



AR



RevealMATH®

The Future Is Now

BRING MATH TO LIFE WITH AUGMENTED REALITY

McGraw Hill AR helps students visualize math and see math in the world around them. From ski slopes to fireworks, from racing cars to desert islands, students can experience the fun in learning math and realize it's not just about numbers and equations.

These engaging, bite-size experiences promote deep conceptual learning and provide a great complement to your Reveal Math curriculum.

Each activity offers a consistent approach:

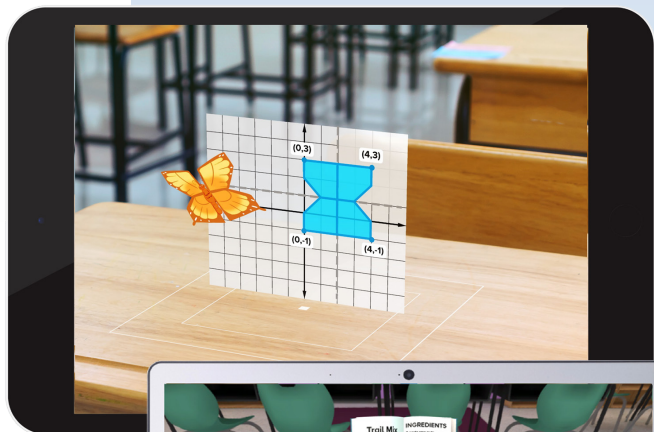
- **Observe:** Students watch a narrated animation.
- **Explore:** Students interact with 3D objects and experiment at their own pace.
- **Evaluate:** Students apply their knowledge by answering interactive questions.

Lesson Plans & Worksheets

Create a free account on [Verizon Innovative Learning HQ](#) to access the lesson plans. There are also student worksheets that correlate to the activities, as well as Enrichment and Extension activities.

How to Access McGraw Hill AR

McGraw Hill AR offers two experiences. The app, which is powered by augmented reality, can be downloaded for free from the App Store or Google Play for use on tablets or smartphones. You can also scan the QR code to download it. There's also a web-based experience for Chromebooks, laptops, and desktops at [mharonline.com](#).



Math Topics in McGraw Hill AR

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

*Spanish versions available in the app and online

**This is a spatial mapping activity where students are projecting all around them for a more immersive experience.

McGraw Hill AR can be used in direct support of lessons noted below. However, please see the Content Progression Chart for an exploration of how to use the app for other grade levels with modifications.

NOTE: If you're working on a mobile device with McGraw Hill AR downloaded, click on the App link to go directly to that activity.

McGraw Hill AR Activity	Reveal Math Lesson
Equivalent Fractions App Web Lesson Plan	G4 Unit 8: Fraction Equivalence, Lesson 1: Equivalent Fractions
Coordinate Plane App Web Lesson Plan	G5 Unit 13: Geometry, Lesson 3: Rep. Problems on a Coordinate Plane
Ratios App Web Lesson Plan	G6 Module 1: Ratios and Rates Lesson 2: Tables of Equivalent Ratios
LCM App Web Lesson Plan	G6 Module 5: Numerical & Algebraic Exp. Lesson 5: Factors & Multiples
Solve Equations App Web Lesson Plan	G7 Module 6: Write and Solve Equations Lesson 1: Write and Solve One-Step Equations Alg 1 Module 2: Equations in One Variable Lesson 2: Solving One-Step Equations
Slope App Web Lesson Plan	G8 Module 4: Linear Relationships and Slope, Lesson 2: Slope of a Line G8 Module 4: Linear Relationships and Slope, Lesson 3: Similar Triangles and Slope Alg 1 Module 4: Linear and Nonlinear Functions, Lesson 2: Rate of Change and Slope
Pythagorean Theorem in 3D App Web Lesson Plan	G8 Module 7: Triangles and the Pythagorean Theorem, Lesson 3: The Pythagorean Theorem
Reflections App Web Lesson Plan	G8 Module 8: Transformations, Lesson 2: Reflections Geom Module 2: Angles and Geometric Figures, Lesson 4: Transformations in the Plane Geom Module 4: Transformations and Symmetry, Lesson 1: Reflections
Growth Functions App Web Lesson Plan	Alg 1 Module 9: Exponential Functions, Lesson 1: Exponential Functions Alg 2 Module 7: Exponential Functions, Lesson 5: Modeling Data
Nets App Web Lesson Plan	Geom Module 2: Angles and Geometric Figures, Lesson 6: 2-D Representations of 3-D Figures
Parallel & Skew Lines App Web Lesson Plan	Geom Module 3: Logical Arguments & Line Relationships, Lesson 7: Parallel Lines & Transversals
Cross Sections App Web Lesson Plan	Geom Module 11: Measurement, Lesson 5: Cross Sections and Solids of Revolution
Rotations App Web Lesson Plan	Geom Module 11: Measurement, Lesson 5: Cross Sections and Solids of Revolution
Graph Theory App Web Lesson Plan	Not covered in Reveal Math, but could be covered in Algebra 2
Quadratic Functions App Web Lesson Plan	Alg 2 Module 3: Quadratic Functions, Lesson 1: Graphing Quadratic Functions

McGraw Hill AR Content Progressions Across Reveal Math

Instructions altered for lower grade bands

Original instructions can be used for these grade bands

These grade bands may be too advanced for this activity

The activity may be too advanced for these grade bands

McGraw Hill AR Activity	Description	Reveal Math K-2	Reveal Math 3-5	Reveal Math 6-8	Reveal Algebra	Reveal Geom.	Reveal Alg. 2
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.	Modification: Use recipes to make different foods.	√	√	√	√
LCM	Find the LCM of a set of numbers.	Modification: Get the cars to complete their laps at the same time.	Modification: Get the cars to complete their laps at the same time.	√	√	√	√
Solve Equations	Solve one-step equations.	Modification: Can you make the balance level?	Modification: Can you make the balance level?	√	√	√	√
Slope	Find the slope of a line.	Modification: Help the skateboarder land successfully.	Modification: Help the skateboarder land successfully.	√	√	√	√
Pythagorean Theorem in 3D	Use the Pythagorean Theorem with three-dimensional figures.			√	√	√	√
Reflections	Apply reflections to two-dimensional figures in the coordinate plane.	Modification: Can you create the picture?	Modification: Can you create the picture?	√	√	√	√
Growth Functions	Determine the best model to represent a sequence.	Modification: Predict how many bunnies will come out of the hat.	Modification: Predict how many bunnies will come out of the hat.	Modification: Predict how many bunnies will come out of the hat.	√	√	√
Nets	Identify nets of three-dimensional shapes.	Modification: Open (or unfold) 3D objects.	Modification: Open (or unfold) 3D objects.	√	√	√	√
Parallel and Skew Lines	Identify parallel, perpendicular, and skew lines in three-dimensional figures.	Modification: Explore the edges of 3D objects.	Modification: Explore the edges of 3D objects.	√	√	√	√
Cross Sections	Identify cross sections.	Modification: Slice objects to create shapes.	Modification: Slice objects to create shapes.	√	√	√	√
Rotations	Identify shapes formed by rotations.	Modification: Rotate shapes to form objects.	Modification: Rotate shapes to form objects.	√	√	√	√
Graph Theory	Identify and find Euler Paths.	Modification: Can you create the correct path?	Modification: Can you create the correct path?	√	√	√	√
Quadratic Functions	Identify the maximum of a quadratic function.			√	√	√	√