

**Introducing the Orchard and the Plant Life Cycle**

<b>Grade(s): 3-6</b>	<b>Topic: Introduction, Plant Life Cycle</b>	<b>Season: Fall</b>
<b>Timing:</b> 60 minutes: 10 minute introduction, 10 minute overview on expectations and safety, 15 minute outdoor stewardship or observation activity, 20 minute indoor observation and discussion, 5 minute conclusion		
<b>Objectives:</b> <ul style="list-style-type: none"><li>• Students can compare and contrast their indoor classroom with their outdoor classroom: the rules are the same in both places, but in the outdoor classroom they use special tools and may be challenged to ask and answer questions in new ways</li><li>• Students can summarize the rules and expectations of Outdoor Classroom use</li><li>• Students begin to assume the role of a nature detectives, looking more closely at nature and noticing details</li><li>• Students help create a feeling of community with teachers in the Outdoor Classroom</li><li>• Students begin to explore and learn about the orchard and how they can be stewards of it, and begin classifying materials found in it</li><li>• Students are introduced to the concept of the plant life cycle and examine different found objects in the orchard representing different parts of that cycle.</li></ul>		
<b>Materials:</b> <ul style="list-style-type: none"><li>• Letter to parents (optional)</li><li>• Plant life cycle stages cards (seed, sprout, vegetative growth, flower, fruit)</li><li>• Plant life cycle diagram written on board</li><li>• Plant objects that show on ore more different parts of the life cycle (optional)</li></ul>		
<b>Degree of need for extra teacher or parent helper?</b> High		
<b>Journal Prompt:</b> What is a life cycle? What does “cycle” mean? Can you think of other words that include “cycle”?		
<b>Lesson Sequence:</b>  <b>Expectations &amp; Safety: (10 Minutes)</b> Outdoor learning can be powerful or it can be chaos. To avoid chaos, you must make your expectations very clear. Remember, be firm in the beginning and you will have fewer discipline problems as the year progresses. Here are some important points to be sure you include: <ol style="list-style-type: none"><li>1. You will be taking the class outdoors when the weather allows it.</li><li>2. They need to wear outdoor clothing when going outside.</li><li>3. When the class goes outside it is not recess. All classroom rules apply. (Have them go over what the classroom rules are.)</li><li>4. Have the children come up with a list of other rules. If they participate in this process, the rules will have meaning to them. Be sure to mention the five senses, and that in each lesson, you will let them know which senses to use in order to be safe with themselves and each other, AS WELL AS with the things they find residing outside.</li><li>5. Differentiate between picking and observing – there will be times for each. Introduce the rule of 100. When we are picking, we pick only items that you can see at least another 12 of, so that we are sure to always be leaving some for other people, animals, and plants to use and enjoy.</li><li>6. Talk about treating materials with respect, like the gloves we will be using today.</li><li>7. <b>Bee respect:</b> Introduce/remind students that bees are not mean or bad but that they only</li></ol>		

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sting when they are scared or mad. Ask the students what might happen if a bee is flying near them and they start screaming and waving their arms around. (Chances are the bee will get mad or scared and will sting.) The thing to do to avoid being stung is to stand still. Ask the children to repeat after you – “See a bee, be a tree.” If you are standing still like a tree, a bee isn’t likely to sting you.

8. Summarize: RESPECT. Respect for oneself (comfortable clothing), each other (listening, staying close, not interrupting, not pushing...), and plants and animals (no grabbing, pulling off, ripping, breaking...). Anyone who can’t follow these rules will have to leave the outdoor classroom

### **Introduction (10 minutes)**

Ask the children “What is nature?” They may give answers ranging from plants, animals, and rocks to people and sidewalks. Accept all answers. What is nature? Have each student in the class tell you their favorite thing about being outside or their favorite thing that grows or lives outside. Also introduce the concept of living things and non-living things by taking their answers and grouping them into these categories. Explain what an orchard is. Tell the children that they will be going outside into the orchard to look for things that are part of nature.

### **Orchard Exploration for Different Parts of Plant Life Cycle (35 minutes):**

Before you go outside, show students a diagram of the plant life cycle and show some examples that you brought in yourself. Tell the students that they are going to be scientists and collect data for them to observe and sort and learn more about. Take students on a walk through the orchard, asking them to use their senses to smell, see, hear, and touch (without picking!) what they come across.

Go to the fruit tree and have them tell you what they observe. Which part of the plant life cycle is the fruit tree in right now? Then tell students to look at the orchard and surrounding plants and ask them to try and find parts of plants that are at different stages of the plant life cycle. Tell them they can pick up whatever they would like to bring in, but that they should not uproot everything and use the rule of 100 (only pick something if there are more than 100 of it outside). Put out the Life Cycle Stages cards and have each student put the whatever they picked up on the card they think it belongs to.

Talk with kids about what they collected and review the stages and how they sorted their items. Have them fill in their own diagram of the plant life cycle, drawing an example in each section that someone from class brought in from the orchard or that you brought in. Prompt them with questions about what happens at which time of year. What part of the life cycle are most plants at right now?

### **Conclusion (5 Minutes)**

Lead kids in correctly disposing of plant parts (into the compost!) and review what they have learned about the plant life cycle, nature, and living vs. non-living things found in the orchard.

### **Vocabulary**

Deadhead  
Flower  
Fruit

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Living  
Natural  
Nature  
Non-living  
Orchard  
Life Cycle  
Reproduction  
Seed  
Sprout

**Vocabulario**

Brote  
Ciclo de Vida  
Flor  
Flor Muerta  
Fruta  
Huerto  
Natural  
Naturaleza  
No-vivo  
Reproducción  
Semilla  
Vivo

**Extensions / Homework Ideas:**

- Read the book *Bean and Plant* to reiterate students' newfound knowledge of the plant life cycle and have them draw a diagram specifically of the bean's life cycle