prediction and comparison real-world problems involving ratios and rates. 6(4)(B) Represent problems using scale factors, tables, graphs, and proportions. 6(5)(A) Solve problems involving percents. 6(5)(B) <i>Note: Percent increase and/or decrease is in grade 7.</i> 	<ul style="list-style-type: none"> Convert measures within a measurement system. 5(7)(A) Note: Use appropriate rational numbers.
Expressions, equations, and relationships	<ul style="list-style-type: none"> Identify independent and dependent quantities from tables and graphs. 6(6)(A) Represent situations using verbal descriptions, tables, graphs, and equations. 6(6)(C) Apply order of operations with exponents. 6(7)(A) Distinguish between expressions and equations using multiple representations and determine if expressions are equivalent using multiple representations and properties of operations. 6(7)(B), 6(7)(C), 6(7)(D) Extended knowledge of triangles to include sum of angles of a triangle, relationships between side lengths and angle measures of triangles, and determine when three lengths form a triangle. 6(8)(A) Write one-variable, one-step equations and inequalities to represent constraints or conditions within problems. 6(9)(A) Represent solutions for one-variable, one-step equations and inequalities on number lines. 6(9)(B) Write corresponding real-world problems given one-variable, one-step equations or inequalities. 6(9)(C) Model and solve one-variable, one-step equations and inequalities that represent problems, including geometric concepts. 6(10)(A) Determine if given value(s) make(s) one-variable, one-step equations and inequalities true. 6(10)(B) 	<ul style="list-style-type: none"> Identify, illustrate, and measure angles. 4(6)(C), 4(7)(A), 4(7)(B), 4(7)(C), 4(7)(D), 4(7)(E) Generate additive and/or multiplicative number patterns given a rule and graph. 5(4)(C) Recognize additive vs. multiplicative number patterns from tables or graphs. 5(4)(D) Order of operations with grouping symbols and without exponents. 5(4)(E), 5(4)(F) Represent and solve problems related to perimeter and/or area and related to volume. 5(4)(H)

Revised TEKS (2012) Strands	Curriculum Gap Analysis <i>What new content moves into the grade 6 curriculum in 2014-2015?</i>	Instructional Gap Analysis <i>Considering previous years of instruction, what student expectations will a grade 6 student not have experienced by 2014-2105?</i>
Measurement and data	<ul style="list-style-type: none"> • Graph in all four quadrants using ordered pairs of rational numbers. 6(11)(A) • Represent and interpret numeric data graphically, including dot plots, stem-and-leaf plots, histograms, and box plots. 6(12)(A), 6(13)(A) • Use graphical representation of numeric data to describe the center, spread, and shape of the data distribution. 6(12)(B) • Summarize numeric data with numerical and graphical summaries, including mean, median, range, and interquartile range. 6(12)(C) • Summarize categorical data with numerical and graphical summaries including mode, relative frequency tables, and percent bar graph. 6(12)(D) • Distinguish between situations that yield variability and those that do not. 6(13)(B) 	<ul style="list-style-type: none"> • Classify 2-dimensional figures in a hierarchy of sets & subsets using graphic organizers. 5(5)(A) • Graph in the first quadrant of the coordinate plane ordered pairs of numbers arising from mathematical and real-world problems, including those generated by number patterns or found in an input-output table. 5(8)(C) • Represent categorical data with bar graphs or frequency tables, and numerical data with dot plots or stem and leaf plots. 5(9)(A) • Represent discrete paired data on a scatter plot. 5(9)(B) • Solve one- and two-step problems using data from a frequency table, dot plot, bar graph, stem and leaf plot, or scatter plot. 5(9)(C)
Personal financial literacy	<ul style="list-style-type: none"> • Compare the features and costs of a checking account and a debit card offered by different financial institutions. 6(14)(A) • Distinguish between debit cards and credit cards. 6(14)(B) • Balance a check register. 6(14)(C) • Explain why it is important to establish a positive credit history. 6(14)(D) • Describe the information on a credit report. 6(14)(E) • Describe the value of credit reports. 6(14)(F) • Explain various methods to pay for college. 6(14)(G) • Compare the annual salary of several occupations requiring various levels of post-secondary education or vocational training. 6(14)(H) 	<ul style="list-style-type: none"> • Reference the Vertically Aligned TEKS Charts.

