The background of the slide features a stylized landscape. At the bottom, there are dark green, rolling hills. Two large, leafy trees with brown trunks and light green foliage stand on the left and right sides of the frame. The sky is a pale yellow-green, with two white, fluffy clouds in the upper corners. The text is centered in the upper half of the image.

LCCC Arboretum Connected Curriculum SCHOOL AGE

Anlly Rodriguez

TABLE OF CONTENTS



01

RESEARCH

The topic we would be researching would be about trees.

02

LESSONS

In this section, we would be exploring some open-ended lesson related trees, its leaves, different types, and ect

03

CULMINATION

Here we would exposed how we would like to showcase our unit of study to show that learning has happened.

04

MATERIALS

Inclusive teacher-made materials with which children can explore different concepts and knowledge about trees.

01

Research

Planning research and resources





Additional Field Trips

The following includes a collection of field trips and supplemental locations for students to visit to enhance and further their learning about native Pennsylvania trees, wildlife and nature.

Morris Arboretum of the University of PA

This site provides special events and opportunities to all ages, presenting some of the oldest, rarest, and largest trees in Philadelphia. In addition, offer a closer look to the diversity of the trees around us, examine the unique characteristics of trees, and discover which tree you are most likely to.

Address

100 E. Northwestern Avenue
Philadelphia, PA 19104

Phone Number

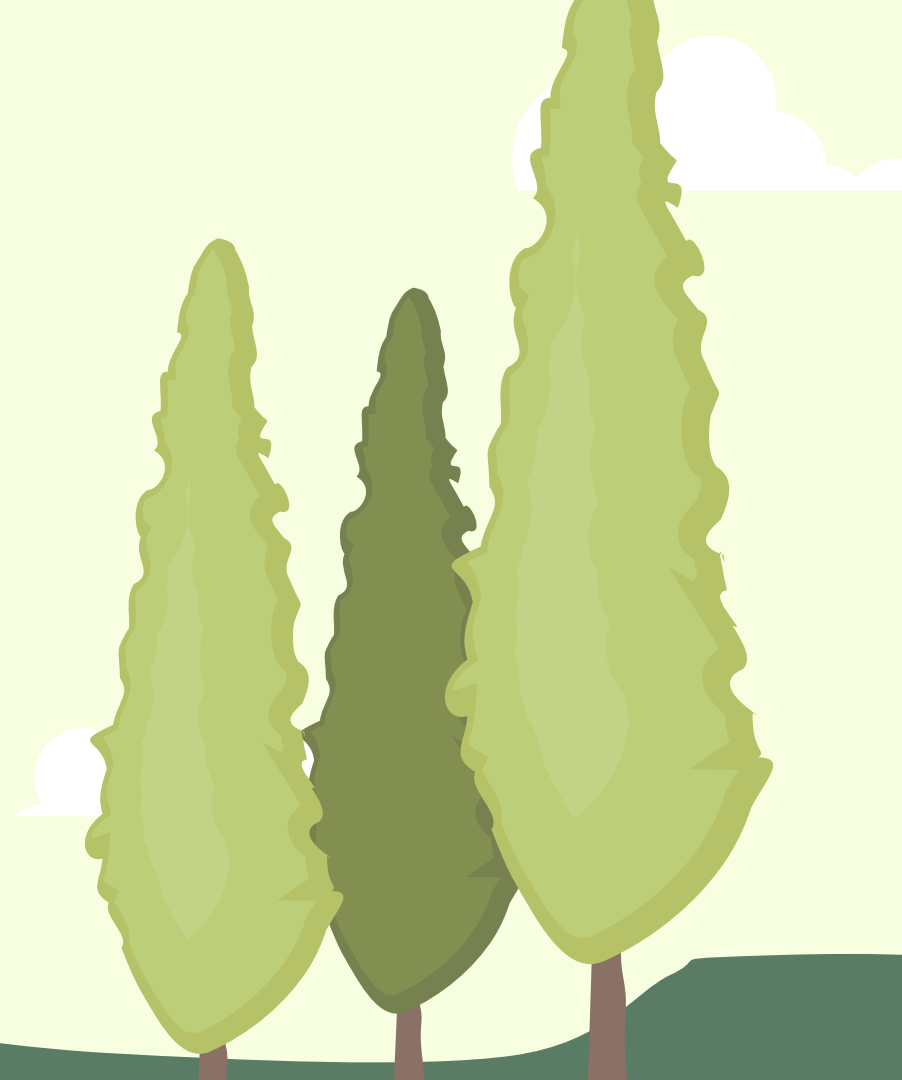
(215) 247- 5777

Email

Education@morrisarboretum.org

Topic Experts

The following experts are valuable resources to support student learning of interest areas related to the Lehigh Carbon Community College Arboretum



Suzanne Simard

She's a great source of information when the topic it's about trees and she loves traveling to do her ted talks about this topic. She is a professor of dorset ecology at the university of British Columbia and the leader of the "Mother Tree Project," she will talk about the crucial role the forest plays is combating climate change and emphasize the importance of appreciating our natural world. She would be able to show some samples and how she invested herself in the mother tree project.

Phone Number

(604) 822-1955

Email

suzanne.simard@ubc.ca

WEBSITES

The following slides are a compilation of valuable web resources for students and teachers when planning for school age exploration on Pennsylvania tree and nature content.



