**location**

## date, start/end time

**Session Title: A Time for Trees: Activities for Budding Scientists**

*Facilitator names*

## Session Overview and Session Outcome-Based Agenda

### Session Overview

**Session Description:** Bring the outdoors into your program. Help your students discover the benefits of trees and why they are important, with fun interactive and engaging activities. Walk away with handouts, hands-on activities and example crafts you can use next week with your students.

### Session Objectives:

* Participants will use observation skills and discover ways to engage their students with the natural world and identify the benefits of trees in the environments.
* Participants will explore science-focused concepts through simple and nature based activities and experiments.
* Participants will examine the function and benefits of trees and their role in the environment.
* Participants will understand the benefits that trees provide, and why we should teach about them.
* Participants will be introduced to PLT activities and nature based crafts and activities to use with their students after the conference.
* Participants will become familiar with Arboretum resources and opportunities for students and teachers through the Morton arboretum.

### Session Intended Outcomes:

* Participants will practice observation skills with their students, following the workshop, in either an indoor or outdoor setting.
* Participants will utilize activities with their students that grow an affinity for trees and their role in the environment.
* Participants will utilize 1-2 of the activities or experiments highlighted during the Tree Craft Stations
* Participants will utilize either the Every Tree for Itself, or Tree Factory activity with their students.
* Participants will encourage their students to protect and understand the importance of trees.
* Participants will seek additional opportunities to engage with the Morton Arboretum’s free loan materials, field trip options, or teacher professional development opportunities.
* Participants will use PLT activities in their teacher and seek additional opportunities to engage with PLT

### Overview/Agenda (At a Glance)

* Introduction and background of presenters (5 minutes)
* T/F Quiz about the benefits of trees (5 minutes)
* My Leaf Activity (5 minutes)
* Benefits of Trees- Why should you teach about trees? (5 minutes)
* Every Tree for Itself- Group Activity- Lead by facilitator (15 minutes)
* Tree Craft Stations- Lead by facilitator (8-10 minutes at each station)- 40 minutes total.
  + Leaf Animals
    - (Leaf shapes and animals that need trees-interdependence)
  + Tree Pencil Roots
    - Tree Parts (Root structure and function)
  + Coffee Filter Trees
    - Tree Parts (Tree Vascular System)
  + Seeds- Distribution activity, Seed Dissection, Experience Box.
* Tree Factory- Lead by facilitator (15 minutes)
* Wrap Up- Arboretum Resources- Contact information (5 minutes)

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| **Session Learning Objectives** | **Session Intended Outcomes** | **Related Session Activity** |
| * Participants will use observation skills and discover ways to engage their students with the natural world and identify the benefits of trees in the environments. | * Participants will practice observation skills with their students, following the workshop, in either an indoor or outdoor setting. * Participants will utilize activities with their students that grow an affinity for trees and their role in the environment. | * Kahoot T/F Quiz about Tree Benefits * My Leaf Activity * Seed Exploration (Tree Craft Stations) |
| * Participants will explore science-focused concepts through simple and nature based activities and experiments. | * Participants will utilize 1-2 of the activities or experiments highlighted during the Tree Craft Stations | * Coffee Filter Trees * Tree Pencil Roots * Seed Exploration * My Leaf Activity |
| * Participants will examine the function and benefits of trees and their role in the environment. * Participants will understand the benefits that trees provide, and why we should teach about them. | * Participants will utilize either the Every Tree for Itself, or Tree Factory activity with their students. * Participants will encourage their students to protect and understand the importance of trees. | * Every Tree for itself * Tree Factory * Kahoot T/F Quiz about Tree benefits |
| * Participants will be introduced to PLT activities and nature based crafts and activities to use with their students after the conference. | * Participants will use PLT activities in their teacher and seek additional opportunities to engage with PLT | * Every Tree for itself * Tree Factory * Slide/information shared regarding project learning tree. |
| * Participants will become familiar with Arboretum resources and opportunities for students and teachers through the Morton arboretum. | * Participants will seek additional opportunities to engage with the Morton Arboretum’s free loan materials, field trip options, or teacher professional development opportunities. | * Slide/information shared regarding Arboretum resources and opportunities. |

