

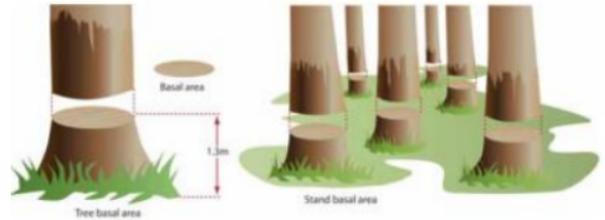
BioBox Unit 9 Essential Vocabulary Dictionary

Angiosperm



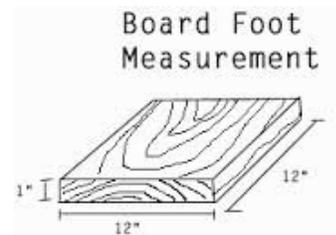
Flower-bearing trees and plants.

Basal Area



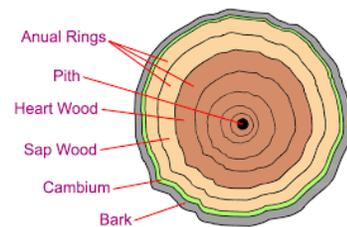
Total amount of area contained in the cross sections of the tree trunks in a stand.

Board Foot



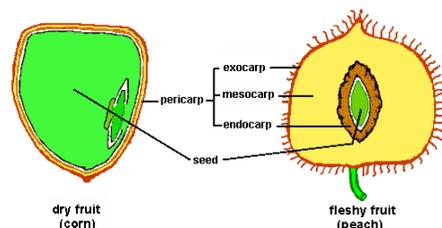
Equal to a piece of wood one foot long, one foot wide, and one inch thick.

Cambium



Tree trunk layer that produces new bark to the outside, and new sapwood to the inside.

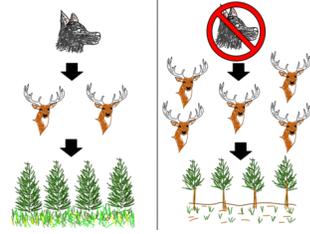
Capsule



Dry fruits that split open at maturity to release seeds.

BioBox Unit 9 Essential Vocabulary Dictionary

Cascade Effect



When something happens to a dominant species, and this affects other species which affects other species and so on.

Cellophane



Cellulose is treated so that it forms this wrap used to keep food fresh, and to prevent tampering with objects.

Cellulose



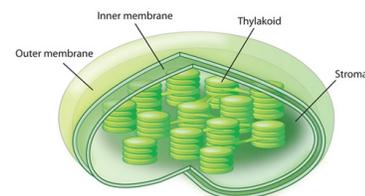
Material that cell walls are composed of in trees and other plants. Tree bark is removed, and the underlying wood is chipped up, cooked, and chemically treated.

Charcoal on the Tree Cookie



Demonstrates that a fire burned through the area where it was growing.

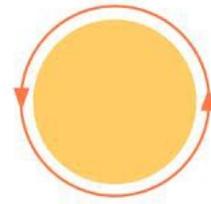
Chloroplast



An organelle found in plant and algae cells where photosynthesis occurs; makes the food the tree needs to grow and reproduce.

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Circumference



Distance around the trunk.

Clinometer



Tool used to easily find the height of a tree when standing on ground level with its base.

Cone



Woody structures that open and release seeds when dry; some need high heat of fires for the cones to open.

Conifers



Trees that bear cones.

Curled/Wavy Tree Rings



Demonstrates the tree was injured by something during that time period.

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Dead Phloem



Outer bark layers of a tree trunk.

Dendrochronology



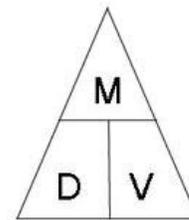
Study of the history recorded within a tree (tree rings).

Dendrology



The natural history of trees.

Density



Unit of mass per unit of volume.

Diameter



Length of a line passing from one edge of the trunk to the other through its center.

