

CHESSIE Tree Unit Schedule

Groups 4A & 4B

Reading Material

- **ABeka Grade 7: Science: Order & Reality**
- Online version of *Common Native Trees of Virginia*
[Common-Native-Trees-ID_pub.pdf](#)

Parent note: It is easier to open the schedule from the handout page on the website and click the website addresses there. Please do not type the addresses manually. If you cannot get an online link to work, please look for an alternate resource. Please do not contact me about broken links. (Thank you! 😊 Kathy)

September 3---Tree Unit Begins

Topics: Observing leaves; leaf arrangements; leaf margins; compound and simple leaves.

Prior to Class

- **Read:** *Science: Order & Reality*, Grade 7, pages 62–66.
- **Complete:** Brain Drain questions on page 66 on a piece of paper that you keep in your binder. Homework is checked for completion in class each week
- **Optional Enrichment: Read/watch** online at the Arbor Day Foundation website:
 - 1) “The Value of trees” <https://www.arborday.org/value>
 - 2) “Benefits of Trees” <https://www.arborday.org/youth-education/benefits-trees>
 - 3) “Trees around the world”
Click on the name of each tree to find out more about it.
<https://www.arborday.org/youth-education/trees-around-world>
 - 4) “Jr. Arborist Quiz” See how many answers you can get correct.
<https://www.arborday.org/youth-education/junior-arborist>

Class Time

Parts of a tree; types of needleleaf trees; mystery item; annual rings; leaf arrangements; leaf margins; compound and simple leaves; and leaf venation.

September 10

Topics: The process and products of photosynthesis; the process of respiration. How to prevent forest fires.

Prior to Class:

Read: *Order & Reality*, pages 68-70

Complete: Brain Drain questions p72

Class Time

(“What tree has a knee?”); compare tree nuts and fruits; guess that tree. How to prevent forest fires. Disappearing paper.

Website Suggestions

With concern this past summer about wildfires in Canada and the United States, watch the two videos below to learn more about what starts forest wildfires and how important safety around fire is. What is a smokenado?

- Wildfires 101, National Geographic —
<https://youtu.be/5hghT1W33cY?si=qLYNkpEsDMmyL7UU>
- The science behind wildfires
https://youtu.be/Dg1ZmvSCMvk?si=h_q4EHHWs6M2eulw
- What is a smokenado?
<https://weather.com/2026/07/30/news/weather/video/smokenado-over-utah-wildfire>

September 17

Topics: Tree anatomy and choosing the right tree for the right place.

Prior to Class

- **Review** “Anatomy of a Tree” on the Arbor Day Foundation website
<https://www.arborday.org/tree-guide/anatomy-tree>
- **Read** the **steps to plant a bare-root tree** on the CHESSIE website handout page
- **Complete:** Homework handout for today
- **Class Time:** Experimenting with Chromatography Discs—Why do leaves change color in the fall? Students will look at a variety of tree leaves to identify. Students in these groups will meet inside the classroom today.

• September 24 — Guest Presentation

Michael Abbott, a board-certified Master Arborist and local manager for Bartlett Tree Experts in Charlottesville, will give today’s presentation.

Prior to Class

- Watch the brief video about Michael Abbott’s work.
- Watch the National Geographic video, “This Crazy Tree Grows 40 Kinds of Fruit!”
To find this video, go to youtube and put the title into the search bar
- **Read:** The handout about trees and grafting.
- **Complete:** Answer the questions on the handout covering grafting.

Class Time

Learn how to identify trees, what trees do for us, how to identify trees by their bark, forest ecology, and tree diseases.

October 1 — Oak Leaf Booklet

Bring your Oak Leaf booklet to class to share today. Don't forget!

No other homework for today's class

Guest Presenter Biography (CLASS ON SEPT 24)

Michael Abbott

Michael Abbott is a homeschool dad to Christian, Gideon, and Elizabeth, who have graduated from science classes at CHESS. He is a board-certified Master Arborist and holds a master's degree in forestry. He is the local manager for Bartlett Tree Experts in Charlottesville.

Bartlett is a scientific tree and shrub care company. Michael enjoys visiting clients' properties to consult with them about their tree and shrub needs. Bartlett provides tree seedlings to support reforestation efforts and teaches people how to care for trees.