

Unit Image

Unit Number
Unit 3

Unit Title
Congruence and Similarity

My Dashboard
Pop-Out

Glossary
Pop-Out

Math Tools
Pop-Out

Unit Video
Pop-Out

Parent Letter


Unit Assessment

Unit Overview

Concept Number | **3.1**
Concept Title | **Investigate Geometric Transformations**
Concept Image

Grade 8 Math | Unit 3

My Dashboard Glossary Math Tools



 **UNIT 3**
Congruence and Similarity

Unit Opener: Congruence and Similarity

Parent Letter Unit Assessment Unit Overview

CONCEPT 3.1
Investigate Geometric Transformations

CONCEPT 3.2
Perform Multiple Transformations



Unit Image

Global News *Pop-Out* Techbook Atlas *Pop-Out* Reference *Pop-Out*

Subdiscipline Number UNIT 1:	Subdiscipline Title A NATION DIVIDED	Subdiscipline Timeline (1820-1877)	
Unit Number CHAPTER 1:	Unit Title SLAVERY AND THE CIVIL WAR	Unit Timeline Start and End (1820 – 1865)	Chapter Assessment

Unit Title Description Child
Chapter Essential Question: In what ways was the Civil War both a beginning and an ending?

Concept Number | **1.1**
Concept Title | **Antebellum America**
Concept ?? | **How closely did the United States in 1850 reflect the Founders' vision for the nation?**

United States History (Civil War ... > A Nation Divided (1820-1877) > Slavery and the Civil War (1820...

GLOBAL NEWS TECHBOOK ATLAS REFERENCE

UNIT 1: A NATION DIVIDED (1820-1877)
CHAPTER 1: SLAVERY AND THE CIVIL WAR (1820-1865) **CHAPTER ASSESSMENT**

Chapter Essential Question: In what ways was the Civil War both a beginning and an ending?



CONCEPTS

- 1.1 Antebellum America**
How closely did the United States in 1850 reflect the Founders' vision for the nation?
- 1.2 Slave Life and Culture**
In antebellum America, what did it mean to be a slave? A free African American?

Unit Title
Life Cycles of Organisms

Concept Title | **Animal Life Cycles**
Concept Image

Unit Assessment Unit Review

Concept Review
Hands-On Activities
Preparation
Five-Minute Preps

I believe these are no longer required

COURSE: **Grade 3 – NGSS Global** > UNIT: **Life Cycles of Organisms** ▾

UNIT:
Life Cycles of Organisms

CONCEPTS IN THIS UNIT

- Animal Life Cycles**
- Plant Life Cycles

CONCEPT:
Animal Life Cycles [View Concept ▶](#)

Lesson Objectives:
By the end of this lesson, students should be able to:

- ▶ Identify and explain the life cycles of different living organisms.
- ▶ Compare the life cycles of different living things.

Unit Assessment Unit Review ▾

- English
- French
- Spanish

Concept Review ▶

- Hands-On Activities** ▶
- Preparation** ▶
- Five Minute Prep** ▶



Unit 6
Intersecting Lines and Angles

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Unit Overview

Unit Resources

Unit Video (Anchor Phenomena)
Pop-Out

6.1
Understand Interior and Exterior
Angles

6.2
Investigate Parallel and
Intersecting Lines

MOVE PARENT LETTER TO OPENER
PAGE | COULD APPEAR FOR ANY
SUBJECT

[Grade 8 Math](#) > Unit 6



Unit 6

Intersecting Lines and Angles

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Unit Resources

[Parent Letter](#)

[Unit Assessment](#)

Standards

CCSS.Math.Content.8.G.A.1b Angles are taken to angles of the same measure.

CCSS.Math.Content.8.G.A.1a Lines are taken to lines, and line segments to line segments of the same length.

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Characteristics of the Sun-Earth-Moon System

Unit Overview

Unit Resources



Moon



Earth



Sun

Characteristics of the Sun-Earth-Moon System

Unit Overview

Unit Resources

Unit Resources

Unit Assessment

Performance-Based
Assessment

Five-Minute Preps ??
(Seriously— do we
need ?)

Standards

Moon

11.A.3a - Formulate hypotheses that can be tested by collecting data.

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11.A.3e - Use data manipulation tools and quantitative (e.g., mean, mode, simple equations) and representational methods (e.g., simulations, image processing) to analyze measurements.

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11.A.3g - Report and display the process and results of a scientific investigation.

12.F.3b - Describe the organization and physical characteristics of the solar system (e.g., sun, planets, satellites, asteroids, comets).

