

Student Learning Map for Unit Topic:  
Earth and Space Sciences

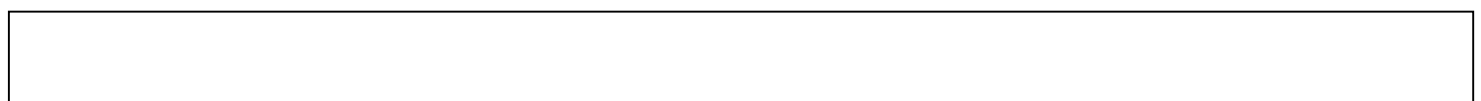
**Big Idea:** Earth is made up of water and land.

**Unit Essential Question:**  
What are different earth materials?

<p>Skill: Comparing rocks 3.3.1.A1 3.3.1.A7</p>	<p>Skill: Exploring soil 3.3.1.A1 3.3.1.A7</p>	<p>Skill: Identify and describe bodies of water. 3.3.1.A4 3.3.1.A7</p>
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<p><b>Lesson Essential Questions:</b></p> <p>How are rocks different?</p> <p>How many ways can rocks be sorted?</p>	<p><b>Lesson Essential Questions:</b></p> <p>What's in dirt?</p> <p>Are all soils the same?</p>	<p><b>Lesson Essential Questions:</b></p> <p>What is the difference between fresh and salt water?</p>
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<p><b>Vocabulary:</b></p> <p>Rock            Scoria Dust            Sand Geologist      Silt Separate        Pebble Texture         Gravel Basalt Tuff</p>	<p><b>Vocabulary:</b></p> <p>Humus          Pebbles Soil             Clay Ingredients Sample Silt Sand Gravel</p>	<p><b>Vocabulary:</b></p> <p>Oceans Rivers Lakes Ponds Streams</p>
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Student Learning Map for Unit Topic: Genetics, Organisms and Cells

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Big Idea: Plants grow from seeds

Unit Essential Question  
How do plants grow and change?

Skill:  
Parts of a plant  
3.1.3.A5

Skill:  
What a plant needs to grow  
3.1.1.B1  
3.1.1.A2

Skill:  
Comparing plants  
3.1.1.B6

Lesson Essential Questions:  
What are the parts of a plant?  
What are the functions of each part of a plant?

Lesson Essential Questions:  
What does a plant need to grow?

Lesson Essential Questions:  
How do you compare seedlings and adult plants?

Vocabulary  
Stem  
Root  
Pollen  
Function  
Seed  
Leaf  
Sprout  
Flower  
Brassica  
Grass  
wheat

Vocabulary:  
Air  
Soil  
Sun's energy  
Water  
Nutrients  
growth

Vocabulary:  
Seedlings  
Comparison  
Change  
observation

Student Learning Map for Unit Topic:  
Origin and Evolution of the Universe/Physics – Light and Shadows

Big Idea: Light is everywhere in our world.

Unit Essential Question:  
What can we learn from light?

<p>Skill: Investigate how light travels through different materials 3.2.1.B5 3.3.1.B3</p>	<p>Skill: Explore shadows 3.3.1.B1 3.3.1.B3</p>	<p>Skill: Explore prisms and mirrors 3.2.1.B5 3.3.1.B3</p>
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<p>Lesson Essential Questions:  How does light travel through different materials?</p>	<p>Lesson Essential Questions:  What is a shadow?  How does a shadow change at various times during the day?</p>	<p>Lesson Essential Questions:  What does a prism do to white light?  What does a mirror redirect light?</p>
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<p>Vocabulary: Sun Light Shadow</p>	<p>Vocabulary: Prism Light Mirror Bend Reflect Redirect</p>	<p>Vocabulary: Translucent Transparent Opaque</p>
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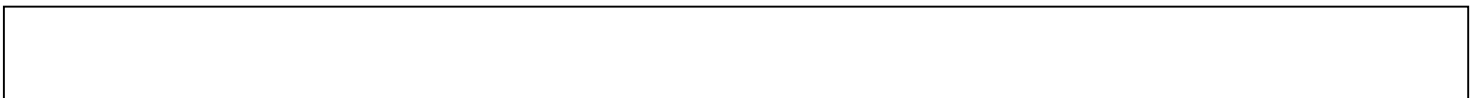
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Student Learning Map for Unit Topic:  
Organism and Cells/Evolution

Big Idea: All things can be categorized as living and non-living.

