

School Visit Connections to the Massachusetts Curriculum Framework for Science and Technology/Engineering

Self-Guided Visit Connections to Curriculum Frameworks

J.K. Lilly III Automobile Gallery

- PreK-ESS3-2(MA). Observe and discuss the impact of people's activities on the local environment.
- PreK-PS1-2(MA). Investigate natural and human-made objects to describe, compare, sort, and classify objects based on observable physical characteristics, uses, and whether something is manufactured or occurs in nature.
- 1.K-2-ETS1-1. Ask questions, make observations, and gather information about a situation people want to change that can be solved by developing or improving an object or tool.

The McGraw Family Garden of the Senses

- PreK-LS1-2(MA). Explain that most animals have five senses they use to gather information about the world around them.
- PreK-LS1-3(MA). Use their five senses in their exploration and play to gather information.
- 1-LS1-1. Use evidence to explain that (a) different animals use their body parts and senses in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water, and air, and (b) plants have roots, stems, leaves, flowers, and fruits that are used to take in water, air, and other nutrients, and produce food for the plant.
 - Clarification Statement: Descriptions are not expected to include mechanisms such as the process of photosynthesis.

The Flume and the Sundial

- 1-ESS1-1. Use observations of the Sun, Moon, and stars to describe that each appears to rise in one part of the sky, appears to move across the sky, and appears to set.
- 1-ESS1-2. Analyze provided data to identify relationships among seasonal patterns of change, including relative sunrise and sunset time changes, seasonal temperature and rainfall or snowfall patterns, and seasonal changes to the environment. Clarification Statement: • Examples of seasonal changes to the environment can include foliage changes, bird migration, and differences in amount of insect activity.

The Administration Building

- PreK-LS3-1(MA). Use observations to explain that young plants and animals are like but not exactly like their parents. Clarification Statement: • Examples of observations include puppies that look similar but not exactly the same as their parents.
- 1-LS3-1. Use information from observations (first-hand and from media) to identify similarities and differences among individual plants or animals of the same kind.
 Clarification Statements: Examples of observations could include that leaves from the same kind of plant are the same shape but can differ in size. Inheritance, animals that undergo metamorphosis, or hybrids are not expected.

The Labyrinth

 K-ESS2-2. Construct an argument supported by evidence for how plants and animals (including humans) can change the environment. Clarification Statement: • Examples of plants and animals changing their environment could include a squirrel digging holes in the ground and tree roots that break concrete.

The Special Exhibitions Gallery

- PreK-ESS3-2(MA). Observe and discuss the impact of people's activities on the local environment.
- 2-ESS2-1. Investigate and compare the effectiveness of multiple solutions designed to slow or prevent wind or water from changing the shape of the land.* Clarification Statements:
 Solutions to be compared could include different designs of dikes and windbreaks to hold back wind and water, and different designs for using shrubs, grass, and trees to hold back the land.
 Solutions can be generated or provided.

The Wampanoag Wetu & Three Sisters Garden

- PreK-LS1-3(MA). Use their five senses in their exploration and play to gather information.
- 1.K-2-ETS1-1. Ask questions, make observations, and gather information about a situation people want to change that can be solved by developing or improving an object or tool.
- 2.K-2-ETS1-3. Analyze data from tests of two objects designed to solve the same design problem to compare the strengths and weaknesses of how each object performs.*
 Clarification Statements: Data can include observations and be either qualitative or quantitative. Examples can include how different objects insulate cold water or how different types of grocery bags perform.

The American Art & Carousel Gallery

- PreK-LS1-3(MA). Use their five senses in their exploration and play to gather information.
- PreK-LS1-1(MA). Compare, using descriptions and drawings, the external body parts of animals (including humans) and plants and explain functions of some of the observable body parts. Clarification Statement: Examples can include comparison of humans and horses: humans have two legs and horses four, but both use legs to move.
- 1.K-2-ETS1-1. Ask questions, make observations, and gather information about a situation people want to change that can be solved by developing or improving an object or tool.
- 2.K-2-ETS1-3. Analyze data from tests of two objects designed to solve the same design problem to compare the strengths and weaknesses of how each object performs.*
 Clarification Statements: Data can include observations and be either qualitative or quantitative. Examples can include how different objects insulate cold water or how different types of grocery bags perform.
- 2-PS1-1. Describe and classify different kinds of materials by observable properties of color, flexibility, hardness, texture, and absorbency.

Hidden Hollow™

- PreK-PS2-1(MA). Using evidence, discuss ideas about what is making something move the way it does and how some movements can be controlled.
- 2.K-2-ETS1-3. Analyze data from tests of two objects designed to solve the same design problem to compare the strengths and weaknesses of how each object performs.*
 Clarification Statements: Data can include observations and be either qualitative or quantitative. Examples can include how different objects insulate cold water or how different types of grocery bags perform.