13.A.3a - Identify and reduce potential hazards in science activities (e.g., ventilation, handling chemicals).

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Earth's Changing Surface

Unit Overview

Unit Resources

ANCHOR PHENOMENON



The Grand Canyon From Space

The Grand Canyon appears from space to be a giant gash in the surface Earth. How was this immense canyon formed? Why does it have so many different colors?

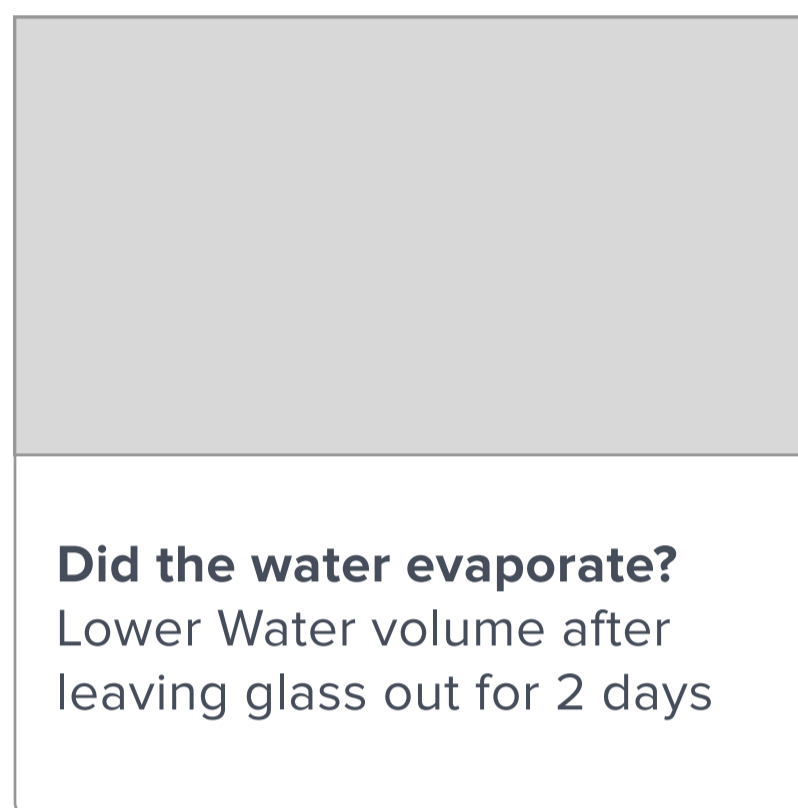
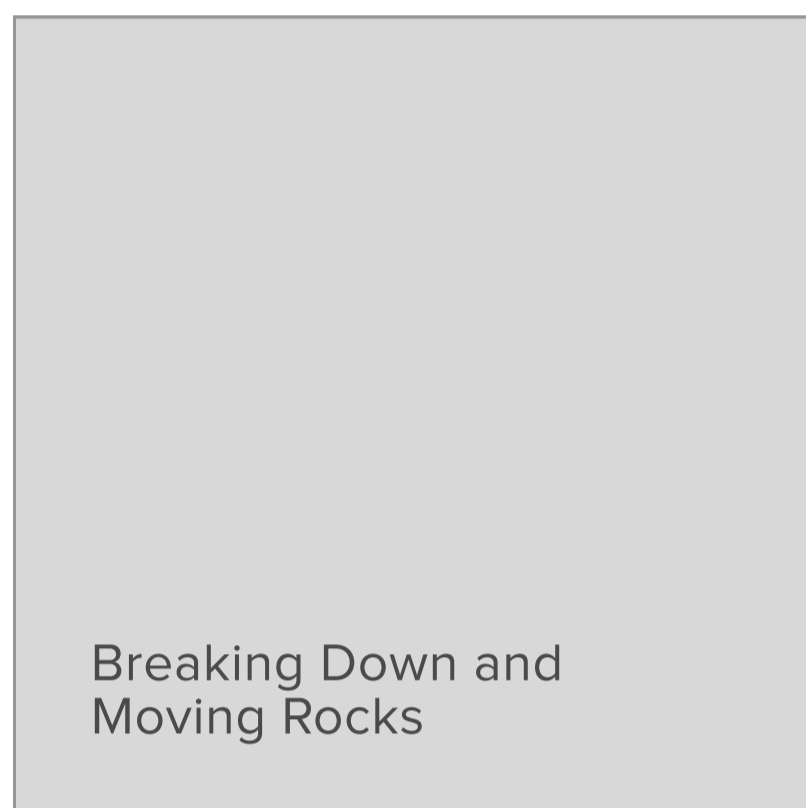
Driving Questions

1. How do water, ice, wind and vegetation sculpt landscapes?
2. What factors affect how quickly landscapes change
3. How are landscape changes recorded by layers of rocks and fossils
4. How can people minimize the effects of changing landscape on property while still protecting the environment?

