

COACHELLA VALLEY UNIFIED SCHOOL DISTRICT
2023-24 Grade 8 Year at a Glance

ANYTHING UNDERLINED IS A LINK!

[Assessment List](#)

MAPS NEEDED TO CREATE GRADE LEVEL TRACKERS

Gr8_Math_CMap

[Assessment Calendar](#)

What Students Learn in Eighth Grade Mathematics	
Eighth grade is the culmination of middle school math, when students fuse all of their arithmetic skills with their growing knowledge of number relationships, equations, the coordinate plane, and spatial reasoning to become high school-ready problem-solvers. In short, Grade 8 is when arithmetic begins to mature into algebra. In addition, by the end of middle school, foundations have been laid for further exploration of statistics and geometry in high school. In eighth grade, students should attain conceptual and procedural fluency with regard to single-variable linear equations, and become familiar with how to use them to model and solve problems. They will also begin to solve pairs of dual-variable equations and analyze/compare functions. Students in eighth grade should expand their number fluency to include irrational numbers and radicals, as well as exponent operations. Geometric transformations (translations, rotations, reflections and dilations) are explored and used to build toward an understanding of the concepts of congruence and similarity. One of the major topics of Grade 8 is The Pythagorean Theorem, and applying it to solving problems involving right triangles. Finally, eighth graders augment their knowledge of three-dimensional figures by studying cylinders, cones and spheres.	
Unit Numbers and Titles	By the end of Grade 8, ...
Q 1 Unit 0: Introductory Week (1-2 weeks) Includes a review of integer operations. Required Diagnostic: i-Ready (Aug 28 - Sept 22) Unit 1: Triangles and the Pythagorean Theorem, with intro to Irrationals (4 weeks) Unit 2: Solving a Single Variable Linear Equation (4 wks)	<p>Students should have mastered the following:</p> <ul style="list-style-type: none"> • Linear functions in multiple representations (graphs, equations, tables, verbal descriptions) • Calculating and comparing rates of change • Solving single variable linear equations • Simplifying expressions with integer exponents <p>Students should be working towards fluency in:</p> <ul style="list-style-type: none"> • Understanding and comparing functions • Solving systems of linear equations • Understanding congruence and similarity through transformations • Understanding and applying the Pythagorean Theorem to solve real world problems • Reasoning about quantities expressed in scientific notation <p>Students should have been introduced to:</p> <ul style="list-style-type: none"> • Modeling and interpreting bivariate data with scatter plots • Calculating volumes of solids • Understanding the difference between rational and irrational numbers and their location on the number line
Q 2 Unit 3 (part 1): Functions & Linear Functions (4 wks) Required Benchmark #1 Gr8_Math_BM1 in MasteryConnect (Dec 4-Dec 15) Unit 3 (part 2): Functions & Linear Functions (4 weeks) Required Diagnostic: i-Ready (Jan 8-Feb 2)	
Q 3 Unit 4: Systems of Linear Equations (4 wks) Unit 5: Exponents & Scientific Notation (3 wks) Unit 6: Transformations, Congruence & Similarity (3 wks)	
Q 4 Required Benchmark #2 Gr8_Math_BM2 in MasteryConnect (Apr 8-Apr 19) Unit 7: Volume: Cylinders, Cones & Spheres (2 wks) CAASPP (2 weeks) Unit 8: Bivariate Data (2 weeks) Required Diagnostic: iReady (May 1-June 11) Wrap up topics that need more attention.	

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