

TEKS Distribution among Units

	8.1A	8.1B	8.1C	8.1D	8.1E	8.1F	8.1G
Unit 1	X	X	X	X	X	X	X
Unit 2	X	X	X	X	X	X	X
Unit 3	X	X	X	X	X	X	X
Unit 4	X	X	X	X	X	X	X
Unit 5	X	X	X	X	X	X	X
Unit 6	X	X	X	X	X	X	X
Unit 7	X	X	X	X	X	X	X
Unit 8	X	X	X	X	X	X	X
Unit 9	X	X	X	X	X	X	X

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Math Grade 7 AAC Scope and Sequence 2025-2026

Mathematical Process Standards: The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:

Process Standards:

8.1A Apply mathematics to problems arising in everyday life, society, and the workplace

8.1B Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution

8.1C Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems

8.1D Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate

8.1E Create and use representations to organize, record, and communicate mathematical ideas

8.1F Analyze mathematical relationships to connect and communicate mathematical ideas

8.1G Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication

Note: The 7th Grade TEKS not listed above are covered in 6th Grade AAC. All 8th Grade TEKS will be covered in 7th Grade AAC.

Grading Period 1

Unit 1: Represent Real Numbers

Estimated Date Range: Aug. 12 – Aug. 27 (12 total school days)

Instructional & Re-engagement Days in Unit: 11 days

Assessments

STATE/NATIONAL ASSESSMENTS

N/A

DISTRICT ASSESSMENTS

N/A

COMMON FORMATIVE ASSESSMENT

(CFAs)

Unit 1, 8.2D (1 Day)

Testing Window: Aug. 20 – Aug. 27

Concepts within the Unit

TEKS

Establishing a Positive Mathematics
Community
Suggested Days: 2

Process Standards:

- 8.1A Apply mathematics to problems arising in everyday life, society, and the workplace
- 8.1B Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution
- 8.1C Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems
- 8.1D Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate
- 8.1E Create and use representations to organize, record, and communicate mathematical ideas
- 8.1F Analyze mathematical relationships to connect and communicate mathematical ideas
- 8.1G Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication

Concept #1: Representing Real Numbers
Suggested Days: 8

Priority Standards

8.2D (14) order a set of real numbers arising from mathematical and real-world contexts (R)

CFA 8.2D
(Aug. 20 – Aug. 27)

Important Standards:

- 8.2A (3) extend previous knowledge of sets and subsets using a visual representation to describe relationships between sets of real numbers (S)
- 8.2B (5) approximate the value of an irrational number, including π and square roots of numbers less than 225, and locate that rational number approximation on a number line (S)
- 8.2C (5) convert between standard decimal notation and scientific notation (S)

Unit 2: Data & Probability

Estimated Date Range: Aug. 28 – Sept. 25 (20 total school days) Instructional & Re-engagement Days in Unit: 16 days		
STATE/NATIONAL ASSESSMENTS N/A	DISTRICT ASSESSMENTS NWEA MAP BOY (9/9 – 9/11) 3 days	COMMON FORMATIVE ASSESSMENT (CFAs) Unit 2, 7.6I & 7.6H (1 Day) Testing Window: Sept. 17 – Sep. 25
Concepts within the Unit	TEKS	
Concept #1: Foundations of Probability Suggested Days: 3	<u>Important Standards</u> 7.6A (3) represent sample spaces for simple and compound events using lists and tree diagrams (S) 7.6B select and use different simulations to represent simple and compound events with and without technology (S)	
Concept #2: Determining Probability of Simple and Compound Events Suggested Days: 6	<u>Priority Standards</u> 7.6I (14) determine experimental and theoretical probabilities related to simple and compound events using data and sample spaces (R) <u>Important Standards</u> 7.6B select and use different simulations to represent simple and compound events with and without technology(S) 7.6E (2) find the probability of a simple event and its complement and describe the relationship between the two (S)	
Concept #3: Making Predictions with Simple and Compound Events Suggested Days: 5 CFA 7.6I & 7.6H (Sept. 17 – Sept. 23)	<u>Priority Standards</u> 7.6H (14) Solve problems using qualitative and quantitative predictions and comparisons from simple experiments (R) <u>Important Standards</u> 7.6D (2) Make predictions and determine solutions using theoretical probability for simple and compound events with and without technology (S) 7.6C (3) make predictions and determine solutions using experimental data for simple and compound events (S) 7.6F use data from a random sample to make inferences about a population (S)	
Unit 3: Data & Statistics Estimated Date Range: Sept. 29 – Oct. 10 (10 total school days) Instructional Days in Unit Time Frame: 9 days		

