

# Kindergarten Life Sciences

## Unit Lesson Plan

Grade: Kindergarten

Strand: Life Sciences

### **Benchmarks:**

- **LS.1.A.** Describe the component part of living things (e.g. birds have feathers; people have bones, and their major functions).
- **LS.1.B.** Categorise living organisms using a variety of observable features (size, colour, shape, backbone).
- **LS.1.C.** Describe and compare characteristics of living things in relationship to their environment.
- **LS.1.D.** Describe how living things depend on one another for survival
- **LS.1.E.** Understand the competitive interdependent cyclic nature of living things in the environment.
- **LS.1.F.** Utilise scientific method including identification of a problem, developing research questions, collecting data and communicating the problem, the evidence and the conclusion and use the collaborative approach.
- **LS.1.G.** Explain that scientists use different kinds of investigation depending upon the questions. Employ equipment, tools, and a variety of techniques and information sources to gather, analyse and interpret data.

Lesson 1: Senses in the Garden

Lesson 2: What do plants need to live?

Lesson 3: Bugs in the Garden

Lesson 4: Create a Habitat

## Kindergarten Life Sciences

<b>Lesson Plan</b>	Senses in the Garden
<b>Reference</b>	<i>LS.1.G. Explain that scientists use different kinds of investigation depending upon the questions. Employ equipment, tools, and a variety of techniques and information sources to gather, analyse and interpret data.</i>

### Objectives

Understand how we use our senses to perceive our environment.

### Summary of Tasks

(1) Inquiry: how do we perceive our surroundings? What are senses?  
Ask the questions: What can you (see, smell, hear, taste, feel)? How can your senses help you in the garden? Which sense do you most enjoy in the garden?

(2) After exploring the five senses, conduct simple experiments that involving the senses in the garden.

Examples:

Identify and taste plants that are sour, sweet, bitter, salty, spicy.

Search for plants that are soft, hard, prickly, fuzzy, smooth, rough. What parts of the plant have you collected?

How many different colours can you see in the garden?

What can you hear? How many different types of animals and insects can you hear and see?

Search for smells; find something that smells sweet, yucky, strong. What sorts of things have you found that smell good/yummy. Ask the question: Just because something smells good, does that mean that it tastes good?

How do you use your senses to know if something is edible?

### Materials

N/A

## Kindergarten Life Sciences

<b>Lesson Plan</b>	What do plants need to live?
<b>Lesson Duration</b>	
<b>Reference</b>	<i>LS.I.C. Describe and compare characteristics of living things in relationship to their environment.</i>

### Objectives

Understand the characteristics of plants that are adapted to their environment.

### Summary of Tasks

(1) Explain activity. *Discuss the basic needs of living things (e.g. food, water, air, space). Teach that if living things do not get food, water, shelter, air and space, they will die.* Students as a class determine a couple questions that they want to answer by the end of the class.

(2) Conduct a series of experiments to show that plants need food, water, air and space to live.

(3) Using a sunflower seed, plant a seed

- in garden and cared for regularly
- in a small cup - space
- in covered cup - air

- in cup not watered - water
- in cup on layer of wet paper towel - food

(4) After a week, students can use their journal to track what has been happening each day to each planted seed.

(5) After one week, determine which seeds did well and which poorly. Why?

### Materials

Sunflower seeds  
Four cups/beakers  
Soil  
Paper towel

## Kindergarten Life Sciences

<b>Lesson Plan</b>	Relationships in the Garden
<b>Lesson Duration</b>	
<b>Reference</b>	<i>LS.1.D. Describe how living things depend on one another for survival</i>

### Objectives

Understand the ways that animals obtain food from plants and other animals.

### Summary of Tasks

(1) Class goes into garden to observe insects. Help students to identify insects and plants by name.

(2) With the help of Nea, explain the relationships of different bugs and plants that students have identified in the garden.

(3) Students can then go back into the garden to look in closer detail at the relationships

they have previously observed. In the garden, students then document this through a drawing and give a short presentation to the class about their findings.

### Materials

Garden Journal

## Kindergarten Life Sciences

<b>Lesson Plan</b>	Habitat Homes
<b>Lesson Duration</b>	
<b>Reference</b>	<i>LS.1.C. Describe and compare characteristics of living things in relationship to their environment.</i> <i>LS.1.D. Describe how living things depend on one another for survival</i>

### Objectives

Examine relationships between living things and their habitats. Identify unique needs and differences between species. Explain why.

### Summary of Tasks

(1) Introduce the idea of a habitat. Pre-teach basic concepts.

(2) Students choose between a mouse or a frog. With recycled materials they then create a home for the animal. Identify basic needs of each species and encourage children to incorporate an element of these in their creations.

(3) Students can place their Habitat Homes in areas throughout the garden.

### Materials

**Boxes**

Recycled materials to create a Habitat Home. Bottles, paper, caps, cans, etc.