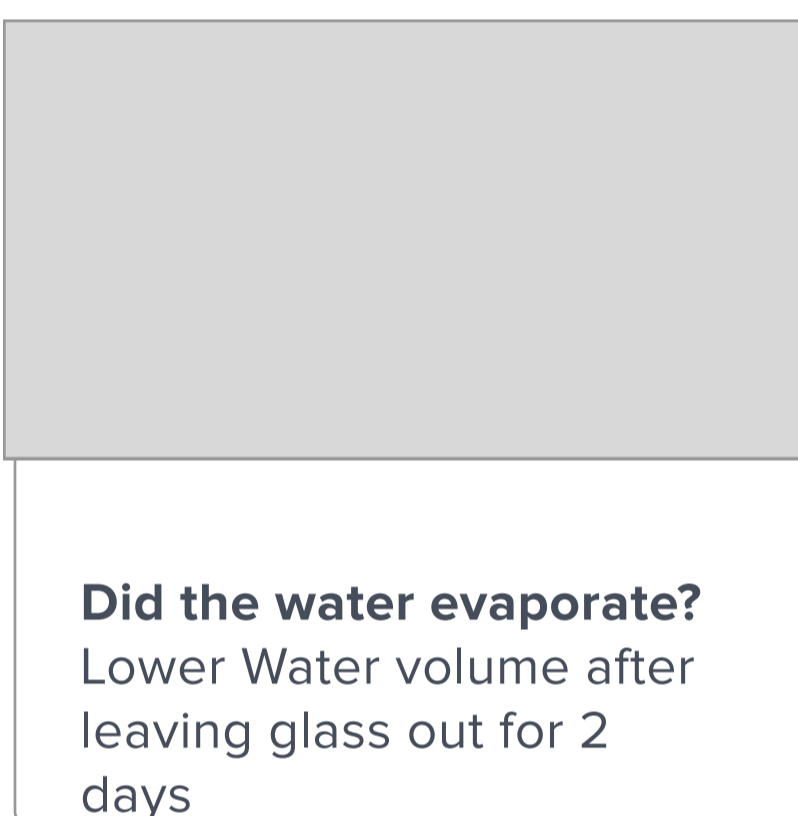
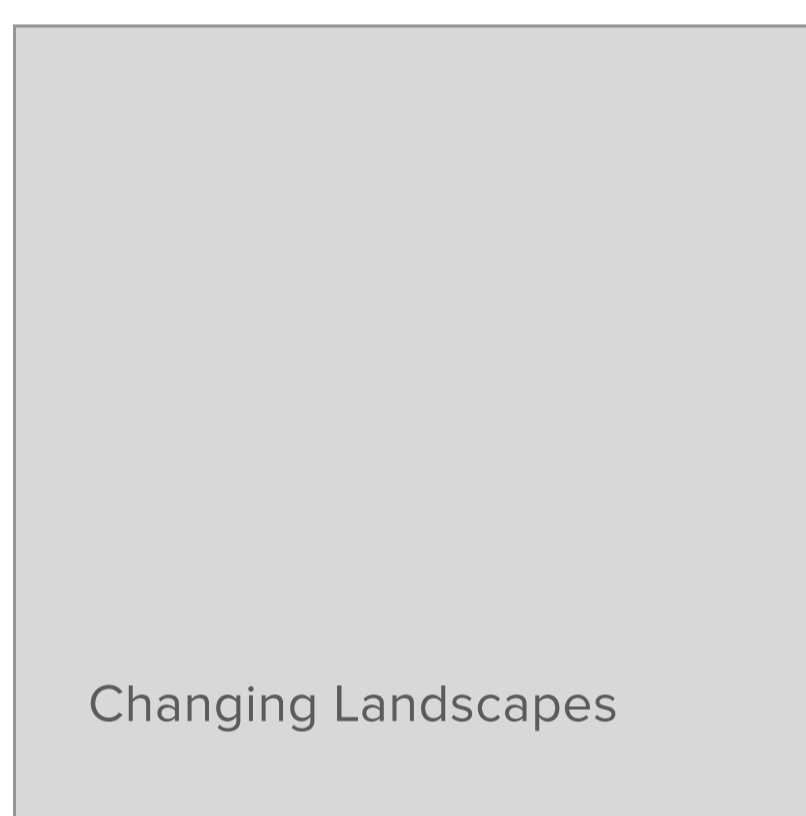
CONCEPT