Assessments		
STATE/NATIONAL ASSESSMENTS N/A	DISTRICT ASSESSMENTS N/A	COMMON FORMATIVE ASSESSMENT (CFAs) Unit 3, 7.6G & 7.12A (1 Day) Testing Window: Oct. 6 – Oct. 10
Concepts within the Unit	TEKS	
Concept #1: Analyzing Data in Bar Graphs, Dot Plots, and Circle Graphs Suggested Days: 6 CFA 7.6G & 7.12A (Oct. 6 – Oct. 10)	<u>Priority Standards</u> 7.6G (14) Solve problems using data represented in bar graphs, dot plots, and circle graphs, including part-to-whole and part-to-part comparisons and equivalents (R) 7.12A (14) Compare two groups of numeric data using comparative dot plots or box plots by comparing their shapes, centers, and spreads	
Concept #2: Making Inferences with Data Suggested Days: 2	<u>Important Standards</u> 7.12B (3) use data from a random sample to make inferences about a population (S) 7.12C (3) compare two populations based on data in random samples from these populations, including informal comparative inferences about differences between the two populations (S) 8.11C simulate generating random samples of the same size from a population with known characteristics to develop the notion of a random sample being representative of the population from which it was selected (S)	
Concept #3: Mean Deviation Suggested Days: 1	<u>Important Standards</u> 8.11B (2) determine the mean absolute deviation and use this quantity as a measure of the average distance data are from the mean using a data set of no more than 10 data points (S)	
Grading Period 2		
Unit 4: Equations and Inequalities Estimated Date Range: Oct. 21 – Nov. 17 (20 total school days) Instructional & Re-engagement Days in Unit: 19 days		
Assessments		
STATE/NATIONAL ASSESSMENTS N/A	DISTRICT ASSESSMENTS N/A	COMMON FORMATIVE ASSESSMENT (CFAs) Unit 4, 8.8C & 8.7C (1 Day)

		Testing Window: Nov. 10 – Nov. 17
Concepts within the Unit	TEKS	
Concept #1: Represent (Models/Write) Equations and Inequalities Suggested Days: 3	<p><u>Priority Standards</u> 8.8C (14) model and solve one-variable equations with variables on both sides of the equal sign that represent mathematical and real-world problems using rational number coefficients and constants (R)</p> <p><u>Important Standards</u> 8.8A (6) write one-variable equations or inequalities with variables on both sides that represent problems using rational number coefficients and constants (S) 8.8B (3) write a corresponding real-world problem when given a one-variable equation or inequality with variables on both sides of the equal sign using rational number coefficients and constants (S)</p>	
Concept #2: Model, Write and Solve Equations Suggested Days: 6	<p><u>Priority Standards</u> 8.8C (14) model and solve one-variable equations with variables on both sides of the equal sign that represent mathematical and real-world problems using rational number coefficients and constants (R)</p> <p><u>Important Standards</u> 8.8A (6) write one-variable equations or inequalities with variables on both sides that represent problems using rational number coefficients and constants (S) 7.11C (6) write and solve equations using geometry concepts, including the sum of the angles in a triangle, and angle relationships (S)</p>	
Concept #3: Inductive Reasoning Suggested Days: 2	<p><u>Important Standards</u> 8.8D (5) use informal arguments to establish facts about the angle sum and exterior angle of triangles, the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles(S)</p>	
Concept #4: Application of Pythagorean Theorem Suggested Days: 6 CFA 8.8C & 8.7C (Nov. 10 – Nov. 17)	<p><u>Priority Standards</u> 8.7C (12) use the Pythagorean Theorem and its converse to solve problems (R)</p> <p><u>Important Standards:</u> 8.6C (3) use models and diagrams to explain the Pythagorean Theorem (S) 8.7D (5) determine the distance between two points on a coordinate plane using the Pythagorean Theorem (S)</p>	

