

Student Learning Map

Grade/Course: 5th Grade/Science

Unit: The Nature of Science-Scientific Process

Key Learning: Scientific Knowledge is acquired and continually revised based on data from specific observations and experiments.

Unit Essential Question:
How do we use the scientific method?
S.5.A

Lesson Topic 1: Scientific Inquiry S.5.A.1	Lesson Topic 2: Scientific Investigations S.5.A.2.1	Lesson Topic 3: Scientific Instruments S.5.A.2.2
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<p>Lesson Essential Questions:</p> <p>How can questions be answered through scientific inquiry?</p> <p>How do we use observations and/or experimental results to support inferences and claims about an investigation?</p> <p>How do you use evidence to develop explanations, predictions and models?</p>	<p>Lesson Essential Questions:</p> <p>How can a simple, controlled experiment be designed?</p> <p>What are the differences between independent and dependent variables?</p> <p>How do you interpret data and observations to describe relationships between variables?</p>	<p>Lesson Essential Questions:</p> <p>How do you properly use tools to aid in scientific investigations?</p> <p>How do the instruments enhance human abilities for specific purposes?</p>
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<p>Vocabulary</p> <p>Scientific Inquiry Experimental Results Investigation Models</p>	<p>Vocabulary:</p> <p>Controlled Experiment Independent Variable Dependent Variable Interpret</p>	<p>Vocabulary:</p> <p>Scale Mass Distance Volume Temperature Thermometer Hand Lens Graduated Cylinder</p>
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Student Learning Map

Grade/course: 5th Grade/Science

Unit: Changing Earth

Key Learning: The surface of the Earth is in a continuous state of change.

Unit Essential Question:
What kinds of processes change the Earth and its resources?

Lesson Topic 1:
Features and Processes That Change Earth
S.5.D.1

Lesson Topic 2:
Weather, Climate and Atmospheric Processes
S.5.D.2

Lesson Topic 3:
Earth's water systems and resources
S.5.D.1.2

Lesson Essential Questions:

What are the abrupt changes and gradual changes that change the Earth?

What is the relationship between erosion and deposition?

Vocabulary:
Abrupt Change
Gradual Change
Earthquake
Volcano
Erosion
Deposition

Lesson Essential Questions:

What are the differences between weather and climate?

How do oceans and lakes affect climate?

How does the cycling of water into and out of the atmosphere impact climatic patterns?

Vocabulary:
Climate
Atmosphere

Lesson Essential Questions:

What are the physical, chemical and biological factors that affect water quality?

What is the importance of wetlands in an ecosystem?

Vocabulary:
Physical Factors
Chemical Factors
Biological Factors
Water Quality
Wetlands
Ecosystem

Student Learning Map

Grade/course: 5th Grade/Science

Unit: Physical Sciences

Key Learning: Changes, energy and motion can affect the properties of matter.

Unit Essential Question:
How are the properties of matter affected by changes, energy and motion?

Lesson Topic 1:
Properties and Changes of Matter

S.5.C.1

Lesson Essential Questions:

How are properties used to describe matter?

What is the difference between volume and mass?

How do physical and chemical changes differ?

Vocabulary:

Matter

Properties

Mass

Volume

Physical Change

Chemical Change

Lesson Topic 2:
Forms, Sources, Conversion and Transfer of Energy

S.5.C.2

Lesson Essential Questions:

In what forms does energy exist and how is it transformed?

How is heat energy a byproduct of energy transformation?

What is the difference between kinetic and potential energy?

How is energy conserved?

Vocabulary:

Energy Transformation

Kinetic Energy

Potential Energy

Conservation

Lesson Topic 3:
Mass, Force and Movement

S.5.C.3

Lesson Essential Questions:

What is the difference between mass and weight of an object?

How does the mass of an object resist change in motion?

Vocabulary:

