Mini-Map for SCI.EE.5.PS1-2

Subject: Science
Physical
Grade: 3–5

Learning Outcome

DLM Essential Element	Grade-Level Standard
SCI.EE.5.PS1-2 Measure and compare weights of substances before and after heating, cooling, or mixing substances to show that weight of matter is conserved.	**5-PS1-2** Measure & graph quantities to provide evidence that, regardless of the type of change that occurs when heating, cooling, or mixing substances, the total weight of matter is conserved.

Linkage Level Descriptions

Initial	Precursor	Target
Recognize the change in state from liquid to solid or from solid to liquid of the same material.	Compare the weight of an object before and after it changes from a liquid to a solid and from a solid to a liquid.	Measure and compare weights of substances before and after heating, cooling, or mixing substances to show that weight of matter is conserved.

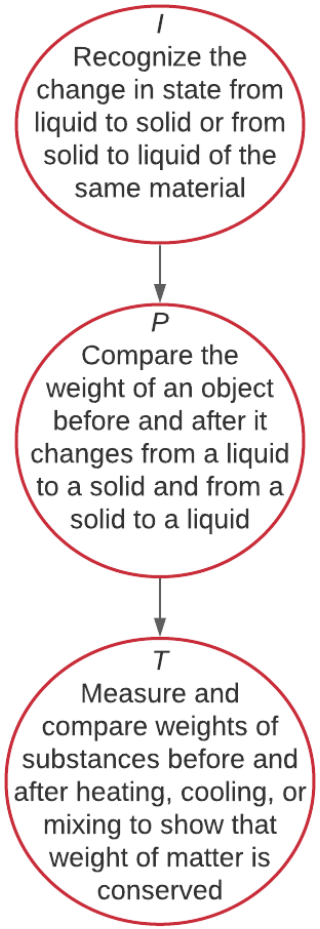
Instructional Resources

Linkage Level	Instructional Activities
Initial/Precursor/Target	N/A
Connections	
Science and Engineering Practices	Using Mathematics and Computational Thinking
Crosscutting Concepts	Scale, Proportion, and Quantity
ELA Essential Elements	**ELA.EE.W.5.7**: Conduct short research projects using 2 or more sources. **ELA.EE.W.5.8**: Gather and sort relevant information on a topic from print or digitalsources into given categories.
Released Testlets	
See the Guide to Practice Activities and Released Testlets.	

Link to Text-Only Map

SCI.EE.5.PS1-2 Measure and compare weights of substances before and after heating, cooling, or mixing substances to show that weight of matter is conserved.

Map Key	
I	Initial
P	Precursor
T	Target



Mini-Map for SCI.EE.5.PS1-3

Subject: Science
Physical
Grade: 3–5

Learning Outcome

DLM Essential Element	Grade-Level Standard
SCI.EE.5.PS1-3 Make observations and measurements to identify materials based on their properties (e.g., weight, shape, texture, buoyancy, color, or magnetism).	**5-PS1-3** Make observations and measurements to identify materials based on their properties.

Linkage Level Descriptions

Initial	Precursor	Target
Match materials with similar physical properties (e.g., shape, texture, weight).	Classify materials by physical properties (e.g., weight, shape, texture, buoyancy, color, or response to magnetic force).	Make observations and measurements to identify materials (e.g., glass, wood, metal) based on their properties (e.g., weight, shape, texture, buoyancy, color, or response to magnetic force).