Grade 7 Curriculum and Instructional Gap Analysis Implementation Year 2014-2015

Revised TEKS (2012) Strands	Curriculum Gap Analysis <i>What new content moves into the grade 7 curriculum in 2014-2015?</i>	Instructional Gap Analysis <i>Considering previous years of instruction, what student expectations will a grade 7 student not have experienced by 2014-2015?</i>
Number and operations	<ul style="list-style-type: none"> Use a visual representation to describe relationships between sets of rational numbers. 7(2)(A) Add, subtract, multiply, and divide rational numbers fluently and apply and extend to solve problems. This now includes negative fractions and negative decimals. 7(3)(A), 7(3)(B) 	<ul style="list-style-type: none"> Use a visual representation to describe the relationship between whole numbers, integers, and rational numbers. 6(2)(A) Compare and order rational numbers including integers and negative fractions and decimals with and without a number line. Identify absolute value. 6(2)(B), 6(2)(C), 6(2)(D) Multiply and divide positive rational numbers. This includes fractions and decimals. 5(3)(D), 5(3)(E), 5(3)(F), 5(3)(G), 5(3)(I), 5(3)(J), 5(3)(L), 6(2)(E), 6(3)(A), 6(3)(B), 6(3)(E) Add, subtract, multiply, and divide integers fluently with and without models. 6(3)(C), 6(3)(D)
Proportionality	<ul style="list-style-type: none"> Determine the constant of proportionality ($k = y/x$) within mathematical and real-world problems. 7(4)(C) Convert between measurement systems. 7(4)(E) Describe pi as the ratio of the circumference of a circle to its diameter. 7(5)(B) <i>Note: Students in grade 7 in 2014-2015 will have seen this skill in grade 6 during 2013-2014.</i> Represent sample spaces for simple and compound events using lists and tree diagrams. This includes dependent compound events. 7(6)(A) Select and use different simulations to represent simple and compound events with and without technology. This includes dependent compound events. 7(6)(B) Make predictions and determine solutions using experimental data and theoretical probability for simple and compound events. This includes dependent compound events. 7(6)(C), 7(6)(D) Find the probabilities of a simple event and its complement. 7(6)(E) <i>Note: Students in grade 7 in 2014-2015 will have seen this skill in grade 6 during 2013-2014.</i> Solve problems using data in bar graphs, dot plots, and circle graphs, including part-to-whole and part-to-part comparisons and equivalents. 7(6)(G) Solve problems using qualitative and quantitative predictions and comparisons from simple experiments. 7(6)(H) Determine experimental and theoretical probabilities related to simple and compound events using data and sample spaces. This includes dependent compound events. 7(6)(I) 	<ul style="list-style-type: none"> Use multiple representations to differentiate additive vs. multiplicative relationships. 6(4)(A) Apply qualitative and quantitative reasoning to solve prediction and comparison real-world problems involving ratios and rates. 6(4)(B) Represent problems using scale factors, tables, graphs, and proportions. 6(5)(A) Solve problems involving percents. 6(5)(B) <i>Note: Percent increase and/or decrease is in grade 7.</i>

