# Mc Graw Hill

### Inspire Science



### BRING SCIENCE TO LIFE WITH AUGMENTED REALITY

McGraw Hill and Verizon have partnered to create McGraw Hill AR, an augmented reality app combining proven content with powerful technology to engage your students in unique and impactful ways.

Your science students can now experiment with the impossible in the classroom like dissecting the human eye, taking apart a v8 engine, or playing mini golf to understand the law of reflection.

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

Each activity is standards-aligned and 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 <u>Verizon Innovative Learning HQ</u> 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.



### Science Topics in McGraw Hill AR

- Circulatory System
- Respiratory System
- Glacier
- Photosynthesis
- · Human Eye
- V8 Engine
- Law of Reflection (incl. group activity)



## **Inspire** Science

McGraw Hill AR Correlations to Inspire Science

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	Inspire Science Units, Modules, and Lessons			
Circulatory System App   Web   Lesson Plan	<b>Grade 6 Integrated,</b> Unit 1: Life: Structure & Function, Module: Body Systems, Lesson 4: Moving Materials			
	<b>Life Science (6-8),</b> Unit 2: Life: Structure & Function, Module: Body Systems, Lesson 4: Moving Materials			
Respiratory System App   Web   Lesson Plan	Grade 6 Integrated, Unit 1: Life: Structure & Function, Module: Body Systems, Lesson 4: Moving Materials			
	Life Science (6-8), Unit 2: Life: Structure & Function, Module: Body Systems, Lesson 4: Moving Materials			
Glacier App   Web   Lesson Plan	Grade 7 Integrated, Unit 2: The Changing Earth,			
	Module: Dynamic Earth, Lesson 4: Changing Earth's Surface			
	Earth and Space (6-8), Unit 4: The Changing Earth,			
	Module: Dynamic Earth, Lesson 4: Changing Earth's Surface			
Photosynthesis App   Web   Lesson Plan	Grade 7 Integrated, Unit 4: Interactions within Ecosystems,			
	Module: Matter and Energy in Ecosystems, Lesson 1: Photosynthesis and Cellular Respiration			
	Life Science (6-8), Unit 1: Interactions within Ecosystems,			
	Module: Matter and Energy in Ecosystems,			
	Lesson 1: Photosynthesis and Cellular Respiration			
Human Eye App   Web   Lesson Plan	<b>Grade 4 Integrated,</b> Unit 4: Information Processing & Living Things, Unit 3: Understanding Waves, Module: Information Proicessing and Transfer, Lesson 2: Roles of Animals' Eyes			
	<b>Grade 8 Integrated,</b> Unit 3: Understanding Waves, Module: Light, Lesson 2: Reflection and Mirrors, Lesson 3: Refraction and Lenses			
	<b>Physical Science (6-8),</b> Unit 2: Understanding Waves, Module: Light Lesson 2: Reflection and Mirrors, Lesson 3: Refraction and Lenses			
<b>V8 Engine</b> App   Web   Lesson Plan	<b>Physics,</b> Unit 3: Momentum and Energy, Module 11:Thermal Energy, Lesson 2: Changes of State and Thermodynamics			
Law of Reflection App   Web   Lesson Plan	Physics Unit 4: Waves and Light, Module 16: Reflection & Refraction, Lesson 1: Reflection of Light			

# Inspire Science

McGraw Hill AR Content Progressions Across Science

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	Science K-2	Science 3-5	Science 6-8	Science 9-12
Human Eye	Learn how each part of the human eye works to help process information.		✓	✓	✓ <b> </b>
Circulatory System	Learn how the circulatory system transports nutrients, gases, and other substances.		✓	✓	✓
Respiratory System	Learn how the respiratory system supplies the body with oxygen and gets rid of carbon dioxide.		✓	✓	✓
Glacier	Learn how glaciers carve out land as they move and create glacial features.		✓	✓	✓
Photosynthesis	Learn how plants convert light to energy.		<b>✓</b>	<b>√</b>	<b>/</b>
V8 Engine	Learn how a V8 engine works to transform energy.		Modification: Only use in Grade 5. The activity may be too advanced for Grades 3 and 4.	<b>√</b>	<b>/</b>
Law of Reflection	Recognize the Law of Reflection and how it applies to miniature golf.		<b>√</b>	✓	✓