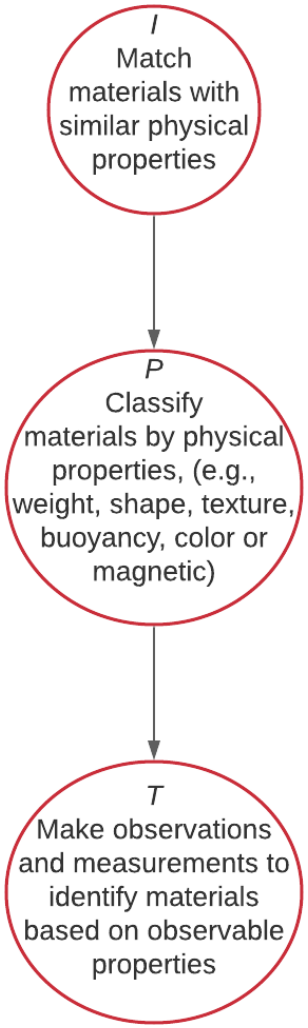
Instructional Resources

Linkage Level	Instructional Activities
Initial/Precursor/Target	N/A
Connections	
Science and Engineering Practices	Planning and Carrying out Investigations
Crosscutting Concepts	Scale, Proportion, and Quantity
ELA Essential Elements	**ELA.EE.W.5.7**: Conduct short research projects using 2 or more sources. **ELA.EE.W.5.8**: Gather and sort relevant information on a topic from print ordigital sources into given categories.
Mathematics Essential Elements	**M.EE.5.MD.A.1**: Use standard units to measure weight and length.
Released Testlets	
See the Guide to Practice Activities and Released Testlets.	

Link to Text-Only Map

SCI.EE.5.PS1-3 Make observations and measurements to identify materials based on their properties (e.g., weight, shape, texture, buoyancy, color, or magnetism).

Map Key	
I	Initial
P	Precursor
T	Target



Mini-Map for SCI.EE.5.PS2-1

Subject: Science
Physical
Grade: 3–5

Learning Outcome

DLM Essential Element	Grade-Level Standard
SCI.EE.5.PS2-1 Demonstrate that the gravitational force exerted by Earth on objects is directed down.	**5-PS2-1** Support an argument that the gravitational force exerted by Earth on objects is directed down.

Linkage Level Descriptions

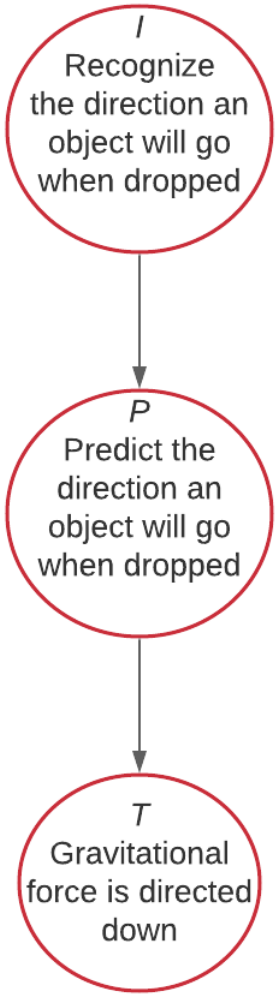
Initial	Precursor	Target
Recognize the direction an object will go when dropped (recognition should be after the action).	Predict the direction an object will go when dropped (not to be misconstrued as an object moving forward/backward or staying still).	Demonstrate that the gravitational force exerted by Earth on objects is directed down.

Instructional Resources

Linkage Level	Instructional Activities
Initial/Precursor/Target	N/A
Connections	
Science and Engineering Practices	Engaging in Argument from Evidence
Crosscutting Concepts	Cause and Effect
ELA Essential Elements	**ELA.EE.RI.5.1**: Identify words in the text to answer a question about explicit information. **ELA.EE.RI.5.9**: Compare and contrast details gained from two texts on the same topic. **ELA.EE.W.5.1**: Write opinions about topics or text (introduce a topic or text and state an opinion about it, provide reasons to support the opinion).
Released Testlets	
See the Guide to Practice Activities and Released Testlets.	

Link to Text-Only Map

SCI.EE.5.PS2-1 Demonstrate that the gravitational force exerted by Earth on objects is directed down.



Map Key	
I	Initial
P	Precursor
T	Target

Mini-Map for SCI.EE.5.PS3-1

Subject: Science
Physical
Grade: 3–5

Learning Outcome

DLM Essential Element	Grade-Level Standard
SCI.EE.5.PS3-1 Create a model to describe that energy in animals' food was once energy from the Sun.	**5-PS3-1** Use models to describe that energy in animals' food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the Sun.