BioBox Unit 9 Essential Vocabulary Dictionary

Dichotomous Key

Key to Writing Implements

1. Writes with ink.....go to 2
1. Writes with graphite.....go to 4
2. Writing tip is metal.....go to 3
2. Writing tip is felt.....marker
3. Writing tip contains a ball.....ball point pen
3. Writing tip does not contain a ball...calligraphy pen
4. Body is made of wood.....regular pencil
4. Body is not made of wood.....mechanical

Figure 2

Tool used to determine the identity of the unknown by answering a couplet of questions.

Dormant



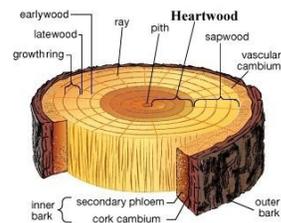
Inactive.

Drupe



Fleshy fruit with a large seed in the center.

Early Wood



One of two tissue layers that forms during the wet spring season, which is when the tree grows most rapidly.

Ecosystem



Multiple communities displaying both biotic and abiotic factors.

BioBox Unit 9 Essential Vocabulary Dictionary

Felling



Death of a tree.

Film



Made from a chemical called cellulose acetate, obtained from wood pulp cellulose.

Forest Regeneration



Keeping forests healthy and replacing trees removed to make forest products.

Forestry



Science and practice of studying and managing forests and their natural resources.

Frequency Table

Data	Tally	Frequency
1		6
2		5
3		4
4		3
5		1
6		10

A table for organizing a set of data that shows the number of times each item or number appears.

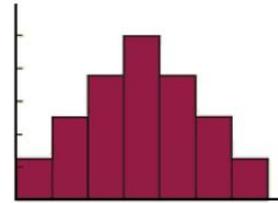
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Heartwood



Dead xylem that provides structural support to the tree; usually darker in color.

Histogram



Symmetric Histogram

A graph of vertical bars representing the frequency distribution of a set of data.

Holes in the Tree Cookie



Demonstrates that insects bored into the tree at some point.

Hypothesis



An educated testable guess.

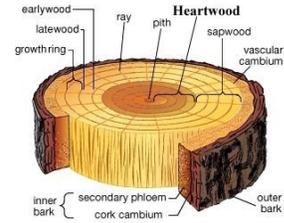
Knots on the Tree Cookie



Demonstrates the presence of branches.

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Late Wood



One of two tissue layers that forms in the drier period from summer to winter.

Legume



Seeds are contained in a pod, which can split open along its seams to release the seeds.

Live Phloem



Inner bark layers of a tree trunk.

Mean

Find the mean of 8, 2, 7 and 3

$$8 + 2 + 7 + 3 = 20$$

$$20 \div 4 = \underline{5}$$

Average value of all measurements; found by adding all numbers and dividing the sum by the number of numbers.

Narrow Tree Rings



Demonstrates the tree did not grow much: slow growth.

BioBox Unit 9 Essential Vocabulary Dictionary

Nut



Hard-shelled dry fruit containing the seed inside; do not open naturally; often round to allow dispersal by rolling; may float to allow dispersal by water; often nutritious to attract animal dispersers.

Outbreaks



Huge population numbers.

Pests



Organisms that can cause damage or spread disease to the trees within it.

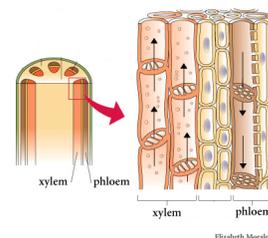
Pheromones

Pheromones in Animals



Chemicals released by organisms to attract others.

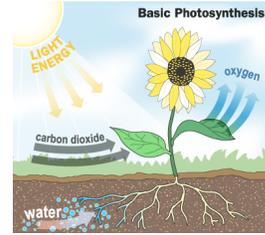
Phloem



Tissues that carry food in a tree.

