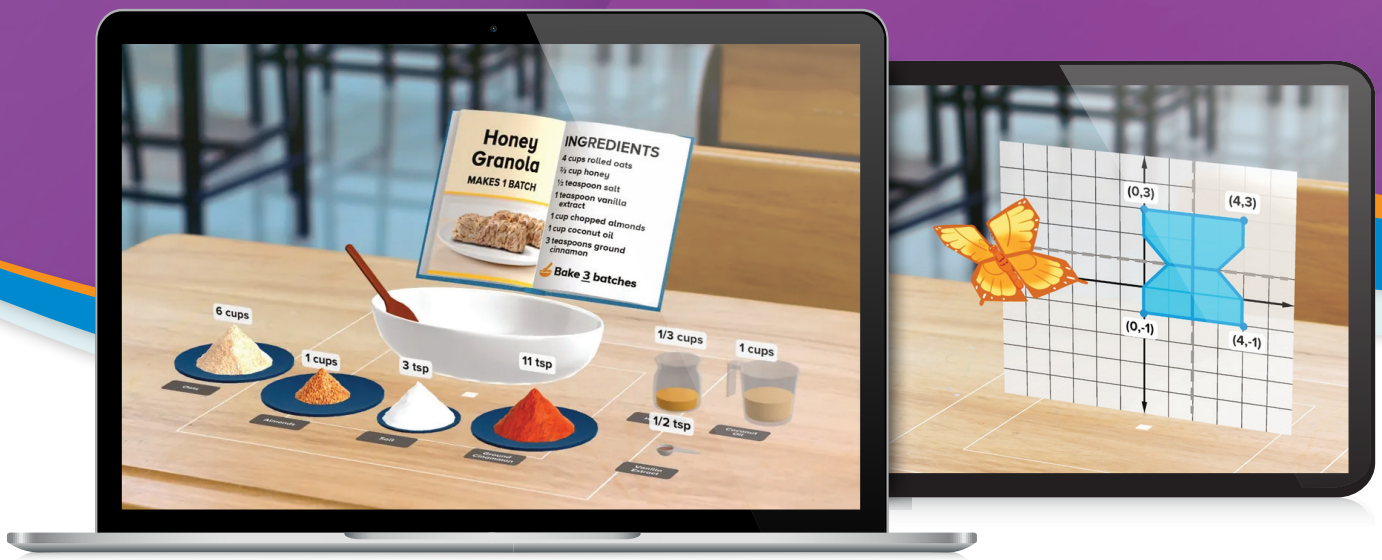
Bring Math to Life
with Augmented Reality



McGraw Hill AR enhances students' ability to visualize math concepts and recognize math in the world around them. Whether it's ski slopes, fireworks, racing cars, or desert islands, students can engage with fun, real-world scenarios that show math is more than just numbers and equations.

These interactive, bite-sized experiences foster deep conceptual understanding and are an excellent complement to *California Reveal Math*.

Each activity offers a consistent approach:

- **Observe:** Students watch a narrated animation.
- **Explore:** Students interact with 3D objects and experiment at their own pace.
- **Evaluate:** Students apply their knowledge by answering interactive questions.

Lesson Plans and Worksheets

Create a free account at **verizon.com/learning/mcgraw-hill** to access lesson plans, student worksheets, and additional Enrichment and Extension activities.

How to Access *McGraw Hill AR*

McGraw Hill AR offers two experiences—a free app for tablets and smartphones available on the **App Store or Google Play** (or download via QR code), and a web-based version for Chromebooks, laptops, and desktops at **mharonline.com**.

Math Topics in *McGraw Hill AR*

- Coordinate Plane
- Cross Sections
- Equivalent Fractions*
- Game Theory
- Graph Theory
- Growth Functions
- LCM
- Nets
- Parallel and Skew Lines
- Pythagorean Theorem in 3D
- Quadratic Functions
- Ratios
- Reflections
- Rotations
- Solving Equations
- Slope

Spanish versions of activities are available in app and on web.