List of Websites for Students

- [Tree Facts | SavATree](#)
- [27 Facts About Trees and Forests](#)
- [Fun Facts About Trees](#)
- [Tree Block Alphabet](#)
- [14 Fun Facts About Trees](#)
- [Fun Facts About Trees](#) (Different)

List of Websites for Teachers

- [Tree Education Hub](#)
- [67 Interesting Facts About Trees - You'll Be Surprised!](#)
- [Leaf measurement/sorting activity](#)
- [15 Astounding Facts About Trees](#)
- [Acorn Oreo Balls](#)
- [Immerse Yourself in a Forest for Better Health - NYS Dept. of Environmental Conservation](#)
- [Leaf Identification Cards](#)



WHOA!

This can be the part of the presentation where you
introduce yourself, write your email...

BOOK LISTS

To support the inclusion of literacy and books
in the classroom, the following slides will
provide a variety of fiction and non-fiction
books related to the Arboretum, Pennsylvania
nature and wildlife

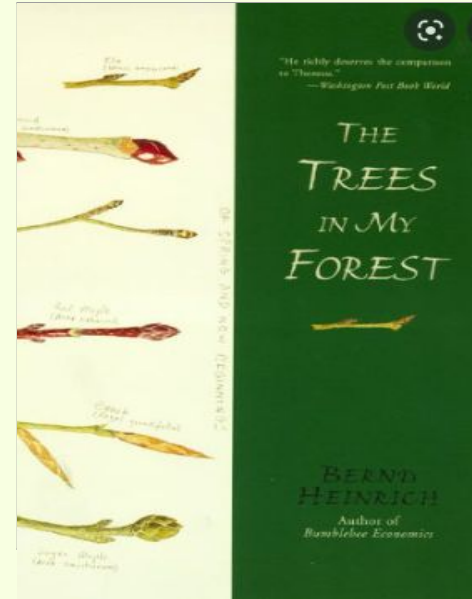


Non-Fiction Book List

The Tree in my Forest

Bernd Heinrich

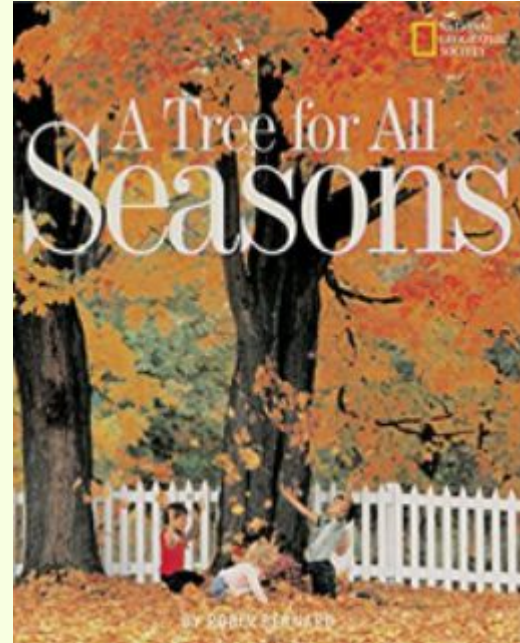
This book explains the science behind our observations of why some trees are tall and others not, how they grow from center and lateral buds and how that can for example, show age. It embrace the true meaning of or nature/outdoor space.



A Tree For All Seasons

Robin Bernard

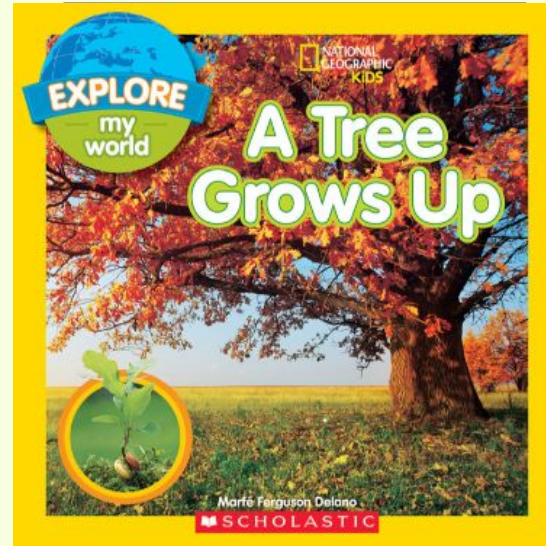
As stated in the title, this book is about how trees look in the different seasons. It would allow children to understand and identify the difference in the four seasons. It explains the concept of changes in the natural world around us season by season.



A Tree Grows Up

Marfe Delano

This picture book would allow children to learn how an acorn grows up to be an oak tree throughout the seasons and year. It also introduces the happenings around the tree from children playing in its shade to squirrels climbing up its trunk and birds nesting in its branches.





Fiction Book List

Tree Full of Wonder

Anna Smithers

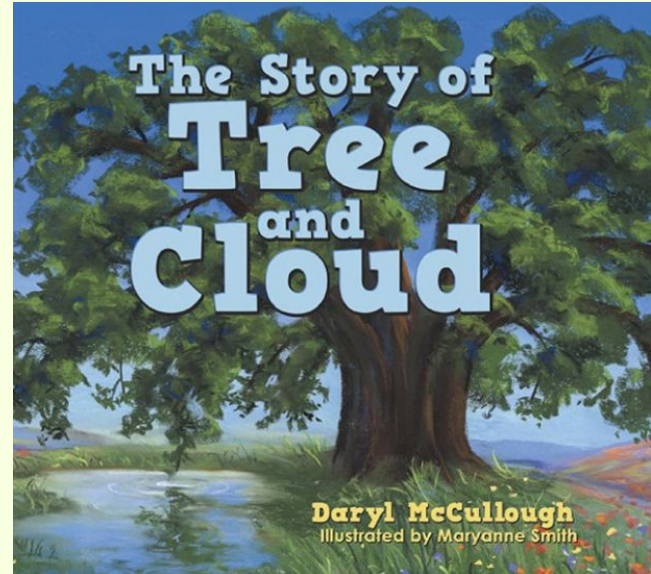
Beautiful book that help children to appreciate the wonder and the beauty of trees and how they are critical to the ability of humans to live and thrive. Also, introduce the reader to a way they can make a difference in the world by planting more trees.