Linkage Level Descriptions

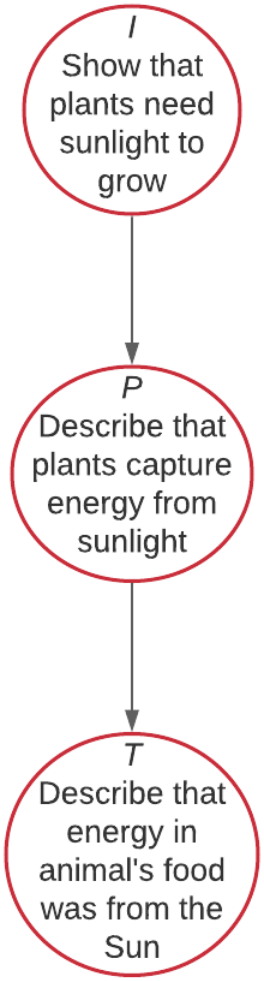
Initial	Precursor	Target
Identify simple models (e.g., concrete pictures or tactile displays) that show that plants need sunlight to grow.	Use models (e.g., visual/tactile displays) to describe that plants capture energy from sunlight.	Create a model (e.g., visual/tactile display) to describe that energy in animals' food was once energy from the Sun.

Instructional Resources

Linkage Level	Instructional Activities
Initial/Precursor/Target	Energy from the Sun
Connections	
Science and Engineering Practices	Developing and Using Models
Crosscutting Concepts	Energy and Matter
ELA Essential Elements	**ELA.EE.RI.5.7**: Locate information in print or digital sources. **ELA.EE.SL.5.5**: Select or create audio recordings and visual/tactile displays to enhance a presentation.
Released Testlets	
See the Guide to Practice Activities and Released Testlets.	

[Link to Text-Only Map]

SCI.EE.5.PS3-1 Create a model to describe that energy in animals' food was once energy from the Sun.



Map Key	
I	Initial
P	Precursor
T	Target

Mini-Map for SCI.EE.5.LS1-1

Subject: Science
Life
Grade: 3–5

Learning Outcome

DLM Essential Element	Grade-Level Standard
SCI.EE.5.LS1-1 Provide evidence that plants need air and water to grow.	**SCI.EE.5.LS1-1** Support an argument that plants get the materials they need for growth chiefly from air and water.

Linkage Level Descriptions

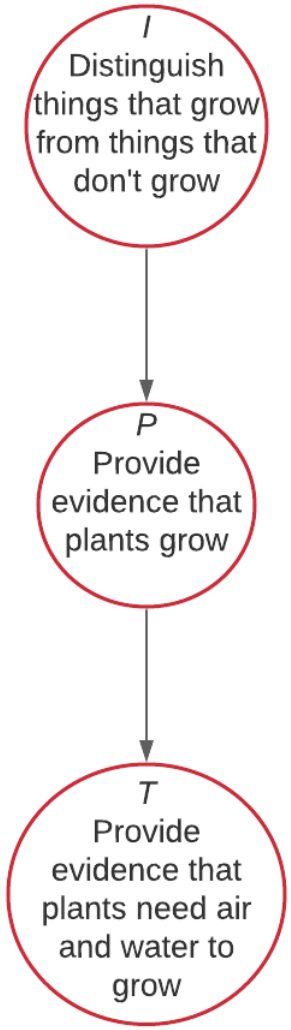
Initial	Precursor	Target
Distinguish things that grow from things that don't grow (but some things grow slower than others).	Provide evidence that plants grow (e.g., increase in weight, size, or number of stems, leaves, roots).	Provide evidence that plants need air and water (but not soil) to grow.

Instructional Resources

Linkage Level	Instructional Activities
Initial/Precursor/Target	N/A
Connections	
Science and Engineering Practices	Engaging in Argument from Evidence
Crosscutting Concepts	Energy and Matter
ELA Essential Elements	**ELA.EE.RI.5.1**: Identify words in the text to answer a question about explicit information. **ELA.EE.RI.5.9**: Compare and contrast details gained from two texts on the same topic. **ELA.EE.W.5.1**: Write opinions about topics or text (introduce a topic or text and state an opinion about it, provide reasons to support the opinion).
Mathematics Essential Elements	**M.EE.5.MD.1.b**: Use standard units to measure weight and length of objects.
Released Testlets	
See the Guide to Practice Activities and Released Testlets.	

[Link to Text-Only Map]

SCI.EE.5.LS1-1 Provide evidence that plants need air and water to grow.



Map Key	
I	Initial
P	Precursor
T	Target

Mini-Map for SCI.EE.5.LS2-1

Subject: Science
Life
Grade: 3–5

Learning Outcome

DLM Essential Element	Grade-Level Standard
SCI.EE.5.LS2-1 Create a model that shows the movement of matter (e.g., plant growth, eating, composting) through living things.	**5-LS2-1** Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.