Unit Essential Question:  
How can things in our world be classified?

<p>Skill: Compare living and non-living things. 3.1.1.A1 3.1.1.B6</p>	<p>Skill: Explain what living things need to survive 3.1.1.A2 3.2.1.B6 3.1.1.B6</p>	<p>Skill: Identify different types of habitats 3.1.1.C3 3.1.1.B6</p>
<p>Lesson Essential Questions:  What are living things found in our world?  What are non-living things found in our world?</p>	<p>Lesson Essential Questions:  What do living things need to survive?</p>	<p>Lesson Essential Questions:  What are different types of habitats?</p>
<p>Vocabulary: Grows Changes</p>	<p>Vocabulary: Food Water Shelter Sun Space Air</p>	<p>Vocabulary: Habitat</p>



Student Learning Map for Unit Topic: Physical Sciences and Chemistry

**Big Idea:** Everything is made of matter

**Unit Essential Question**  
What are the three states of matter?

<p><b>Skill:</b> Solids and liquids have properties 3.2.1.A1 3.2.1.A5 3.2.1.A6</p>	<p><b>Skill:</b> Solids and liquids can be mixed 3.2.1.A4 3.2.1.A6</p>	<p><b>Skill:</b> Matter can change states 3.2.1.A3 3.2.1.A6</p>
<p><b>Lesson Essential Questions:</b></p> <p>How can solids be described?</p> <p>How can solids be sorted by their properties?</p>	<p><b>Lesson Essential Questions:</b></p> <p>What happens when different solids are mixed with water?</p> <p>What happens when water is mixed with different liquids?</p>	<p><b>Lesson Essential Questions:</b></p> <p>How does matter change its state?</p> <p>What happens when a substance is heated or cooled?</p> <p>What changes are reversible and not reversible?</p>
<p><b>Vocabulary</b></p> <p>Properties Solid Flexible Property Rigid Rough Smooth Transparent Opaque Soft Hard Bubbly Has color Colorless foamy</p> <p>translucent transparent viscous</p>	<p><b>Vocabulary:</b></p> <p>Mixture Change Dissolve Change</p>	<p><b>Vocabulary:</b></p> <p>Heat Melt Cool freezing reversible matter</p>

Student Learning Map for Unit Topic:  
Physics

Big Idea: Objects can move.

Unit Essential Question:  
How can objects move?

Skill:  
Describe the motion as push or pull.  
3.2.1.B1  
3.4C (PALSEC)  
3.2.1.A6

Skill:  
Explore magnets  
3.2.1.B1  
3.2.1.A6

Skill:

Lesson Essential Questions:

What is motion?  
What is a push?  
What is a pull?

Lesson Essential Questions:

What is a magnet?  
What types of objects do magnet attract?  
Why do magnets sometime repel each other?

Lesson Essential Questions:

Vocabulary:

Motion  
Push  
Pull

Vocabulary:

Magnet  
Attract  
Repel  
Positive  
Negative  
Force

Vocabulary:

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Student Learning Map for Unit Topic:  
Physics/Earth and Space Sciences (Weather)

Big Idea: Weather changes with the seasons.

Unit Essential Question:  
How can weather be observed and recorded in various seasons?

Skill:  
Describe seasons  
3.3.1.A5  
3.2.1.A6

Skill:  
Describe types of weather  
3.3.1.A5  
3.2.1.A6

Skill:  
Using a thermometer  
3.2.1.B3  
3.2.1.A6

Lesson Essential Questions:

What are the four seasons?  
How are the four seasons different?

Lesson Essential Questions:

What are different types of weather?

Lesson Essential Questions:

How is a thermometer read?

Vocabulary:

Seasons  
Fall  
Winter  
Spring  
Summer  
Changes

Vocabulary:

Snow      Foggy  
Hail      Stormy  
Wind      Meteorologist  
Rain  
Sleet  
Cloudy  
Sunny  
Frost

Vocabulary:

Thermometer  
Temperature  
Fahrenheit  
Degrees