The Story of Tree and Cloud

Daryl McCullough

This picture book shares the story of an ages-old oak tree named Folie. Throughout the seasons of her life, Folie sees and experiences many fascinating things, but she also experiences loss and the resulting grief. Soon, she comes to understand that her loved one's spirit lives on, and she finds solace in that.

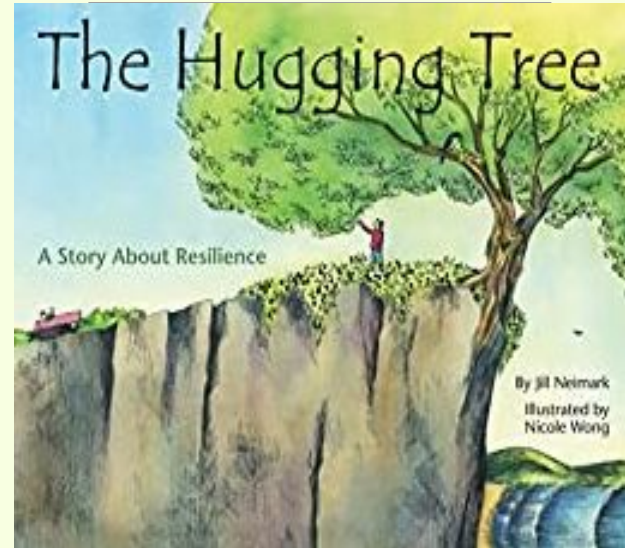


The Hugging Tree: A Story About Resilience

Jill Neimark

This book tells the story of a little tree growing all alone on a cliff, by a vast and mighty sea. Thundering storms and the cold of winter, the tree holds fast.

Sustained by the natural world and the kindness and compassion of one little boy, eventually the tree grows until it can hold and shelter others.



VIDEOS

The following videos are suitable for student and classroom viewing



List of Online Videos for Students

- [Kids vocabulary - Growing a Tree - Learn English for kids - English educational video](#)
- [How Do Trees Grow? - Kids STEM #TeamTrees](#)
- [Red Leaves In Autumn · Free Stock Video](#)
- [Life as a tree! - SciShow Kids](#)
- [The World's Tallest Tree! | Science for Kids](#)
- [Trees | Educational Video for Kids](#)
- [Trees for Kids | Learn all about trees in this fun educational video for kids](#)
- [Aerial View Of Forest · Free Stock Video](#)

A stylized landscape illustration with a large, dark green tree on the left, rolling green hills in the background, and a pale yellow sky with two white clouds. The number '02' is displayed in a bold, orange font in the upper right area.

02

Lessons

Ideas and Instructions

Look, Find, and Match- examination table with leaves

Materials:

- Magnifying glasses, different baskets labeled with its season, different real leaves, journals.

PA Learning Standard

3.1 1.A.5 Identify and describe plant parts and their function.

Vocabulary

Tree, leaves, red, orange, brown, green, basket, magnifying glass.

Objective

Children will be able to describe what changes happen in each season with the trees and its leaves.

Look, Find, and Match- examination table with leaves

Leaf identification cards (I used this as an inspiration but is not the same)

This activity is about finding different leaves color as part of a tree and matching it with its season basket, exploring their names according to their color, textures and shapes. They would use magnifying glasses to really examine them through hands-on experiences and to take notes about their discoveries in their journals. They can express their conclusions or notes by drawing it just by sticking to words and letters.

*Fact: Leaves appear green because chlorophyll absorbs red and blue light energy, causing the green energy to bounce off the leaf's surface.



Apple Tree Math Game

Apple Tree Math

Materials:

- Apple tree with the problems and solutions cards.

PA Learning Standard


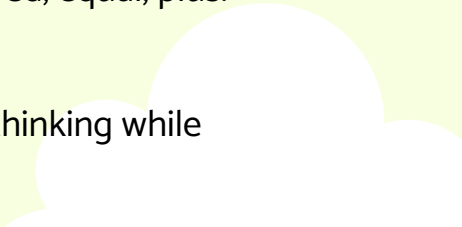
2.2 2.A.1 Represent and solve problems involving addition and subtraction within 100.

Vocabulary

Apple, trees, numerals up to 100, trunk, green, brown, red, equal, plus.

Objective

Children would be able to expose their mathematical thinking while identifying apples as a fruit that came from trees.



Apple Tree Math Game

Apple Tree Math

This one could be very interactive and challenging depending if the child likes challenges, this tree math game, could offer them mathematical addition problems appropriate to their age and developmental skills. They can try easy ones like one value addition or for those that feel more comfortable and want to be challenged can be presented to 2 and 3 values addition. It also has a non-permanent marker board that thanks to the platification children can put their problems on the trunk and erase it when they are done and want to put new ones. They would use the apples to represent the total of its addition problem and as I said before they are also platificated so that means in any case if it doesn't already have their total answer written down on the apple they by themselves can add it to it. I think this experience would be fun for them and they would enjoy it because for what I know there are always a group that likes to be challenge and this could be an perfect opportunity for that and is hands-on experience and that engages children, they are more-likely to be engage when they are the one actually discovering, experimenting, and exploring. So, it would be great to let them by themselves while doing this activity to see how they do without assistance.