California Reveal MATH®

MA24 M 24866

McGraw Hill AR Correlations to *California Reveal Math*

McGraw Hill AR Activity	*California Reveal Math* Lesson
Equivalent Fractions	**G4** Unit 9: Visual Fraction Models, Lesson 1: Equivalent Fractions
Coordinate Plane	**G5** Unit 12: Plotting to Tell a Data Story, Lesson 5: Rep. Problems on a Coordinate Plane
Ratios	**G6** Unit 3: Ratios and Rates, Lesson 1: Understand Ratios
LCM	**G6** Unit 6: Numerical & Algebraic Exp., Lesson 7: Find Factors and Multiples
Solve Equations	**G6** Unit 8: Equations and Inequalities, Lesson 1: Understand Equations and Their Solutions
Slope	**G8** Unit 3: Linear Relationships and Equations, Lesson 1: Describe the Slope of a Line **Alg. 1** Unit 3: Linear and Nonlinear Functions, Lesson 2: Rate of Change and Slope **Int. 1** Unit 3: Linear and Nonlinear Functions, Lesson 2: Rate of Change and Slope
Pythagorean Theorem in 3D	**G8** Unit 6 Angles, Triangles, and the Pythagorean Theorem, Lesson 7: Apply the Pythagorean Theorem
Reflections	**G8** Unit 2: Congruence and Similarity, Lesson 2: Explore Reflections **Geom.** Unit 4: Transformations and Symmetry, Lesson 1: Reflections **Int. 1** Unit 12: Transformations and Symmetry, Lesson 1: Reflections
Growth Functions	**Alg. 1** Unit 8: Exponential Functions, Lesson 1: Exponential Functions **Alg. 2** Unit 7: Exponential Functions, Lesson 5: Modeling Data **Int. 3** Unit 4: Exponential Functions, Lesson 5: Modeling Data
Nets	**Geom.** Unit 1: Tools of Geometry, Lesson 7: Three Dimensional Figures **Int. 2** Unit 11: Measurement, Lesson 4: Surface Area
Parallel & Skew Lines	**Geom.** Unit. 3: Parallel and Perpendicular Lines, Lesson 1: Parallel Lines & Transversals **Int. 1** Unit 11: Parallel and Perpendicular Lines, Lesson 1: Parallel Lines and Transversals
Cross Sections	**Geom.** Unit 11: Measurement, Lesson 5: Cross Sections and Solids of Revolution **Int. 3** Unit 8: Advanced Geometry, Lesson 1: Cross Sections and Solids of Revolution
Rotations	**Geom.** Unit 11: Measurement, Lesson 5: Cross Sections and Solids of Revolution **Int. 3** Unit 8: Advanced Geometry, Lesson 1: Cross Sections and Solids of Revolution
Graph Theory	**Int. 3** Unit 8: Advanced Geometry
Game Theory	**Alg. 2** Unit 10: Inferential Statistics, Lesson 2: Using Statistics to Make Decisions **Int. 3** Unit 7: Inferential Statistics, Lesson 2: Using Statistics to Make Decisions
Quadratic Functions	**Alg. 2** Unit 3: Quadratic Functions, Lesson 1: Graphing and Interpreting Quadratic Functions **Int. 2** Unit 5: Quadratic Functions, Lesson 1: Graphing and Interpreting Quadratic Functions

See the Content Progression Chart for grade level modifications on the next page.

McGraw Hill AR Content Progressions Across *California Reveal Math*

✓ Original instructions can be used for these grades

Activity may be too rudimentary for these grades

Modified instructions noted for these grades

Activity may be too advanced for these grades

McGraw Hill AR Activity	Grades K–2	Grades 3–5	Grades 6–8	Alg. 1	Geom.	Alg. 2	Int. 1	Int. 2	Int. 3
Equivalent Fractions: Identify equivalent fractions.	**Modification:** Go on a treasure hunt for shapes.	✓	✓	✓	✓		✓		
Coordinate Plane: Travel from one point to another on the coordinate plane.	**Modification:** Help the dog find his bone.	✓	✓						
Ratios: Understand and use ratios.	**Modification:** Use recipes to make different foods.		✓	✓	✓	✓	✓	✓	✓
LCM: Find the LCM of a set of numbers.	**Modification:** Get the cars to complete laps at the same time.		✓	✓	✓	✓	✓	✓	✓
Solve Equations: Solve one-step equations.	**Modification:** Make the balance level.		✓	✓	✓	✓	✓	✓	✓
Slope: Find the slope of a line.	**Modification:** Help the skateboarder land successfully.		✓	✓	✓	✓	✓	✓	✓
Pythagorean Theorem in 3D: Use the Pythagorean Theorem with 3D figures.			✓	✓	✓	✓	✓	✓	✓
Reflections: Apply reflections to 2D figures in the coordinate plane.	**Modification:** Can you create the picture?		✓	✓	✓	✓	✓	✓	✓
Growth Functions: Determine the best model to represent a sequence.	**Modification:** How many bunnies will come out of the hat?			✓	✓	✓	✓	✓	✓
Nets: Identify nets of 3D shapes.	**Modification:** Open (or unfold) 3D objects.		✓	✓	✓	✓	✓	✓	✓
Parallel and Skew Lines: Identify parallel, perpendicular, and skew lines in 3D figures.	**Modification:** Explore edges of 3D objects.		✓	✓	✓	✓	✓	✓	✓
Cross Sections: Identify cross sections.	**Modification:** Slice objects to create shapes.		✓	✓	✓	✓	✓	✓	✓
Rotations: Identify shapes formed by rotations.	**Modification:** Rotate shapes to form objects.		✓	✓	✓	✓	✓	✓	✓
Graph Theory: Identify and find Euler Paths.	**Modification:** Can you create the correct path?		✓	✓	✓	✓	✓	✓	✓
Game Theory: Identify market share and profit.		**Modification:** How much money can you make?	✓	✓	✓	✓	✓	✓	✓
Quadratic Functions: Identify the maximum of a quadratic function.			✓	✓	✓	✓	✓	✓	✓