Unit 5: Linear Relationships (Continues in Grading Period 3) Estimated Date Range: Nov. 18 – Jan. 30 (35 total school days) Instructional & Re-engagement Days in Unit: 32 days (19 days in GP2 and 13 days in GP3)		
Assessments		
STATE/NATIONAL ASSESSMENTS N/A	DISTRICT ASSESSMENTS NWEA MAP MOY (1/27 – 1/29) 3 days	COMMON FORMATIVE ASSESSMENT (CFAs) N/A
Concepts within the Unit	TEKS	
Concept #1: Intro to Functions Suggested Days: 2	Priority Standards 8.5G (14) Identify functions using ordered pairs, tables, mapping, and graphs (R) (Moved down from Algebra 1)	
Concept #2: Rate of Change and Slope and y-intercept Suggested Days: 8	Priority Standards 8.4C (14) use data from a table or graph to determine the rate of change or slope-and y-intercept in mathematical and real-world problems (R) <u>Important Standards</u> 8.4A (5) use similar right triangles to develop an understanding that slope, m , given as the rate comparing the change in y-values to the change in x-values, $\frac{y_2 - y_1}{x_2 - x_1}$, is the same for any two points (x_1, y_1) and (x_2, y_2) on the same line (S)	
Concept #3: Understanding Proportional Linear Functions Suggested Days: 7	Priority Standards 8.4B (14) graph proportional relationships, interpreting the unit rate as the slope of the line that models the relationship (R) <u>Important Standards</u> 8.5A (6) represent linear proportional situations with tables, graphs, and equations in the form of $y=kx$. (S)	

	8.5E (4) Solve problems involving direct variation (S) (Moved down from Algebra 1)
Concept #4: Understanding Non-Proportional Linear Functions Suggested Days: 7	<p>Priority Standards 8.5I (14) write an equation in the form $y=mx+b$ to model a linear relationship between two quantities using verbal, numerical, tabular, and graphical representations (R) (Moved down from Algebra 1)</p> <p>Important Standards 8.5F (5) distinguish between proportional and non-proportional situations using tables, graphs, and equations in the form $y=kx$ or $y=mx+b$, where $b \neq 0$ (S) 8.5H (4) identify examples of proportional and non-proportional functions that arise from mathematical and real-world problems (S) 8.5B (4) represent linear non-proportional situations with tables, graphs, and equations in the form of $y=mx+b$, where $b \neq 0$ (S) 8.9A (4) identify and verify the values of x and y that simultaneously satisfy two linear equations in the form $y = mx + b$ from the intersections of the graphed equations (S) (Moved down from Algebra 1)</p>
Concept #5 Scatter Plots and Making Predictions Suggested Days: 5	<p>Priority Standards 8.5D (14) use a trend line that approximates the linear relationship between bivariate sets of data to make predictions (R) (Moved down from Algebra 1)</p> <p>Important Standards 8.11A (4) construct a scatterplot and describe the observed data to address questions of association such as linear, non-linear, and no association between bivariate data (S) (Moved down from Algebra 1) 8.5C (3) contrast bivariate sets of data that suggest a linear relationship with bivariate sets of data that do not suggest a linear relationship from a graphical representation (S) (Moved down from Algebra 1)</p>

Grading Period 3

Unit 5: Linear Relationships (Continued)

Estimated Date Range: Nov. 18 – Jan. 30 (35 total school days)

Instructional & Re-engagement Days in Unit: 32 days (19 days in GP2 and 13 days in GP3)