Fraction with Tree Trunks

tree trunks (this was an inspiration, but it's not the same)

Materials:

- Tree trunks parts

PA Learning Standard


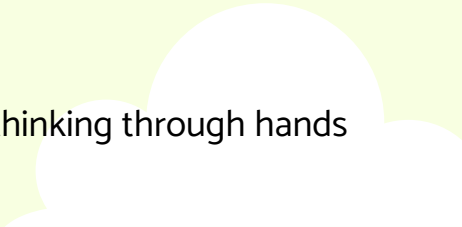
2.3 1.A.2 use the understanding of fractions to partition shapes into halves and quarters.


Vocabulary

partition, halves, quarters, fractions.

Objective

Children would be able to expose their mathematical thinking through hands on experiences while identifying the tree's structure.





Fraction with Tree Trunks

Tree trunks (this was an inspiration, but it's not the same)

In this activity we would allow them to explore the materials first and then as a teacher we provide them some easy fractions problems so things can get warmer and they start making connections, relating, analyzing and understanding to what is being presented. When a fraction is presented to children the best way to introduce it is through visual representations, so they would actually get the meaning in their own words. They would try at first to just represent the fractions and allow them to name it with their corresponding concepts of “that’s a half or that would make a half/quarter” and those concepts. After children are more comfortable with that they can start to name them, raking it with which is more than the other and then visualizing it with those representatives. Just to challenge them a little bit and to realize in which areas they may need some help or assistance.

*Fact: Tree trunks function as a conduit to carry water and nutrients between the roots and crown.





Tree Songs

Song for the Trees // Sounds Like Reign (Lyric Video)

Materials:

- Projector and internet access

PA Learning Standard


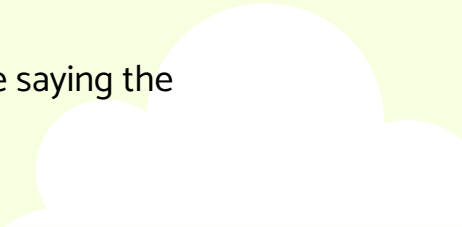
7.4 2.A- Identify how environmental changes can impact people.

Vocabulary

Tree, sprout, root, trunk, leaves, stream, crown, and branch.

Objective

Children would be able to identify tree structures while saying the importance of trees in our world and lives.




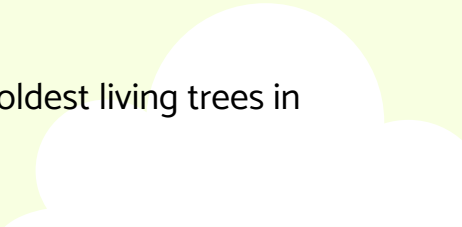


Tree Songs

Song for the Trees // Sounds Like Reign (Lyric Video)

Have students watch and listen to the song for trees on YouTube by sounds like reign. After watching and listening, we would practice the song so they can actually sing it and understand the message of the song. This will help them learn about how important trees are and how affected our world is when they are cut off and also would learn and review specific facts about it. This can be expanded into working in groups, each group can be assigned one tree and they can either put together a small presentation about those or create a box with things that came from it or represent trees. After working on this long project, let some other classes be their audience so they can showcase their hard work.

*Fact: Methuselah, an estimated 4,765-year-old ancient Bristlecone Pine, is one of the oldest living trees in the world.





03

Culmination Activities

Ideas, resources and instructions for closure
on an Arboretum inspired unit of study