Revised TEKS (2012) Strands	Curriculum Gap Analysis <i>What new content moves into the grade 7 curriculum in 2014-2015?</i>	Instructional Gap Analysis <i>Considering previous years of instruction, what student expectations will a grade 7 student not have experienced by 2014-2105?</i>
Expressions, equations, and relationships	<ul style="list-style-type: none"> Represent linear relationships using verbal descriptions, tables, graphs, and equations that simplify to the form of $y = mx + b$. 7(7)(A) Provide multiple representations to justify why the volumes of rectangular and triangular pyramids are $\frac{1}{3}$ of the volume of related rectangular and triangular prisms with the same base area and height. 7(8)(A), 7(8)(B) Use and connect models to formulas for the circumference and area of circles. 7(8)(C) <i>Note: Students in grade 7 in 2014-2015 will have seen this skill in grade 6 during 2013-2014.</i> Solve problems involving volume of prisms and pyramids. 7(9)(A) Solve problems with lateral and total surface area of a rectangular prism, rectangular pyramid, triangular prism and triangular pyramid by determining the area of the shape's net. 7(9)(D) Write one-variable, two-step equations and inequalities to represent problems. 7(10)(A) Represent solutions for one-variable, two-step equations and inequalities on number lines. 7(10)(B) Write corresponding real-world problems given one-variable, two-step equations and inequalities. 7(10)(C) Model and solve one-variable, two-step equations and inequalities, and determine if given value(s) make(s) one-variable, two-step equations and inequalities true. 7(11)(A), 7(11)(B) Write and solve equations using geometry concepts, including the sum of the angles in a triangle, and angle relationships. 7(11)(C) 	<ul style="list-style-type: none"> Identify independent and dependent quantities from tables and graphs. 6(6)(A) Represent situations using verbal descriptions, tables, graphs, and equations. 6(6)(C) Apply order of operations with exponents. 6(7)(A) Distinguish between expressions and equations using multiple representations and determine if expressions are equivalent using multiple representations and properties of operations. 6(7)(B), 6(7)(C), 6(7)(D) Extended knowledge of triangles to include sum of angles of a triangle, relationships between side lengths and angle measures of triangles, and determine when three lengths form a triangle. 6(8)(A) Write one-variable, one-step equations and inequalities to represent constraints or conditions within problems. 6(9)(A) Represent solutions for one-variable, one-step equations and inequalities on number lines. 6(9)(B) Write corresponding real-world problems given one-variable, one-step equations or inequalities. 6(9)(C) Model and solve one-variable, one-step equations and inequalities that represent problems, including geometric concepts 6(10)(A) Determine if given value(s) make(s) one-variable, one-step equations and inequalities true. 6(10)(B)
Measurement and data	<ul style="list-style-type: none"> Compare the shape, center, and spread of two groups of numeric data using comparative box plots and dot plots. 7(12)(A) Compare two populations based on data in random samples from these populations. 7(12)(C) 	<ul style="list-style-type: none"> Graph in all four quadrants using ordered pairs of rational numbers. 6(11)(A) Represent and interpret numeric data graphically, including dot plots, stem-and-leaf plots, histograms, and box plots. 6(12)(A), 6(13)(A) Determine and represent the mean of a set of data 6(12)(B), 6(12)(C). Use graphical representation of numeric data to describe the center, spread, and shape of the data distribution. 6(12)(B) Summarize numeric data with numerical and graphical summaries, including mean, median, range, and interquartile range. 6(12)(C) <i>The current TEKS expect students to use concrete and pictorial models to determine the mean of a set of data.</i> Summarize categorical data with numerical and graphical summaries including mode, relative frequency tables, and percent bar graph. 6(12)(D) Distinguish between situations that yield variability and those that do not. 6(13)(B)
Personal financial literacy	<ul style="list-style-type: none"> Calculate sales tax for a given purchase and income tax for earned wages. 7(13)(A) Identify components of a personal budget and calculate percentages of each component. 7(13)(B) Create and organize a financial assets and liabilities record and construct a net worth statement. 7(13)(C) Use a family budget estimator to determine budget and wage needs for a family to meet its basic needs. 7(13)(D) Calculate and compare simple interest and compound interest earnings. 7(13)(E) Analyze and compare monetary incentives. 7(13)(F) 	<ul style="list-style-type: none"> Reference the Vertically Aligned TEKS Charts.

