

## **Living Lab Extension: Broadleaf Trees and Leaves** (primarily targeted to K-1st)

### **K-1 NGSS Performance Expectations and Standards**

K-LS1-1. Use observations to describe patterns of what plants and animals (including humans) need to survive

K-ESS2-1. Use and share observations of local weather conditions to describe patterns over time.

K-ESS3-1. Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.

K-PS3-1. Make observations to determine the effect of sunlight on Earth's surface

1-ESS1-2 Earth's Place in the Universe

Make observations at different times of year to relate the amount of daylight to the time of year.

### **Common Core Standards**

Reading Foundational Skills supported through reading associated with this lesson.

Reading Informational Text achieved through readings associated with this lesson.

### **The Arts Standards**

(VA:Cr1.1.K ) Engage in exploration and imaginative play with materials.

(VA:Cr2.1.K ) Through experimentation, build skills in various media and approaches...

(VA:Cr2.3.K ) Create art that represents natural and constructed environments.

(VA:Cr1.2.1) Use observation and investigation in preparation for making a work of art.

(VA:Cr2.1.1) Explore uses of materials and tools to create works of art or design.

(VA:Cn10.1.1) Identify times, places, and reasons by which students make art outside of school.

### **2nd grade NGSS Performance Expectations and Standards**

LS2.A: Interdependent Relationships in Ecosystems: Plants depend on water and light to grow. Cross cutting concept: Cause and Effect Events have causes that generate observable patterns.

2-LS2-2 Ecosystems: Interactions, Energy, and Dynamics

Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.\*

2-LS4-1 Biological Evolution: Unity and Diversity

Make observations of plants and animals to compare the diversity of life in different habitats.

### **Common Core Standards**

Reading Foundational Skills supported through reading associated with this lesson.

Reading Informational Text achieved through readings associated with this lesson.

### **The Arts Standards**

(VA:Cr1.2.2) Make art or design with various materials and tools to explore personal interests, questions, and curiosity.

(VA:Cr2.1.2) Experiment with various materials and tools to explore personal interests in a work of art or design.

### **3<sup>rd</sup> grade NGSS Performance Expectations and Standards**

3-LS1-1 From molecules to Organisms: Structures and Processes

Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death.

3-LS3-1 Heredity: Inheritance and Variation of Traits

Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.

### **Common Core Standards**

Reading Foundational Skills supported through reading associated with this lesson.

Reading Informational Text achieved through readings associated with this lesson.

### **The Arts Standards**

(VA:Cr2.1.3) Create personally satisfying artwork, using a variety of artistic processes and materials.