INVESTIGATIVE PHENOMENA

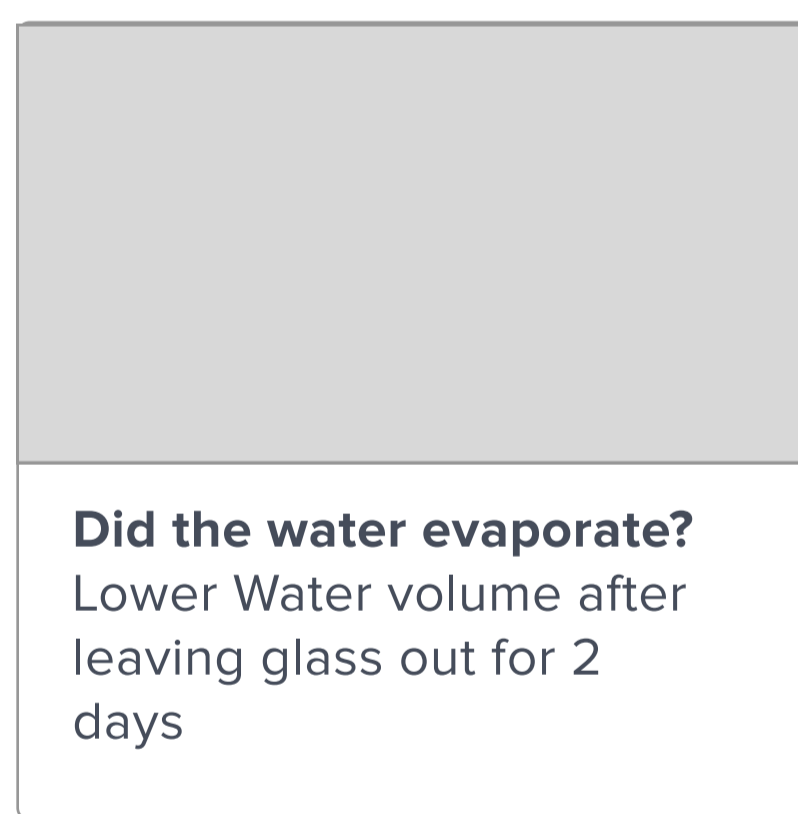
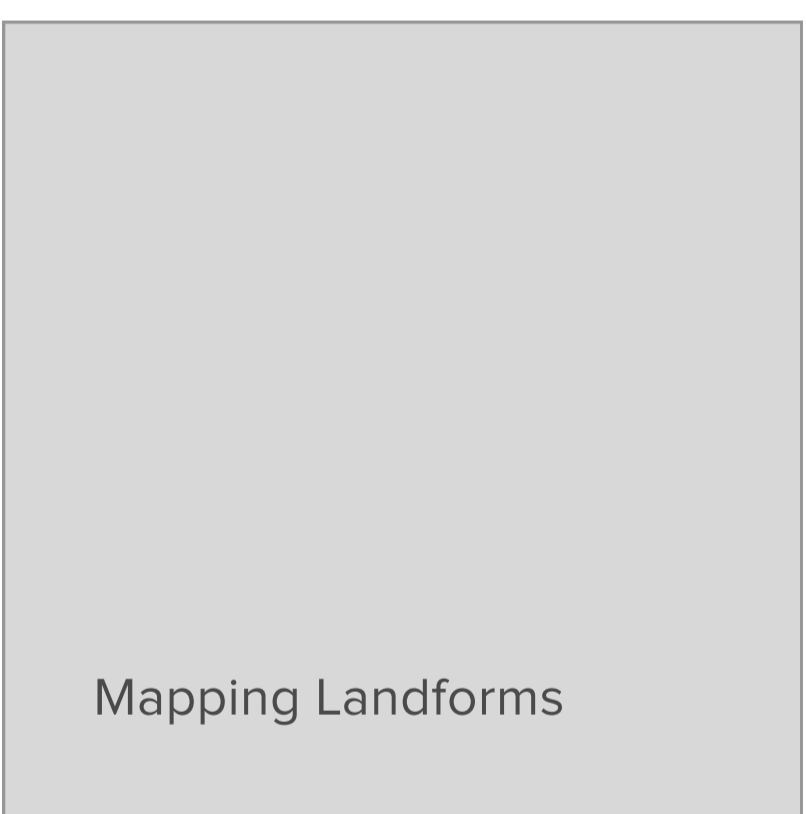
Student Outcomes