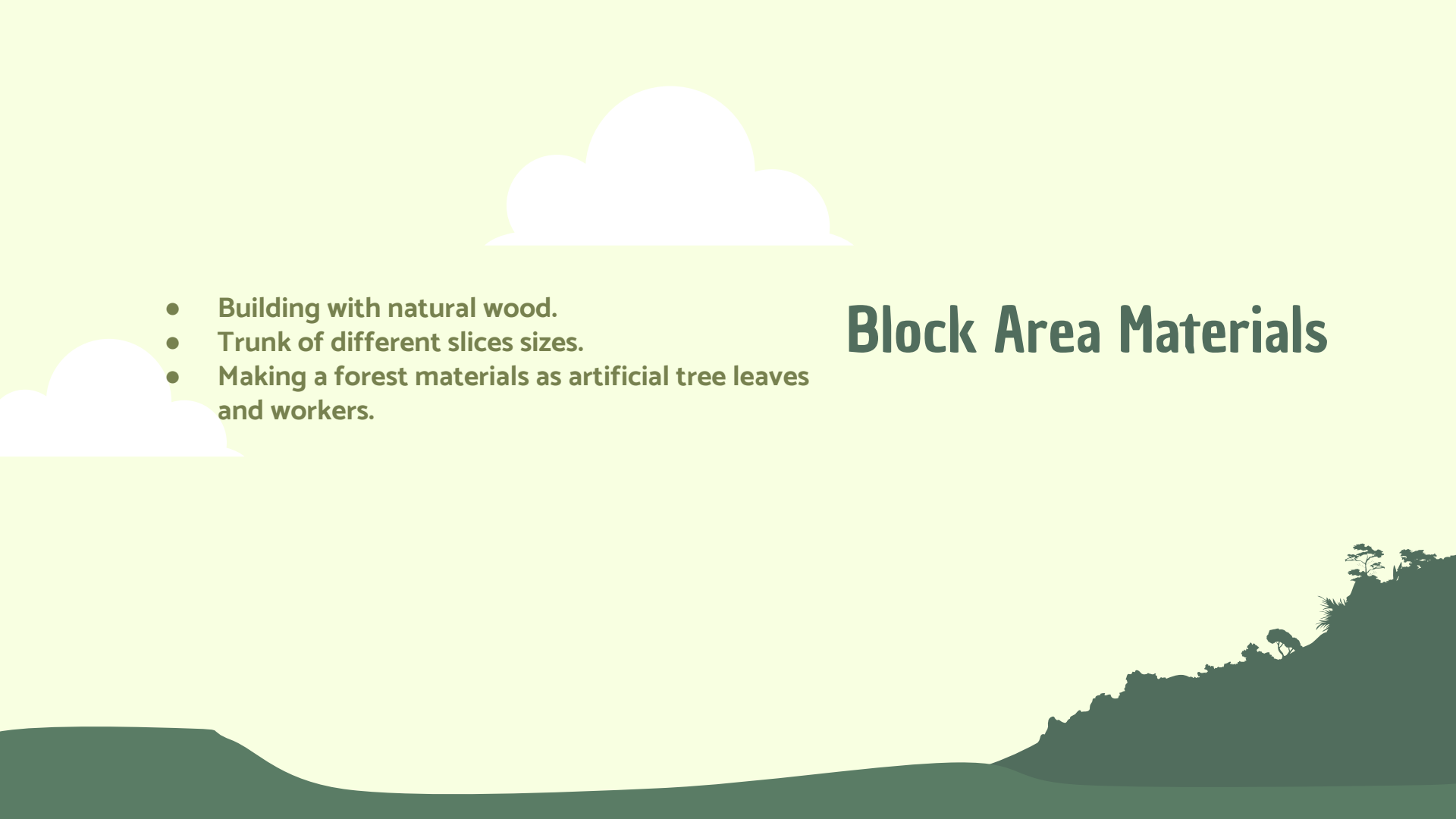
Making Learning Transparent with our Trees Topic.

When the children's interest starts to decrease on our tree topic, I would invite the other children and their family in the center to a celebration that includes all different food we can get from trees where children themselves would bring one plate each and guess which plant they can get that fruit for example. At the same time, they would be a corner displayed with all the research we have done so far with manipulatives made or found by them, representative pictures of them engaged and experimenting in their tree related activities and experiment, as documentation and evidence that learning has occurred so families and other ECE courses can see it and get inspired. They can also stand up with their portrait (a portrait we would be collecting in the process of our unit of study, of their favorite experience, throughout the curriculum unit) and share with their families and classmates what was their favorite experience/activity during the whole unit and take it home as a memory.

04

Materials



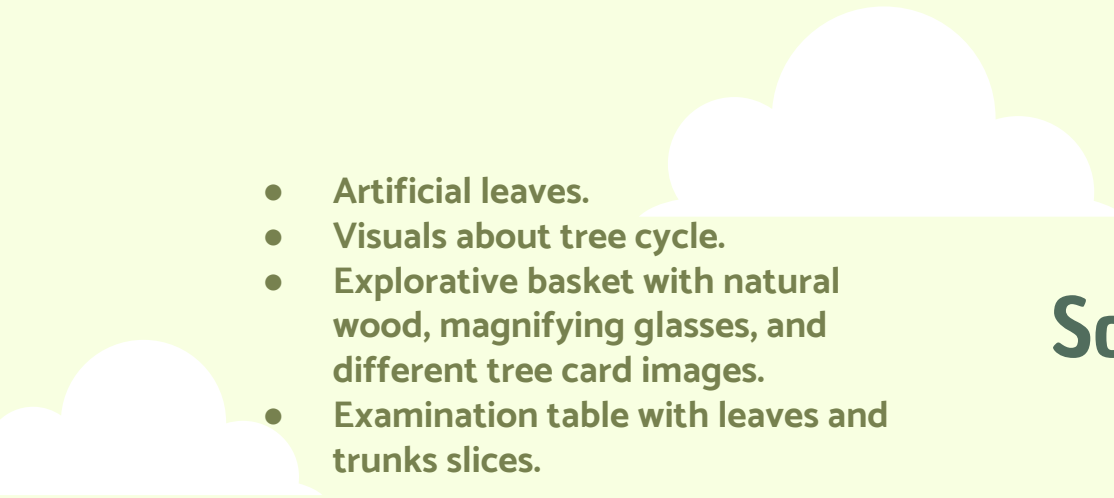
- 
- Building with natural wood.
 - Trunk of different slices sizes.
 - Making a forest materials as artificial tree leaves and workers.

Block Area Materials

- Trees orting with its shapes and color leaves.
- tree items for counting and classifying it into its corresponding basket according to its size.
- Tree trunks for counting.
- Apple tree display for math games.