### Outcome-Based Session Agenda

Session Time Block: 11:25-12:55

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| Time | Activity/Agenda Item | Materials Needed | Outcome |
| 11:05 | Previous session ends, set up available in Getz   * Unpack/unload materials * Organize station materials * Set out Handouts/Folders for participants * Set up projector and powerpoint * Organize tables (if needed) * Make sure Kahoot, is up and loaded | ALL |  |
| 11:20 | Greet participants, be ready for presentation. | ALL |  |
| 11:25-11:30 | Introduction, and Background for both presenters | Slide Show |  |
| 11:30-11:40 | T/F Anticipation about Tree benefits (Shown both as a handout and using kahoot.com). | Copies of the T/F Quiz, kahoot loaded on the computer. | Participants will understand the benefits that trees provide, and why we should teach about them.  Participants will encourage their students to protect and understand the importance of trees. |
| 11:40-11:50 | Benefit of Trees Slides and Answer to T/F Anticipation Guide | Slide Show |
| 11:50-12:00 | My Leaf Activity | Leaves, scrap paper, post-its | Participants will utilize 1-2 of the activities or experiments highlighted during the Tree Craft Stations  Participants will practice observation skills with their students, following the workshop, in either an indoor or outdoor setting.  Participants will utilize activities with their students that grow an affinity for trees and their role in the environment. |
| 12:00-12:10 | Every Tree for Itself | Paper Plates, Colored Squares, markers, activity write up | Participants will utilize either the Every Tree for Itself, or Tree Factory activity with their students.  Participants will encourage their students to protect and understand the importance of trees. |
| 12:10-12:40 | Tree Craft Stations   * Leaf Animals * Coffee Filter Trees * Seed Box | Leaves (100-150 leaves), Coffee Filters (35), Masking tape, food | Participants will utilize 1-2 of the activities or experiments highlighted during the Tree Craft Stations |

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|  | * Tree Pencil Roots   (7 minutes at each station, then rotate) | coloring, small cups, example coffee filter trees (5), seed discovery box, seed discovery box handouts (30), Tree pencil roots handout (30), pipe  cleaners (100), marshmallows (bag), straws (box), yarn, tape etc. | Participants will utilize activities with their students that grow an affinity for trees and their role in the environment. |
| 12:40-12:50 | Tree Factory | Tree parts slips of paper (30), 4 pieces of yarn, six feet in length. | Participants will use PLT activities in their teacher and seek additional opportunities to engage with PLT  Participants will encourage their students to protect and understand the importance of trees. |
| 12:50-12:55 | PLT resources, Arboretum Resources | Slide Show | Participants will seek additional opportunities to engage with the Morton Arboretum’s free loan materials, field trip options, or teacher professional development opportunities.  Participants will use PLT activities in their teacher and seek additional opportunities to engage with PLT |

Characteristics of After School programs

1. The staff at these locations tend to be less trained in classroom mgmt. & education. So tie in connections for activities with these basics.
2. Staff are also usually less engaged at professional development (PD). Because of their younger ages, their lack of education background so some PD goes over their head, and PD providers tend to leave them out and focus on “formal teachers”.
3. Leading activities in the after school (AS) settings is all about not looking like school. The kids just sat through 7 hours of school. They need to be hands-on, active, and fun. The AS providers what and need for funding, learning assessment. … so PLT, WILD, WET fit in excellent on both sides. You just need to show the leadership the assessment abilities… and the educators the fun & hands-on-ness of the activities. And this is definitely where I use “activity” not “lesson”.
4. That said… this can’t be where you pull out $500 water quality testing equipment. Shoe-string budget is the name of the game in most AS settings. So highlight the house-hold items and low-cost equipment… and where grants or funders you may know could help them.
5. AS is super into STEM and SEL right now. SEL – social emotional learning. So if you can tie either or both to activities, even better because that is where some are finding funding from states.