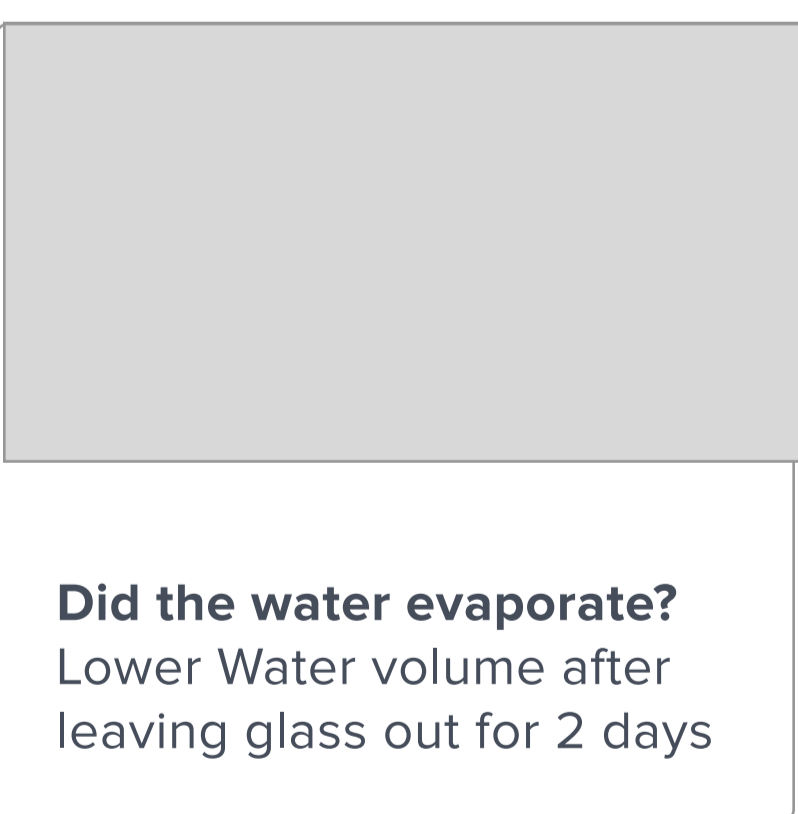
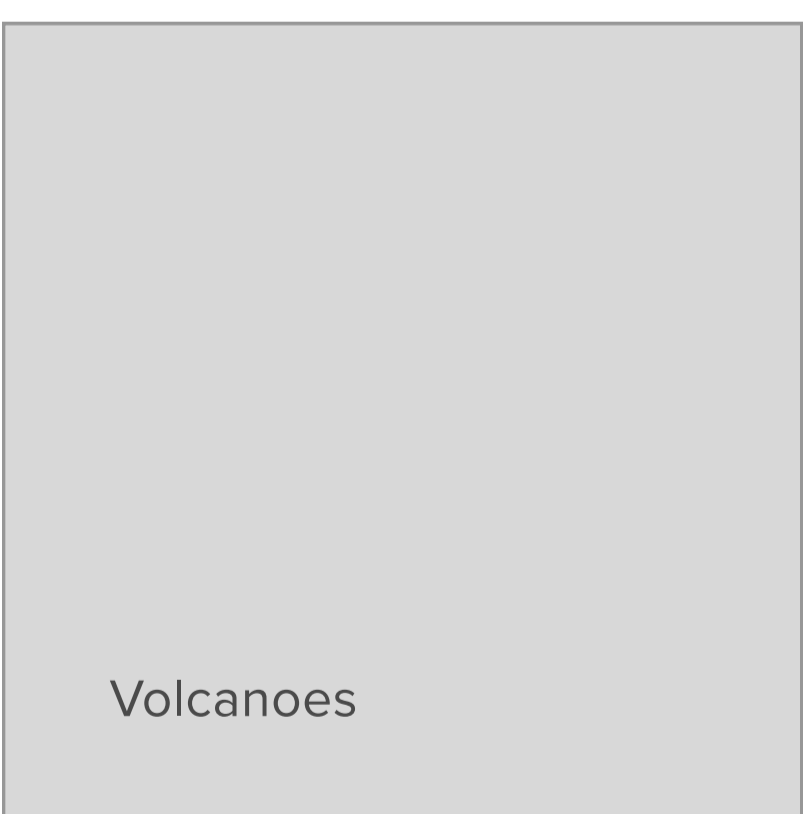
Weathering is the process whereby rocks are broken down into smaller particles. Erosion moves rock particles from one place to another. The main agents of erosion are gravity, water, wind and ice. Deposition occurs when rock particles stop moving.