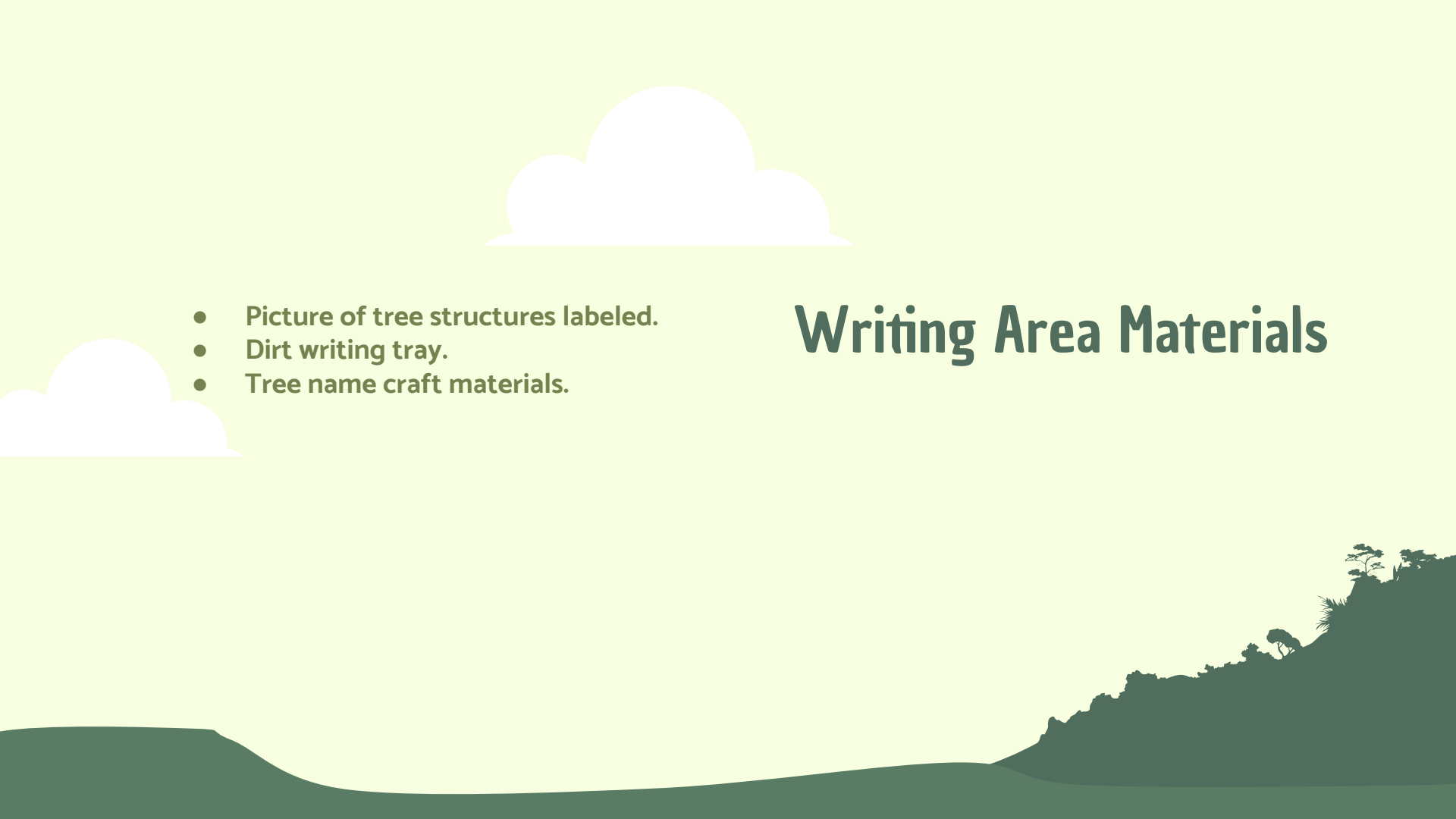


Math Area Materials


- 
- Artificial leaves.
 - Visuals about tree cycle.
 - Explorative basket with natural wood, magnifying glasses, and different tree card images.
 - Examination table with leaves and trunks slices.