See grading period 2 for details

Unit 6: Circumference & Area of 2-D Figures

Estimated Date Range: Feb. 2 – Feb. 24 (15 total school days)

Instructional & Re-engagement Days in Unit: 14 days

STATE/NATIONAL ASSESSMENTS K-12 TELPAS Window (2/17 – 3/27)		DISTRICT ASSESSMENTS N/A	COMMON FORMATIVE ASSESSMENT (CFAs) Unit 6, 7.9B and 7.9C (1 Day) Testing Window: Feb. 17 – Feb. 24
Concepts within the Unit	TEKS		
Concept #1: Circumference and Area of Circles Suggested Days: 4	<u>Priority Standards</u> 7.9B (14) Determine the circumference and area of circles <u>Important Standards</u> 7.5B (5) Describe π as the ratio of the circumference of a circle to its diameter 7.8C use models to determine the approximate formulas for the circumference and area of a circle and connect the models to the actual formulas Integrated Standards		
Concept #2: Area of Composite Figures Suggested Days: 6 CFA 7.9B & 7.9C (Feb. 17 – Feb. 24)	<u>Priority Standards</u> 7.9C (14) Determine the area of composite figures containing combinations of rectangles, squares, parallelograms, trapezoids, triangles, semicircles, and quarter circles		
Unit 7: Volume & Surface Area of 3-D Figures (Continues in Grading Period 4) Estimated Date Range: Feb. 25 – Mar. 25 (15 total school days) Instructional & Re-engagement Days in Unit: 14 days (11 in GP3 and 3 in GP4)			
Assessment			
STATE/NATIONAL ASSESSMENTS K-12 TELPAS Window (2/17 – 3/27)		DISTRICT ASSESSMENTS N/A	COMMON FORMATIVE ASSESSMENT (CFAs) Unit 7, 8.7B (1 Day) Testing Window: Mar. 3 – Mar. 13
Concepts within the Unit	TEKS		
Concept #1: Surface Area Suggested Days: 6	<u>Priority Standards</u>		

<p>CFA 8.7B (Mar. 3 – Mar. 13)</p>	<p>8.7B (14) use previous knowledge of surface area to make connections to the formulas for lateral and total surface area and determine solutions for problems involving rectangular prisms, triangular prisms, and cylinders (R)</p> <p><u>Important Standards</u> 7.9D Solve problems involving the 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 (S)</p>
<p>Concept #2: Volume of 3-D Figures Suggested Days: 7</p>	<p><u>Priority Standards</u> 7.9A (13) Solve problems involving the volume of rectangular prisms, triangular prisms, rectangular pyramids, and triangular pyramids (R) 8.7A (14) solve problems involving the volume of cylinders, cones, and spheres (R)</p> <p><u>Important Standards</u> 7.8A model the relationship between the volume of a rectangular prism and a rectangular pyramid having both congruent bases and heights and connect that relationship to the formulas (S) 7.8B explain verbally and symbolically the relationship between the volume of a triangular prism and a triangular pyramid having both congruent bases and heights and connect that relationship to formulas (S) 8.6A (7) describe the volume formula $V = Bh$ of a cylinder in terms of its base area and its height (S) 8.6B model the relationship between the volume of a cylinder and a cone having both congruent bases and heights and connect that relationship to the formulas (S)</p>
<p>Grading Period 4</p>	
<p>Unit 7: Volume & Surface Area of 3-D Figures (Continued) Estimated Date Range: Feb. 25 – Mar. 25 (15 total school days) Instructional & Re-engagement Days in Unit: 14 days (11 in GP3 and 3 in GP4) See grading period 3 for details.</p>	
<p>Unit 8: Similarity and Transformations Estimated Date Range: Mar. 26 – May 12 (33 total school days) Instructional & Re-engagement Days in Unit: 31 days</p>	
<p>Assessments</p>	
<p>STATE/NATIONAL ASSESSMENTS</p>	<p>DISTRICT ASSESSMENTS</p> <p>COMMON FORMATIVE ASSESSMENTS</p>