Water, ice and wind change the shape of earth's surface and produce many of Earth's landforms. Layers of sediment and patterns in rock formation reveal environmental changes over time.



Maps can be used to locate different land and water features on Earth. Maps reveal relationships between Earth's landforms, both under the oceans and on the continents



Patterns can be identified in the location of volcanoes on Earth. Volcanic eruptions can be very destructive but humans can take precautions to reduce their impact.

Global News

Techbook Atlas

Reference

Chapter 7

Ancient China and Chinese Belief Systems

What factors made China a powerful and prosperous civilization?

Chapter Overview

Chapter Resources



7.1
Geography of China
How did China's location impact its development?

7.2
China's Belief Systems
How did Confucianism, Daoism, and Legalism influence society in ancient China?

7.3
Life in the Chinese Dynasties
How did the Chinese dynasties affect life throughout East Asia?

7.4
Ancient Chinese Economy
How did China become economically successful?

Global News

Techbook Atlas

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Chapter 7

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Assessment

Standards

Geography of China

- 15.A Understand how different economic systems operate in the exchange, production, distribution and consumption of goods and services.
- 16.A Apply the skills of historical analysis and interpretation.
 - 16.A.3b Make inferences about historical events and eras using historical maps and other historical sources.
 - 16.A.3c Identify the differences between historical fact and interpretation.
- 16.E.3a W Describe how the people of the Huang He, Tigris-Euphrates, Nile and Indus river valleys shaped their environments during the agricultural revolution, 4000 - 1000 BCE.
- 17.C Understand relationships between geographic factors and society.
 - 17.C.3a Explain how human activity is affected by geographic factors.
 - 17.C.3b Explain how patterns of resources are used throughout the world.
- 17.D Understand the historical significance of geography.
 - 17.D.3a Explain how and why spatial patterns of settlement change over time.
- SS.EC.3.6-8.MdC Explain barriers to trade and how those barriers influence trade among nations.