Mass

Weight

Motion

Inertia

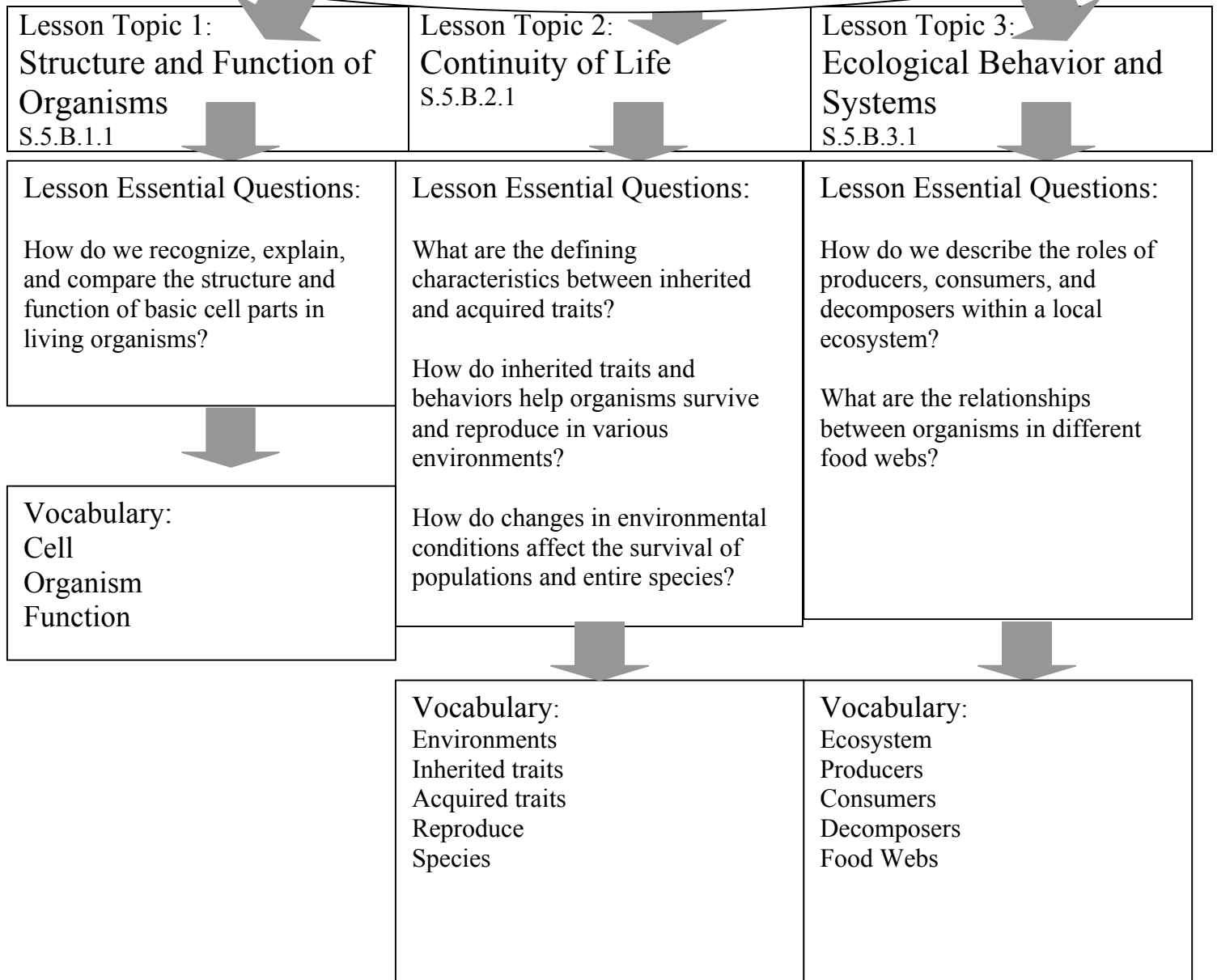
Student Learning Map

Grade/course: 5th Science

Unit: Biology

Key Learning: Organisms are composed of cells and inherit traits and form behaviors that allow them to survive in different ecosystems.

Unit Essential Question:
How do the structure and function of organisms allow them to survive in various ecosystems?



Student Learning Map

Grade/course: 5th Grade/Science

Unit: Environmental Issues and Resources

Key Learning: There is a moral and ethical obligation to preserve the Earth.

Unit Essential Question:
How do humans impact the environment both positively and negatively?

Lesson Topic 1:
Earth's Resources
S.5.B.3.2

Lesson Topic 2:
Environmental Issues
S.5.B.3.2

Lesson Topic 3:

Lesson Essential Questions:

Why is it important to conserve Earth's resources?

Vocabulary:
Conserve
Resource
Renewable
Nonrenewable

Lesson Essential Questions:

Is human progress necessarily beneficial to the Earth?

Vocabulary:
Residential
Pollution
Industrial Pollution
Reduce
Reuse
Recycle
Consumption
Alternative Energy Source

Lesson Essential Questions:

Vocabulary:

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Unit: Earth and Space

Key Learning: Our universe is a constantly changing series of components; each with its own characteristics.

Unit Essential Question:
What are the characteristics of Earth and the Solar System?

Lesson Topic 1:
Earth's Movement & The Moon
S.5.D.3.1

Lesson Essential Questions:
How do we describe the patterns of Earth's rotation and revolution in relationship to the Sun and Moon?

Vocabulary:
Rotation
Revolution
Solar Eclipse
Moon Phases
Axis

Lesson Topic 2:
Planets
S.5.D.3.1

Lesson Essential Questions:
What are the general characteristics of the inner planets of our solar system?

Vocabulary:
Orbital Path
Gravity

Lesson Topic 3:

Lesson Essential Questions:

Vocabulary: