

Activity Plan

Designed by: **Norma Osorio**

OVERVIEW/FRAMING

This Activity Plan is part of a Learning Experience Unit: **Autumn/Why Do Leaves Change Color in the Fall?**

<p>TOPIC: Fall/Autumn Explain how the topic of this activity is developmentally and culturally appropriate for the group of learners you are designing.</p>	<p>This hands-on activity is developmentally and culturally appropriate for preschool age. Children three to five and a half years are curious and like to explore and discover new things. They also want to ask questions and are eager to learn new concepts.</p>
<p>BIG IDEAS/OVERARCHING QUESTIONS What kinds of questions will be explored and/or what new connections and ideas will be engaged through this activity?</p>	<p>Why do leaves change color when it gets cold? What is Autumn? What is photosynthesis? Why are some trees green and never change color?</p>
<p>CONTENT FOCUS: Identity which content area(s) will be addressed in this activity</p>	<p><u>Visual Arts</u> <u>Music</u> Movement/Dance Drama <u>Emergent Literacy</u> Mathematics <u>Science</u> Social Studies</p>

KNOWING THE LEARNERS

AGE RANGE:	3.0 - 5.5
CURRENT DEVELOPMENT: What do you know about the current growth of learners in this age range for the content focus?	Children in this age range have the capacity to engage and understand science. They are natural, hands-on learners. This activity brings children the environment to explore science and develop science skills and knowledge over time.
What misunderstandings might children in this age range have about the topic/content, and how do you plan to address this?	Children can get confused about how leaves change from green to yellow, brown, and orange. To help them to understand the subject better, I will read the book “Why do Leaves Change Color” by Betsy Maestro, Illustrated by Loretta Krupinski. They will also sing the song “Autumn Leaves are Falling Down” By the learning station.
SOCIO-CULTURAL CONTEXT: What do you know about this group of children regarding their cultural backgrounds, learning styles, languages spoken, and learning experiences to date? ^{1*}	All children in the classroom speak English, and two understand and speak Spanish. Students are from different backgrounds. Two are from Latin America, three are from Asia, and two are from African Americans.

MATERIALS & LEARNING ENVIRONMENT PREPARATION

MATERIALS	LEARNING ENVIRONMENT	EVENTS/RESOURCES
<p>What materials will you need to teach this activity? List all books and materials, including any used during the launch/reflection and during set up and clean up</p>	<p>What modifications will you need to make to the classroom to support this activity (e.g., centers, bulletin boards, meeting spaces)?</p>	<p>What events or resources, including people, might you need to arrange in advance?</p>
<ul style="list-style-type: none"> ● Books: “why do Leaves Change Color” by Betsy Maestro, Illustrated by Loretta Krupinski, and “The Leaf Thief by Alice Hemming” ● Song: “Autumn Leaves are Falling Down” By the learning station. ● Rubbing Alcohol ● Coffee filters ● Glass jars ● Scissors ● Green, yellow, brown, red, and orange leaves. 	<ul style="list-style-type: none"> ● The library will have books about Fall in different languages. ● There will be posters about Autumn on the walls of the classroom. ● The science area will have all types of leaves. 	<ul style="list-style-type: none"> ● The class will go on a field trip to the park to collect three leaves. ● I will invite parents to volunteer on the field trip.

THE LEARNING EXPERIENCE

<p>The launch</p> <p>How will you engage the children in this learning experience? How will you introduce the concepts and vocabulary of the topic? How will you describe the procedures of the learning activity?</p>	<p>Good morning class! Today we will learn about Autumn and why leaves change color!</p> <p>The tree leaves are green during the summer, right? As the weather gets colder, the tree leaves start changing color, giving a beautiful view of the city's streets and the mountains!</p> <p>I will read a book about “Why do Leaves Change Color”</p> <p>We will learn new and excellent vocabulary!</p> <p>What it means to absorb, pigment, vein, fade, evergreen, crisp, rot!</p> <p>And after we read the book, we will do a science experiment to see the process the leaves go through to change their color.</p>
<p>The activity</p> <p>List the step-by-step procedures of this learning activity. What will the children be doing? What will you say or do to facilitate and scaffold their learning? Be specific and detailed in your description.</p>	<ul style="list-style-type: none"> ● The whole class will go on a field trip to the park to collect red, yellow, green, and orange leaves. ● Back in the classroom, students will separate the tree leaves by color ● They will cut the tree leaves into small pieces ● They will put the small pieces of leaves in a glass jar ● They will add rubbing alcohol to the glass jar ● They will fold the coffee filters in a cone shape ● Finally, they will introduce the coffee filter into the glass jar and wait for the coffee filters to absorb the color of the leaves.
<p>Reflection</p> <p>As the activity wraps up, what opportunities will you offer the children to respond to and reflect on this activity?</p>	<p>Students will reflect on today’s activity and have the opportunity to ask questions about anything they want to clarify about what they learned.</p> <p>I will ask them what part of the activity they enjoyed the most.</p>

<p>Possible Extensions</p> <p>What could you do on another day to build on this activity?</p>	<p>To extend this activity, I will do a new activity about the shape of the leaves.</p>
<p>Multimodal Engagement</p> <p>Identify and explain how this activity offers opportunities to use at least three different modalities (kinesthetic, tactile, linguistic, visual/spatial, auditory).</p>	<p>This is an engaging activity because it is hands-on, and children are involved from the beginning to the end. While performing the activity, children will engage in conversations that will help them improve their language skills. They will also enhance their fine motor skills by using scissors to cut the leaves.</p>
<p>Differentiation</p> <p>How will you modify this activity for learners with different learning styles and/or special needs (SLLs, physically active, etc.)?</p>	<p>I will translate the activity into Spanish for bilingual students and read books in Spanish. This hands-on activity requires children to be in motion, which will help them to improve their fine and gross motor skills. And it is a versatile activity because the process requires different steps, including walking to the park to pick up the tree leaves.</p>

GROWTH AND LEARNING

How will this learning experience support the children's growth and learning in the following domains?

Use your knowledge of child development.

<p>Cognitive/Thinking</p>	<p>Students will learn about how tree leaves change color. They will observe the process by themselves when performing the science experiment. They will use their critical thinking to analyze this process.</p>
<p>Physical</p>	<p>This hands-on activity allows children to improve their fine and gross motor skills because they need to walk to the park to collect the tree leaves and cut them into small pieces.</p>

Social/emotional	This activity allows children to interact with each other and work in collaboration. They will go on a field trip which requires them to follow instructions and communicate with each other.
Language/literacy	After reading the book and discussing the new vocabulary, students will use it to communicate with each other when performing the science experiment.
Vocabulary	Autumn, absorb, chlorophyll, pigment, vein, fade, evergreen, crisp, rot, photosynthesis, carbon dioxide.
Content Area(s)	Science (How leaves change color experiment) Visual Arts, music, and movement.

STANDARDS/GOALS

What Pre-K Common Core Learning Standards are addressed in this activity?

Use the PKFCC to respond.

Be specific—choose those standards **targeted** by this learning activity (e.g., can development regarding the standard be measured by the evidence gathered (authentic assessment) during this learning activity?)

Domain 1: Approaches to Learning	<p>PK.AL.1. Actively engages in play as a means of exploration and learning.</p> <p>PK.AL.2. Actively engage in problem-solving.</p> <p>PK.AL.3. Approaches tasks and problems with creativity and willingness to try new experiences.</p> <p>PK.AL.4. Exhibits curiosity, interest, and willingness to learn new things and have new experiences.</p> <p>PK.AL.5. Demonstrates persistence.</p>
---	--

<p>Domain 2: Physical Development and Health</p>	<p>PK.PDH.2. Uses sensory information to plan and carry out the movement.</p> <p>PK.PDH.3. Demonstrates coordination and control of large muscles.</p> <p>PK.PDH.4. Combines a sequence of large motor skills with and without the use of equipment.</p> <p>PK.PDH.5. Demonstrates eye-hand coordination and fine motor skills.</p>
<p>Domain 3: Social and Emotional Development</p>	<p>PK.SEL.1. Regulates responses to needs, feelings, and events.</p> <p>PK.SEL.2. Recognize self as an individual having unique abilities and characteristics, feelings and interests</p> <p>PK.SEL.3. Demonstrates and continues to develop positive relationships with significant adults (primary caregivers, teachers, and other familiar adults.</p> <p>PK.SEL.4. Develop positive relationships with their peers.</p> <p>PK.SEL.5. Demonstrate pro-social problem-solving social skills in social interaction.</p> <p>PK.SEL.6. Understands and follows routines and rules.</p> <p>PK.SEL.7. Adapts to change.</p>

<p>Domain 4: Communication, Language, and Literacy</p>	<p>PK.AC.1. Demonstrate motivation to communicate.</p> <p>PK.AC.2. Demonstrate they are building background knowledge.</p> <p>PK.AC.3. Demonstrate understanding of what is observed.</p> <p>PK.AC.4. Demonstrate growing receptive vocabulary.</p> <p>PK.AC.5. Demonstrate a growing expressive vocabulary.</p> <p>PK.AC.6. Demonstrate their ability to represent ideas using a variety of methods.</p> <p>PK.ELAL.8. Exhibits an interest in learning new vocabulary.</p> <p>PK.ELAL.22. (PKSL.4) Describe familiar people, places, things and events.</p> <p>PK.EL AL.24. (PKSL.6.) Express thoughts, feelings, and ideas(e.g., role-playing, music, drawing, artwork, building, writing)</p>
<p>Domain 5: Cognition and Knowledge of the World</p>	<p>PK.MATH.1. [NY-PK.CC.1.] Counts to 20</p> <p>PK.MATH.2, [NY-PK.CC.2] Represents a number of objects (0-5), with a written numeral 0-5(with 0 representing a count of no objects).</p> <p>PK.MATH.3.[NY-PK.CC.3.] Understand the relationship between numbers and quantities to 10, and connect counting to cardinality.</p> <p>PK.MATH.4b.[NY-PK.CC.4b] Given a number from 1-10, counts out that many objects.</p> <p>PK.MATH.9. [NY-PK.OA.2.] Duplicates and extends simple patterns using concrete objects (e.g. what comes next?)</p> <p>PK.SCI.4.[P-LS1-1] Observes familiar plants and animals (including humans) and describes what they need to survive.</p> <p>PK.SOC. 3. Demonstrates an understanding of roles, rights, and responsibilities.</p> <p>PK.ARTS.2. [DA.Pr4-6.PK] Perform Dance</p> <p>PK.ARTS.19. [Cn10-11.PK] Connects to Visual Arts</p>

AUTHENTIC ASSESSMENT

What will you do to gather evidence to assess each child's developmental progress?

How will you determine whether or not individual children are getting the Big Ideas and/or exploring the Overarching Questions?

Evidence may include responses recorded during a group discussion, a visual arts project, a performance, etc.

Your assessment activity **MUST** be connected to the Big Ideas and Overarching Questions.

I will gather evidence by observing children during the activity and having group conversations about it. I will ask questions about the activity. For example, what part of the activity interested you the most? Do you have questions or concerns about the activity? What part of the activity was the most difficult? What part of the activity did you enjoy the most

I will gather evidence of their progress through daily observations, taking pictures of their work, and recording their conversations about the topic when possible.

Activity Results

The activity was successful. The children enjoyed the field trip to the park to pick up tree leaves. They work in groups of four to collect the tree leaves we will need for the experiment. During the investigation, students were amazed to observe how the coffee filters slowly absorbed the leaves' color. They were a little disappointed because they had to wait until the next day to see the coffee filters change to the color of the leaves.

Visual Art:

When the children came to school the next day, they could not wait to see the new colors of the coffee filters. They went to the table where we put the glass jars to see with their eyes that the coffee filters were not white anymore. They were red, orange, green, and yellow! And they decided to wait one more day to let the coffee filters absorb all the color from the leaves. The next day the alcohol was gone, and the Coffee filters were starting to dry. The teacher asked students if they wanted to decorate the classroom with the now colorful coffee filters. They replied, "yes!" and they did it.

Language and literature:

This science activity allowed students to learn new science-related vocabulary. While reading the book, they were asking questions about the Autumn season.

For example, one student asked if there is an Autumn season in another country. They shared their personal experiences related to the book we read. The conversation was so interesting, and the children showed enthusiasm in learning about the other seasons.

They also enjoyed dancing and singing the Autumn songs. This activity enhanced the children's knowledge and curiosity about the world. And is important that students learn about science at an early age because it will help them to develop their critical thinking skills.