Unit 6

Intersecting Lines and Angles

Unit Video (Anchor Phenomena)
Pop-Out

6.1
Understand Interior and
Exterior Angles

6.2
Investigate Parallel and
Intersecting Lines

Unit Resources

Parent Letter

Unit Assessment

My Dashboard
Pop-Out

Math Tools
Pop-Out

Glossary
Pop-Out

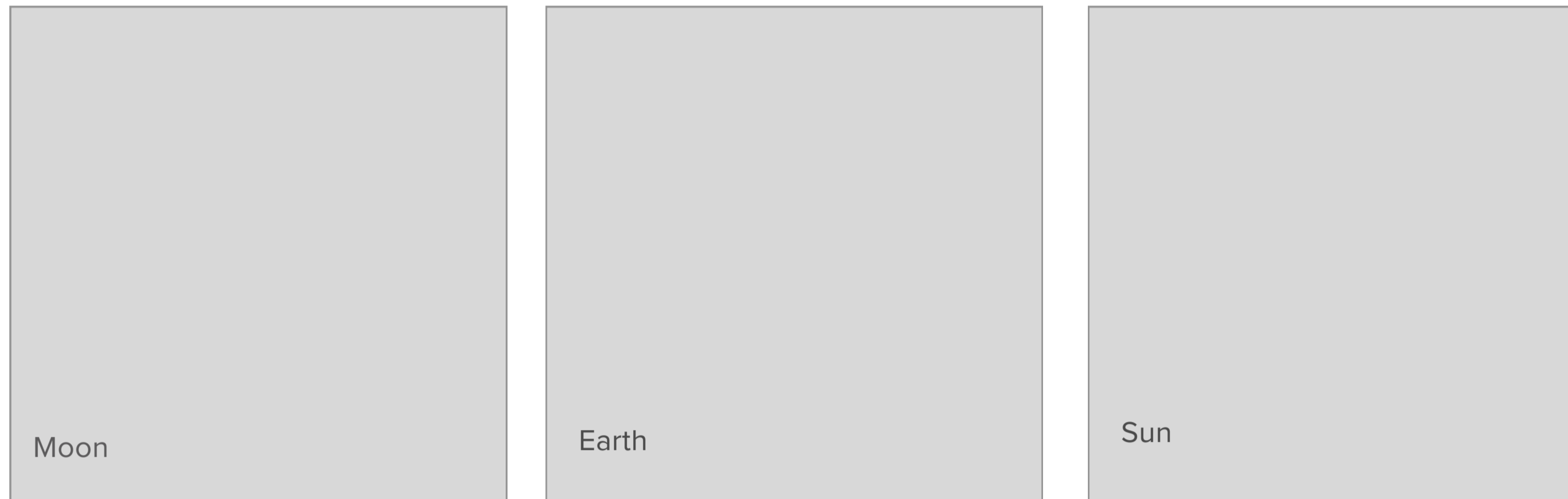
Unit Standards

CCSS.Math.Content.8.G.A.1b Angles are taken to angles of the same measure.

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CCSS.Math.Content.8.G.A.5 Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles.

Characteristics of the Sun-Earth-Moon System



Unit Resources

Unit Assessment

Performance-Based
Assessment

Standards

Moon

- 11.A.3a - Formulate hypotheses that can be tested by collecting data.
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- 11.A.3g - Report and display the process and results of a scientific investigation.
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Characteristics of the Sun-Earth-Moon System

ANCHOR PHENOMENON



The Science of Car Crashes

Lots of things happen in a car crash. There's a lot of noise., Things get broken and thrown about. People get hurt. This video shows one way in which car crashes are studied. We Learn about the things that can happen in a crash and what causes them as. we study this unit.

Guiding Questions

1. What happens to energy when objects collide?
2. Why do car crashes cause so much damage? How can collision damage be reduced?

CONCEPT	INVESTIGATIVE PHENOMENA	STUDENT OUTCOMES
Starting, Moving, and Stopping	<p>Title Description</p>	<p>Objects only begin to move when an unbalanced force is applied to them.</p> <p>Objects only stop if a force is applied to them in a direction that is opposite to the direction of their movement.</p> <p>Energy changes take place when a force is applied to an object.</p>
Energy and Motion	<p>Asset Title Asset Description. What is the source for this text?</p>	<p>Work occurs when a force moves an object.</p> <p>Energy is needed to do work.</p> <p>Energy comes in different forms and these can be used, via energy changes, to move objects.</p>
Speed	<p>Asset Title Asset Description. What is the source for this text?</p>	<p>Speed is the distance moved by an object over a specified period of time.</p> <p>An object's kinetic energy increases as its speed increases.</p> <p>Energy can be used to change the speed of an object</p>
Energy and Collisions	<p>Asset Title Asset Description. What is the source for this text?</p>	<p>Energy changes occur when objects collide.</p> <p>The amount of energy that colliding objects have depends on their masses and speeds.</p> <p>In a collision energy is conserved.</p>

Unit Resources

- Unit Assessment
- Performance-Based Assessment

Standards

Starting and Stopping

- 4-PS3-1. Use evidence to construct an explanation relating the speed of an object to the energy of that object.
- 4-PS3-3. Ask questions and predict outcomes about the changes in energy that occur when objects collide.

Energy and Motion

- 4-PS3-1. Use evidence to construct an explanation relating the speed of an object to the energy of that object.

Speed

- 4-PS3-1. Use evidence to construct an explanation relating the speed of an object to the energy of that object

Energy and Collisions

- 4-PS3-1. Use evidence to construct an explanation relating the speed of an object to the energy of that object.
- 4-PS3-3. Ask questions and predict outcomes about the changes in energy that occur when objects collide.

Chapter 7

Ancient China and Chinese Belief Systems

What factors made China a powerful and prosperous civilization?

Unit Image

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- 17.C Understand relationships between geographic factors and society.
- 17.C.3a Explain how human activity is affected by geographic factors.
- 17.C.3b Explain how patterns of resources are used throughout the world.
- 17.D Understand the historical significance of geography.
- 17.D.3a Explain how and why spatial patterns of settlement change over time.
- SS.EC.3.6-8.MdC Explain barriers to trade and how those barriers influence trade among nations.