Linkage Level Descriptions

Initial	Precursor	Target
Identify common human foods (and non-food items).	Identify a model that shows the movement of matter from plants to animals (e.g., food chain/food web).	Create a model that shows the movement of matter (e.g., plant growth, eating, composting) through living things.

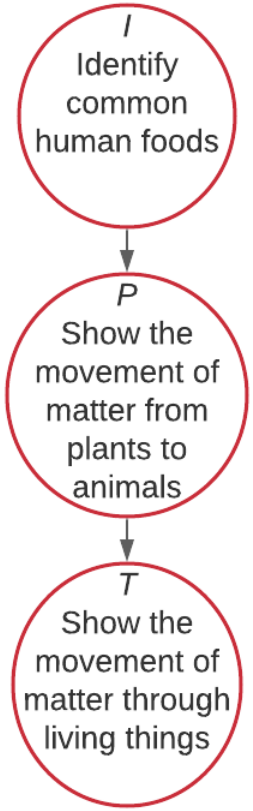
Instructional Resources

Linkage Level	Instructional Activities
Initial/Precursor/Target	Food Cycles
Connections	
Science and Engineering Practices	Developing and Using Models
Crosscutting Concepts	Systems and System Models
ELA Essential Elements	**ELA.EE.RI.5.7**: Locate information in print or digital sources. **ELA.EE.SL.5.5**: Select or create audio recordings and visual/tactile displays to enhance a presentation.
Released Testlets	
See the Guide to Practice Activities and Released Testlets.	

Link to Text-Only Map

SCI.EE.5.LS2-1 Create a model that shows the movement of matter (e.g., plant growth, eating, composting) through living things.

Map Key	
I	Initial
P	Precursor
T	Target



Mini-Map for SCI.EE.5.ESS1-2

Subject: Science
Earth and Space
Grade: 3–5

Learning Outcome

DLM Essential Element	Grade-Level Standard
SCI.EE.5.ESS1-2 Represent and interpret data on a picture, line, or bar graph to show seasonal patterns in the length of daylight hours.	**SCI.EE.5-ESS1-2** Represent data in graphical displays to reveal patterns of daily changes in length and direction of shadows, day and night, and the seasonal appearance of some stars in the night sky.

Linkage Level Descriptions

Initial	Precursor	Target
Order events in a daily routine, including sunrise and sunset.	Recognize patterns about length of daylight hours over time (e.g., week to week, month to month).	Represent and interpret data on a picture, line, or bar graph to show seasonal patterns in the length of daylight hours.

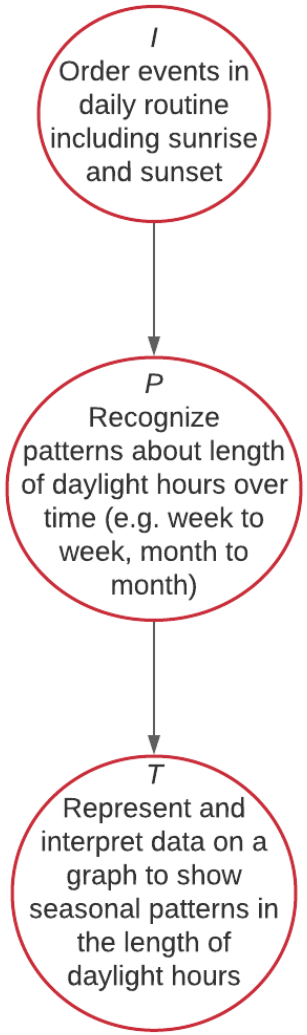
Instructional Resources

Linkage Level	Instructional Activities
Initial/Precursor/Target	The Daylight Hours
Connections	
Science and Engineering Practices	Analyzing and Interpreting Data
Crosscutting Concepts	Patterns
ELA Essential Elements	**ELA.EE.SL.5.5**: Select or create audio recordings and visual/tactile displays to enhance a presentation.
Mathematics Essential Elements	**M.EE.5.NBT.2**: Use the number of zeros in numbers that are powers of 10 to determine which values are equal, greater than, or less than. M.EE.5.G.2: Sort two-dimentional figures and identify the attributes (angles,number of sides, corners, color) they have in common.
Released Testlets	
See the Guide to Practice Activities and Released Testlets.	

Link to Text-Only Map

SCI.EE.5.ESS1-2 Represent and interpret data on a picture, line, or bar graph to show seasonal patterns in the length of daylight hours.