Science Area Materials

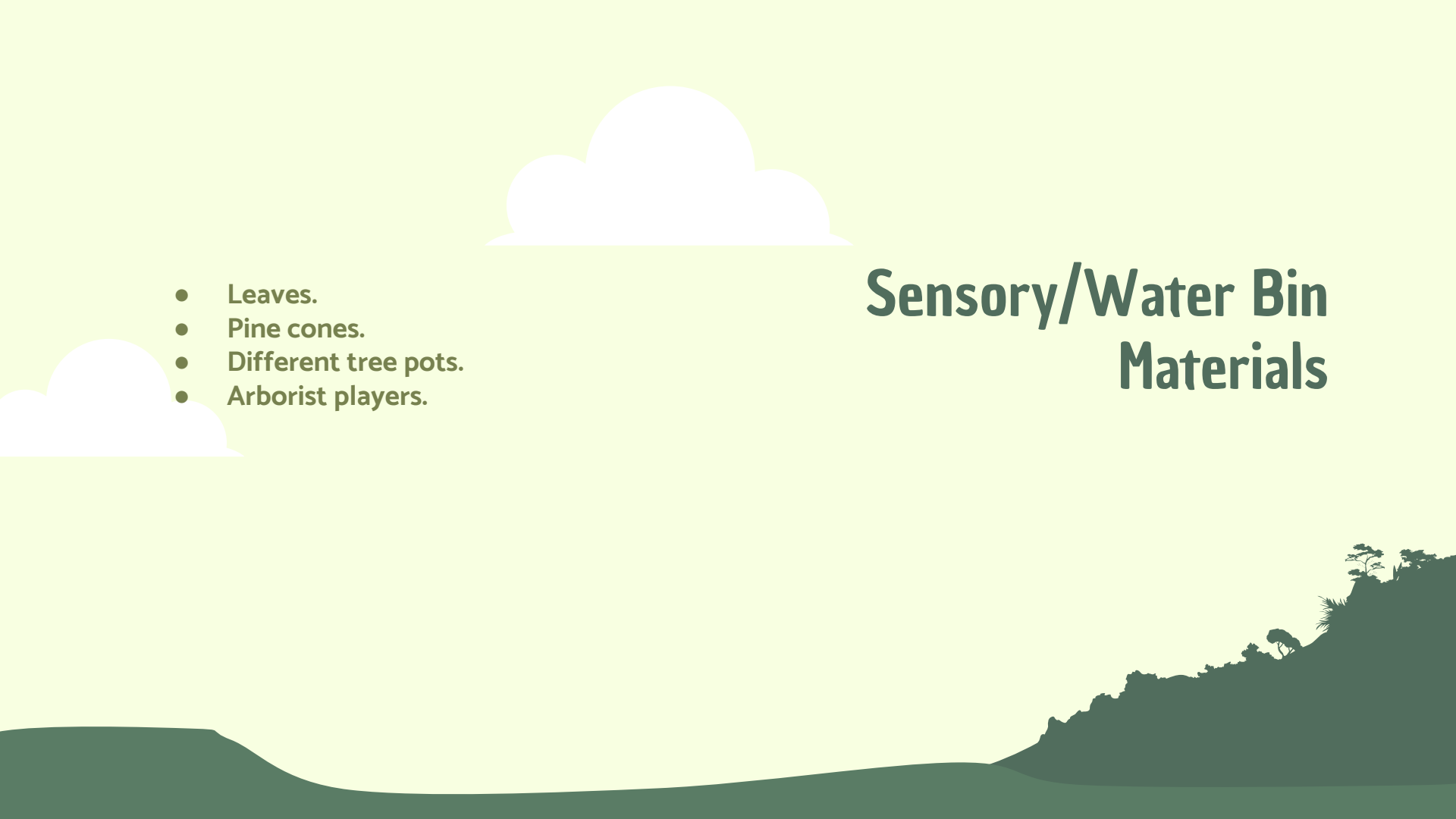


- 
- Picture of tree structures labeled.
 - Dirt writing tray.
 - Tree name craft materials.


Writing Area Materials

- 
- Forest decoration.
 - Frowned or real tree fruits for classification.
 - Real or fake leaves of different colors, shapes.
 - Menu with visuals about the different fruits we get from trees.

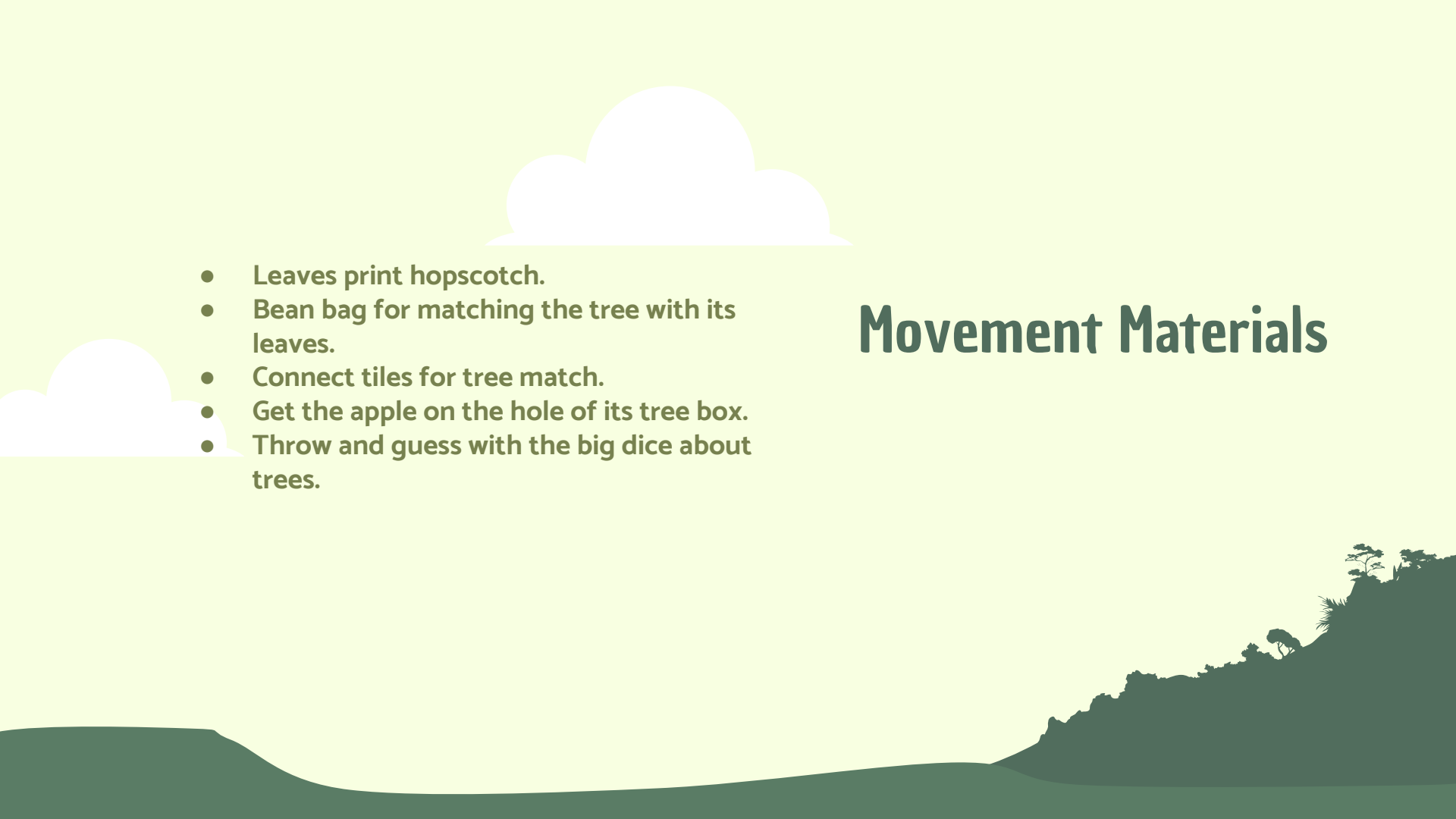
Dramatic Play Area Materials

- 
- Leaves.
 - Pine cones.
 - Different tree pots.
 - Arborist players.