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Unit 6
Intersecting Lines and Angles

Unit Overview

Unit Resources

Unit Video (Anchor Phenomena)
Pop-Out

6.1
Understand Interior and Exterior Angles

6.2
Investigate Parallel and Intersecting Lines



Unit 6
Intersecting Lines and Angles

Unit Overview

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[Unit Assessment](#)

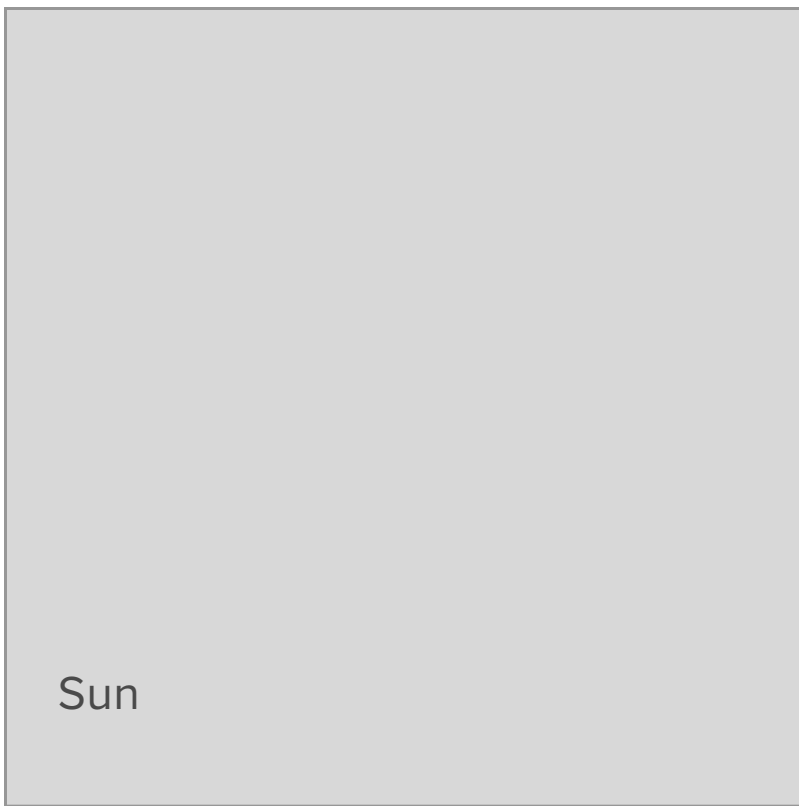
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Characteristics of the Sun-Earth-Moon System



Unit Resources

Unit Assessment

Performance-Based Assessment

Standards

Moon

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Earth's Changing Surface

Unit Overview

Unit Resources

ANCHOR PHENOMENON



The Grand Canyon From Space

The Grand Canyon appears from space to be a giant gash in the surface Earth. How was this immense canyon formed? Why does it have so many different colors?

Driving Questions

1. How do water, ice, wind and vegetation sculpt landscapes?
2. What factors affect how quickly landscapes change
3. How are landscape changes recorded by layers of rocks and fossils
4. How can people minimize the effects of changing landscape on property while still protecting the environment?

CONCEPT

[Breaking Down and Moving Rocks](#)

INVESTIGATIVE PHENOMENON

[Image: Asset Title](#)

STUDENT OUTCOMES

Weathering is the process whereby rocks are broken down into smaller particles. Erosion moves rock particles from one place to another. The main agents of erosion are gravity, water, wind and ice. Deposition occurs when rock particles stop moving.

CONCEPT

[Changing Landscapes](#)

INVESTIGATIVE PHENOMENON

[Image: Asset Title](#)

STUDENT OUTCOMES

Water, ice and wind change the shape of earth's surface and produce many of Earth's landforms. Layers of sediment and patterns in rock formation reveal environmental changes over time.

CONCEPT

[Mapping Landforms](#)

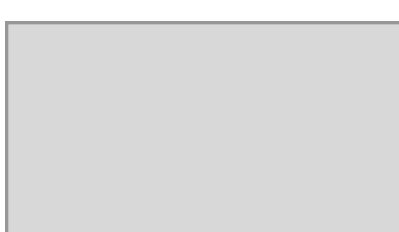
INVESTIGATIVE PHENOMENON

[Image: Asset Title](#)

STUDENT OUTCOMES

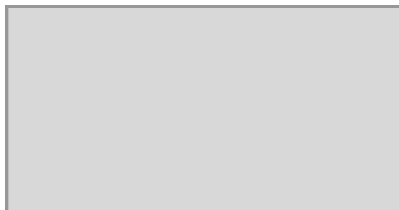
Maps can be used to locate different land and water features on Earth. Maps reveal relationships between Earth's landforms, both under the oceans and on the continents

CONCEPT



[Volcanoes](#)

INVESTIGATIVE PHENOMENON



[Image: Asset Title](#)

STUDENT OUTCOMES

Patterns can be identified in the location of volcanoes on Earth. Volcanic eruptions can be very destructive but humans can take precautions to reduce their impact.

Earth's Changing Surface

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Standards

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