Map Key	
I	Initial
P	Precursor
T	Target



Mini-Map for SCI.EE.5.ESS2-1

Subject: Science
Earth and Space
Grade: 3–5

Learning Outcome

DLM Essential Element	Grade-Level Standard
SCI.EE.5.ESS2-1 Develop a model showing how water (hydrosphere) affects the living things (biosphere) found in a region.	**5-ESS2-1** Develop a model using an example to describe ways the geosphere, biosphere, hydrosphere, and/or atmosphere interact.

Linkage Level Descriptions

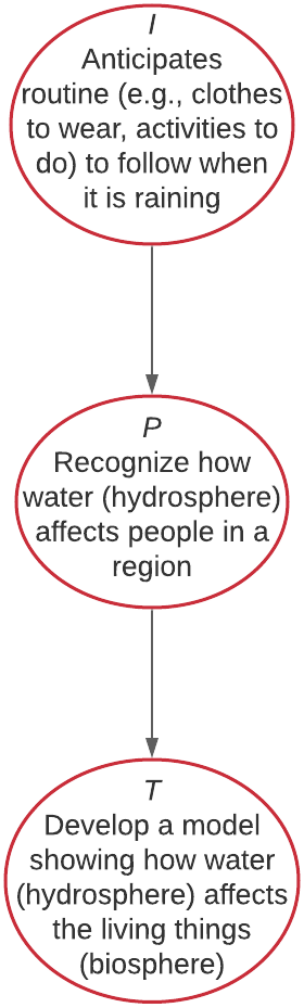
Initial	Precursor	Target
Anticipate routine (e.g., clothes to wear, activities to do) to follow when it is raining.	Recognize how water (hydrosphere) affects people in a region (e.g., floods, droughts, mudslide, tourism, and recreation).	Develop a model showing how water (hydrosphere) affects the living things (biosphere) found in a region.

Instructional Resources

Linkage Level	Instructional Activities
Initial/Precursor/Target	N/A
Connections	
Science and Engineering Practices	Developing and Using Models
Crosscutting Concepts	Systems and System Models
ELA Essential Elements	**ELA.EE.RI.5.7**: Locate information in print or digital sources. **ELA.EE.SL.5.5**: Select or create audio recordings and visual/tactile displays to enhance a presentation.
Mathematics Essential Elements	**M.EE.5.G.2**: Sort two-dimentional figures and identify the attributes (angles,number of sides, corners, color) they have in common.
Released Testlets	
See the Guide to Practice Activities and Released Testlets.	

[Link to Text-Only Map]

SCI.EE.5.ESS2-1 Develop a model showing how water (hydrosphere) affects the living things (biosphere) found in a region.



Map Key	
I	Initial
P	Precursor
T	Target

Mini-Map for SCI.EE.5.ESS3-1

Subject: Science
Earth and Space
Grade: 3–5

Learning Outcome

DLM Essential Element	Grade-Level Standard
SCI.EE.5.ESS3-1 Use information to describe how people can help protect the Earth's resources and how that affects the environment.	**SCI.EE.5.ESS3-1** Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

Linkage Level Descriptions

Initial	Precursor	Target
Identify one way to protect a resource of Earth (e.g., put paper in the recycling bin to save trees, recycle cans to save metal, turn off appliances to save energy).	Compare two methods (e.g., reusable water bottles vs. recycling disposable bottles, shutting off lights, using both sides of paper) people can use to help protect Earth's resources.	Use information to describe how people can help protect Earth's resources and how that affects the environment.

Instructional Resources

Linkage Level	Instructional Activities
Initial/Precursor/Target	N/A
Connections	
Science and Engineering Practices	Obtaining, Evaluating, and Communicating Information
Crosscutting Concepts	Systems and System Models
ELA Essential Elements	**ELA.EE.RI.5.1**: Identify words in the text to answer a question about explicit information. **ELA.EE.RI.5.7**: Locate information in print or digital sources. **ELA.EE.RI.5.9**: Compare and contrast details gained from two texts on the same topic.
Released Testlets	
See the Guide to Practice Activities and Released Testlets.	

[Link to Text-Only Map]

SCI.EE.5.ESS3-1 Use information to describe how people can help protect the Earth's resources and how that affects the environment.

Map Key	
I	Initial
P	Precursor
T	Target