K-12 TELPAS Window (2/17 – 3/27) STAAR RLA (4/7 – 4/9) 1 day STAAR Math (4/21 – 4/23) 1 day		N/A	(CFAs) N/A
Concepts within the Unit	TEKS		
Concept #1: Similar Figures Suggested Days: 4	<p>Priority Standards 7.5C (13) Solve mathematical and real-world problems involving similar shape and scale drawings (R)</p> <p><u>Important Standards</u> 7.5A (5) Generalize the critical attributes of similarity, including ratios within and between similar shapes (S)</p>		
Concept #2: Dilations Suggested Days: 7	<p>Priority Standards 8.3C (14) Use an algebraic representation to explain the effect of a given positive rational scale factor applied to two-dimensional figures on a coordinate plane with the origin as the center of dilation (R)</p> <p><u>Important Standards</u> 8.3A (6) generalize that the ratio of corresponding sides of similar shapes are proportional, including a shape and its dilation (S) 8.3B (3) compare and contrast the attributes of a shape and its dilation(s) on a coordinate plane (S) 8.10D (2) model the effect on linear and area measurements of dilated two-dimensional shapes (S) 8.10A (4) generalize the properties of orientation and congruence of rotations, reflections, translations, and dilations of two-dimensional shapes on a coordinate plan (S) 8.10B (3) differentiate between transformations that preserve congruence and those that do not (S)</p>		
Concept #3: Translations, Rotations, and Reflections Suggested Days: 10	<p>Priority Standards 8.10C (14) explain the effect of translations, reflections over the x- or y-axis, and rotations limited to 90°, 180°, 270°, and 360° as applied to two-dimensional shapes on a coordinate plane using an algebraic representation (R)</p> <p><u>Integrated Standards</u> 8.10A (4) generalize the properties of orientation and congruence of rotations, reflections, translations, and dilations of two-dimensional shapes on a coordinate plan (S) 8.10B (3) differentiate between transformations that preserve congruence and those that do not (S)</p>		

Unit 9: Financial Literacy

Estimated Date Range: May 13 – May 28 (11 total school days)

Instructional & Re-engagement Days in Unit: 8 days

Assessments

STATE/NATIONAL ASSESSMENTS

N/A

DISTRICT ASSESSMENTS

NWEA MAP EOY (5/12 – 5/14) 3 days

COMMON FORMATIVE ASSESSMENTS

(CFAs)

N/A

Concepts within the Unit

TEKS

Concept #1: Purchasing Power
Suggested Days: 1

Integrated Standards

8.12E identify and explain the advantages and disadvantages of different payment methods (S)

Concept #2: Financial Responsibility
Suggested Days: 2

Integrated Standards

7.13B (3) identify the components of a personal budget, including income; planned savings for college, retirement, and emergencies; taxes; and fixed and variable expenses, and calculate what percentage each category comprises of the total budget

7.13C (4) create and organize a financial asset and liabilities record and construct a net worth statement (S)

7.13D (1) use a family budget estimator to determine the minimum household budget and average hourly wage needed for a family to meet its basic needs in the student's city or another large city nearby (S)

8.12F analyze situations to determine if they represent financially responsible decisions and identify the benefits of financial responsibility and the costs of financial irresponsibility (S)

Concept #3: Interest, Borrowing and Saving
Suggested Days: 3

Priority Standards

8.12D (14) calculate and compare simple interest and compound interest earnings (R)

Integrated Standards

8.12A (3) solve real-world problems comparing how interest rate and loan length affect the cost of credit (S)

8.12B calculate the total cost of repaying a loan, including credit cards and easy access loans, under various rates of interest and over different periods using an online calculator (S)

8.12C (2) explain how small amounts of money invested regularly, including money saved for college and retirement, grow over time (S)

8.12G (4) estimate the cost of a two-year and four-year college education, including family contribution, and devise a periodic savings plan for accumulating the money needed to contribute to the total cost of attendance for at least the first year of college (S)