Grade 8 Curriculum and Instructional Gap Analysis Implementation Year 2014-2015

Revised TEKS (2012) Strands	Curriculum Gap Analysis <i>What new content moves into the grade 8 curriculum in 2014-2015?</i>	Instructional Gap Analysis <i>Considering previous years of instruction, what student expectations will a grade 8 student not have experienced by 2014-2015?</i>
Number and operations	<ul style="list-style-type: none"> Use visual representation to describe relationships between sets of real numbers. 8(2)(A) Order a set of real numbers in context. 8(2)(D) 	<ul style="list-style-type: none"> Use a visual representation to describe relationships between sets of rational numbers. 7(2)(A) Add, subtract, multiply, and divide rational numbers fluently and apply and extend to solve problems. This now includes negative fractions and negative decimals. 7(3)(A), 7(3)(B)
Proportionality	<ul style="list-style-type: none"> Generalize that the ratio of corresponding sides of similar shapes are proportional, including a shape and its dilation. 8(3)(A) Use similar right triangles to develop an understanding of slope, given as the rate comparing the change in y-values to the change in x-values $\left(\frac{Y_2 - Y_1}{X_2 - X_1}\right)$. 8(4)(A) Interpret unit rate as the slope of the line that models a proportional relationship. 8(4)(B) Use data from a table or graph to determine rate of change or slope and y-intercept in context. 8(4)(C) Contrast bivariate sets of data that suggest a linear relationship with those that do not suggest a linear relationship from a graphical representation. 8(5)(C) Identify functions using sets of ordered pairs, tables, mappings, and graphs. 8(5)(G) 	<ul style="list-style-type: none"> Represent discrete paired data on a scatter plot. 5(9)(B) Identify independent and dependent quantities from tables and graphs. 6(6)(A) Graph in all four quadrants using ordered pairs of rational numbers. 6(11)(A) Determine the constant of proportionality ($k = y/x$) within mathematical and real-world problems. 7(4)(C) Convert between measurement systems. 7(4)(E) Describe pi as the ratio of the circumference of a circle to its diameter. 7(5)(B) <i>Note: Students in grade 7 in 2014-2015 will have seen this skill in grade 6 during 2013-2014.</i> Represent sample spaces for simple and compound events using lists and tree diagrams. This includes dependent compound events. 7(6)(A) Select and use different simulations to represent simple and compound events with and without technology. This includes dependent compound events. 7(6)(B) Make predictions and determine solutions using experimental data and theoretical probability for simple and compound events. This includes dependent compound events. 7(6)(C), 7(6)(D) Find the probabilities of a simple event and its complement. 7(6)(E) <i>Note: Students in grade 7 in 2014-2015 will have seen this skill in grade 6 during 2013-2014.</i> Solve problems using data in bar graphs, dot plots, and circle graphs, including part-to-whole and part-to-part comparisons and equivalents. 7(6)(G) Solve problems using qualitative and quantitative predictions and comparisons from simple experiments. 7(6)(H) Determine experimental and theoretical probabilities related to simple and compound events using data and sample spaces. This includes dependent compound events. 7(6)(I)
Expressions, equations, and relationships	<ul style="list-style-type: none"> Determine the distance between two points on a coordinate plane using the Pythagorean Theorem. 8(7)(D) Write and solve (with and without models) one-variable equations and inequalities with variables on both sides using rational number coefficients and constants. 8(8)(A), 8(8)(C) Write a real-world problem given an equation or inequality with variables on both sides using rational number coefficients and constants. 8(8)(B) Use everyday language to establish facts about angle sum of triangles, exterior angles of triangles, angles created when parallel lines are cut by a transversal, and angle-angle criterion for similarity of triangles. 8(8)(D) Solve linear systems of equations using graphs. 8(9)(A) 	<ul style="list-style-type: none"> Write, solve, and represent on a number line one-variable, one-step and two-step equations or inequalities. 6(9)(A), 6(9)(B), 6(10)(A), 7(10)(A), 7(10)(B), 7(11)(A) Write a real-world problem given an equation or inequality. 6(9)(C), 7(10)(C) Determine if a given value makes an equation or inequality true. 6(10)(B), 7(11)(B) Represent linear relationships using verbal descriptions, tables, graphs, and equations that simplify to the form of $y = mx + b$. 7(7)(A) Connect models of pyramids to their volume formulas. 7(8)(A), 7(8)(B) Solve problems involving volume of prisms and pyramids. 7(9)(A) Use nets to determine lateral and total surface area of specified solids. 7(9)(D) Write and solve equations using geometry concepts, including the sum of the angles in a triangle, and angle relationships. 7(11)(C)

Revised TEKS (2012) Strands	Curriculum Gap Analysis <i>What new content moves into the grade 8 curriculum in 2014-2015?</i>	Instructional Gap Analysis <i>Considering previous years of instruction, what student expectations will a grade 8 student not have experienced by 2014-2015?</i>
Two-dimensional Shapes	<ul style="list-style-type: none"> Generalize properties of orientation and congruence of transformations, including rotations. 8(10)(A) Differentiate between those transformations that preserve congruence and those that do not, including rotations. 8(10)(B) Explain the effect of a transformation of a 2-dimensional shape on a coordinate plane using an algebraic representation, including rotations. 8(10)(C) 	<ul style="list-style-type: none"> Graph in all four quadrants using ordered pairs of rational numbers. 6(11)(A)
Measurement and data	<ul style="list-style-type: none"> Determine mean absolute deviation and compare to elements of the data set. 8(11)(B) Simulate generating random samples from a population with known characteristics. 8(11)(C) 	<ul style="list-style-type: none"> Represent and interpret numeric data graphically, including dot plots, stem-and-leaf plots, histograms, and box plots. 6(12)(A), 6(13)(A) Summarize numeric data with numerical and graphical summaries, including mean, median, range, and interquartile range. 6(12)(C) Summarize categorical data with numerical and graphical summaries including mode, relative frequency tables, and percent bar graph. 6(12)(D) Compare the shape, center, and spread of two groups of numeric data using comparative box plots and dot plots. 7(12)(A) Compare two populations based on data in random samples from these populations. 7(12)(C)
Personal financial literacy	<ul style="list-style-type: none"> Solve real-world problems comparing how interest rate and loan length affect the cost of credit. 8(12)(A) Calculate the total cost of repaying a loan. 8(12)(B) Explain how small amounts of money invested regularly grow over time. 8(12)(C) Calculate and compare simple interest and compound interest earnings. 8(12)(D) Identify and explain the advantages and disadvantages of different payment methods. 8(12)(E) Analyze situations to determine if they represent financially responsible decisions and identify the benefits of financial responsibility and costs of financial irresponsibility. 8(12)(F) Estimate the cost of a 2-year and 4-year college education. 8(12)(G) 	<ul style="list-style-type: none"> Reference the Vertically Aligned TEKS Charts.