

Middle-level CTE  
Learning Experience Template  
March 2019

Middle-level CTE Learning Experience Title: Measuring Tree Age  
Educator: Zak Messenger-Harris M-



- 9. d) skills to construction of physical shape

[Area\\_Circumference.html](#)

	<p>the Stick Method to the photographs from the tree walk.</p> <p>Teacher checks students' estimates        Tree Growth Rate by Species:  <a href="https://www.arborday.org/trees/treeGuide/growth.cfm">https://www.arborday.org/trees/treeGuide/growth.cfm</a></p> <p>Day 4-        Teacher takes students back outdoors to the trees they have marked with surveyor's tape. Teacher demonstrates how students will measure the breast height circumference (DBH), in inches, using a tape measure.</p> <p>Instruments for Measuring Tree Diameter  <a href="https://openoregon.pressbooks.pub/forestmeasurements/chapter/3-3-instruments-for-measuring-tree-diameter/">https://openoregon.pressbooks.pub/forestmeasurements/chapter/3-3-instruments-for-measuring-tree-diameter/</a></p> <p>Day 5-        Teacher provides students with a link for Tree Age Calculator by species:        Teacher demonstrates use of the calculator.        Tree Age Calculator 1:  <a href="http://www.tree-guide.com/tree-age-calculator">http://www.tree-guide.com/tree-age-calculator</a>        Tree Age Calculator 2:  <a href="https://goodcalculators.com/tree-age-calculator/">https://goodcalculators.com/tree-age-calculator/</a></p>	<p>height of the tree</p> <p>Students post the name of the tree and the tree's height next to their leaf and photo</p> <p>Day 4-        Students go back to the tree they have marked with surveyor's tape.</p> <p>Students measure the breast height circumference of their trees, in inches, using a tape measure.</p> <p>Students post the circumference of their trees next to their leaf and photo</p> <p>Day 5-        Students calculate the age of their trees and post the age next to their leaf.</p>	<p>5 min</p> <p>40 min        35 min</p> <p>5min</p> <p>40min total        10 min</p>
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Teacher asks: How does the age of the tree compare to the height of the tree?

Which tree in our group was the oldest? youngest?

Which tree in our group was tallest?

Exit ticket: Make a summary statement about what we have learned about the relationship of tree age and height.

Day 6-

Teacher shares excerpts from "What is a Tree Worth? by Jill Jones

[https://bcc-cuny.digication.com/yn159/What\\_is\\_a\\_Tree\\_Worth\\_by\\_Jill\\_Jones](https://bcc-cuny.digication.com/yn159/What_is_a_Tree_Worth_by_Jill_Jones)

Day 7 and 8-

Teacher provides a scenario about a community decision to replace a wooded lot with a paved parking lot. Students write a persuasive essay to the Town Planning Board promoting the contributions of the live trees to the aesthetics, health,



Manages Personal Finances	Consistently manages budgeting habits within resources, uses personal financial tools and services effectively.	Manages budgeting habits within resources, uses personal financial tools and services effectively.	Is conscious of personal budgeting but occasionally exceeds resources.	Spends personal resources carelessly.
Analyzes Critical Information	Thoroughly evaluates the reliability of the source and the information researched using internal and external validation.	Thoroughly evaluates information researched using internal and external validation.	Evaluates information researched but not thoroughly.	Does not evaluate information.
Uses System Thinking	Recognizes and manipulates parts of a system to come together to accomplish tasks.	Recognizes how the parts of a system work together to accomplish tasks.	Identifies the parts of a system but cannot explain how they work together.	Is able to identify only some system parts and loses sight of how they work together.
Contributes to Well-being of Community	Is a strong advocate for the community and always acts in a manner that benefits the community.	Understands responsibility of the individual to the community and acts in a manner that benefits the community.	Usually considers the well-being of the community even if occasionally acts in self-interest.	Favors self-interest over the well-being of the community.
Demonstrates Understanding of the System and Environment Influencing the Organization	Consistently acknowledges the economic, political, and social relationships that impact multiple levels of an organization and uses this knowledge in interactions within the group (e.g., local, national, international).	Acknowledges the economic, political, and social relationships that impact multiple levels of an organization (e.g., local, national, international).	Acknowledges some social relationships that impact multiple levels of an organization.	Does not acknowledge social relationships that impact multiple levels of an organization.