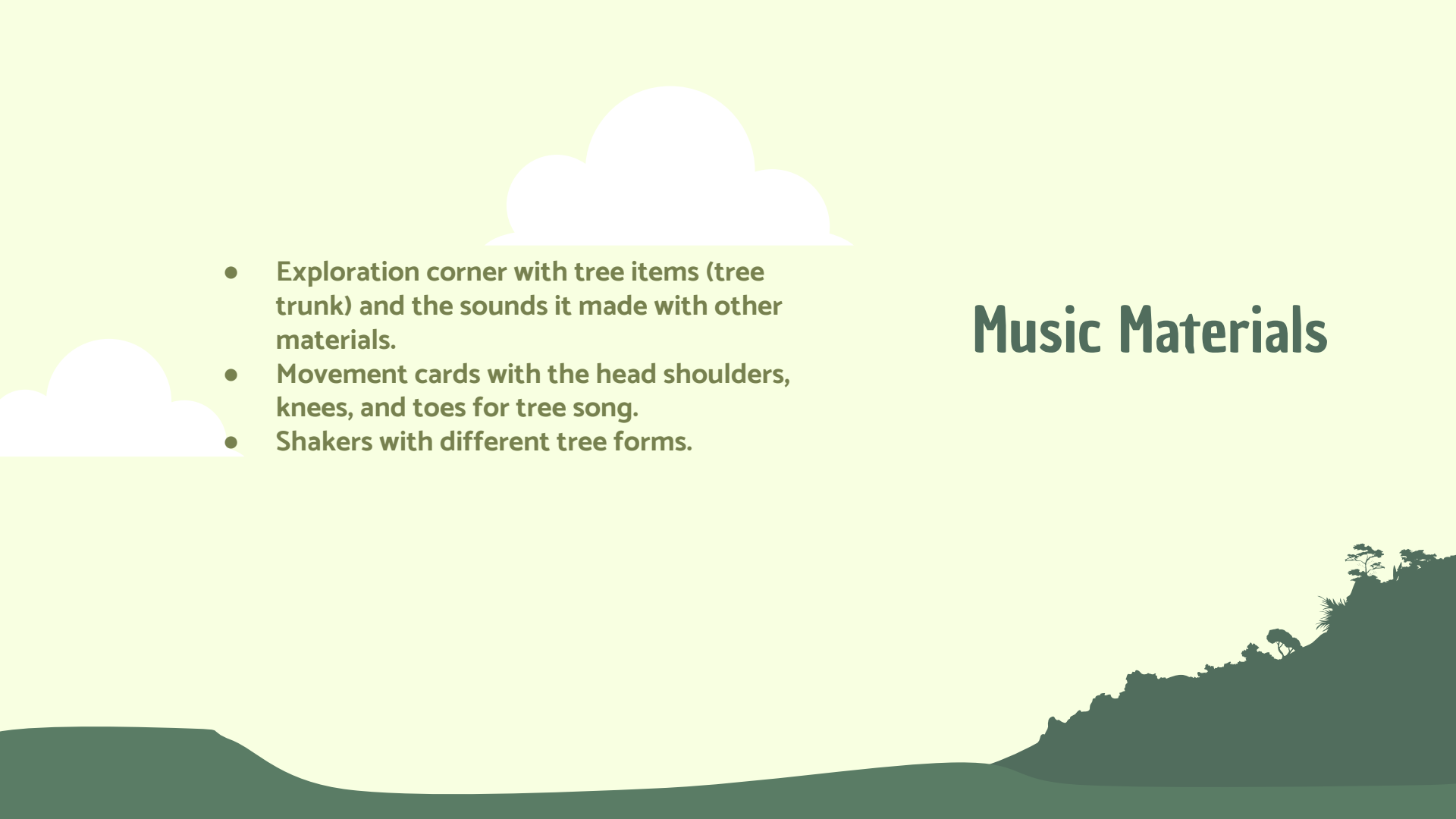
Sensory/Water Bin Materials

- 
- Tree mosaic craft.
 - Flat rocks to paint favorite leaves.
 - Different tree leaves for collages.
 - Well-decorate wall spot for their creations related to trees.


Visual Arts Materials

- 
- Leaves print hopscotch.
 - Bean bag for matching the tree with its leaves.
 - Connect tiles for tree match.
 - Get the apple on the hole of its tree box.
 - Throw and guess with the big dice about trees.


Movement Materials

- 
- Exploration corner with tree items (tree trunk) and the sounds it made with other materials.
 - Movement cards with the head shoulders, knees, and toes for tree song.
 - Shakers with different tree forms.

Music Materials

- 
- Poster-board representing tree cycle.
 - Tree trunk slices for sorting.
 - Basket with different seeds to match it with its tree.

Outdoor Materials



This presentation was made by Lehigh
Carbon Community College, ECE 210
Students to serve as a resource to school
age professionals researching units on
native Pennsylvania trees and for those
looking for connecting education activities
for school agers in conjunction with a visit
to the LCCC Arboretum!

ENJOY!