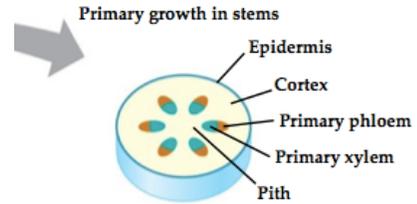
BioBox Unit 9 Essential Vocabulary Dictionary

Photosynthesis



Process by which sugars are produced and then transported from the leaves through the phloem to the other parts of the tree.

Pith



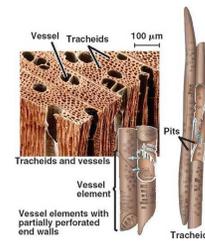
The central core of the trunk layers; stores sugars and wastes.

Plastics



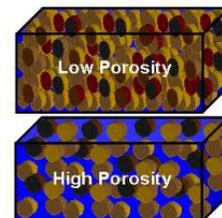
Made from cellulose fibers are also used to make combs and other items.

Pores



Vertical vessels that transport liquids in the xylem.

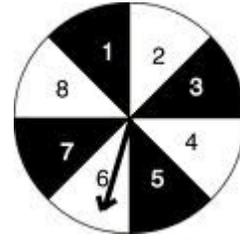
Porosity



Measure of how quickly a liquid will pass through a material.

BioBox Unit 9 Essential Vocabulary Dictionary

Probability



Likelihood that something will occur (equal to number of desired outcomes divided by the number of possible outcomes).

Proportion

$$\frac{\text{part}}{\text{whole}} = \frac{\text{percent}}{100}$$

Fraction that expresses part of a quantity to the whole.

Pulp



End product of cellulose.

Quadrant



A sample plot

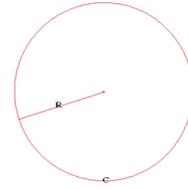
Quantification

1		6	
2		7	
3		8	
4		9	
5		10	

Observations that involves numerical comparisons.

BioBox Unit 9 Essential Vocabulary Dictionary

Radius



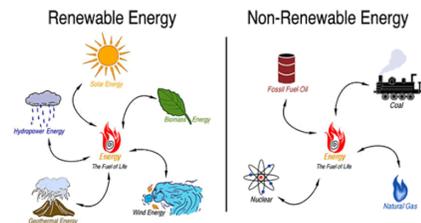
Distance from the center of the trunk to one edge (equal to half the diameter).

Rayon



Made by treating cellulose fibers.

Renewable Resource



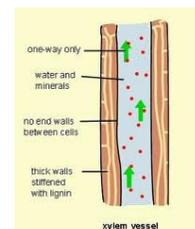
Available to us indefinitely.

Samara



Fruit with "wings" that allows wind to carry seeds far from the parent tree.

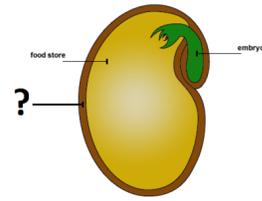
Sapwood



Living xylem that transports water through the tree; usually lighter in color.

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Seed Case



A special structure that surrounds seeds to help with dispersal.

Stand Density



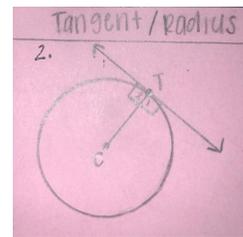
Number of trees per unit area. It is important because trees that grow closely packed tend to grow more slowly, because of more intense competition for light.

Succession



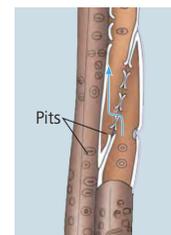
Process of recovery from a disturbed forest to a mature forest.

Tangent of a Right Triangle



Value resulting from the division of the length of the side of the right triangle opposite the angle is divided by the length of the side of the triangle adjacent to the angle.

Tracheids



Conifers use this system of long tapered cells with pitted walls, in the transport of water and other materials.

BioBox Unit 9 Essential Vocabulary Dictionary

Tree Cookie



Cross-Section of a tree ring.

Tree Crown



Top of the tree.

Tree Roots



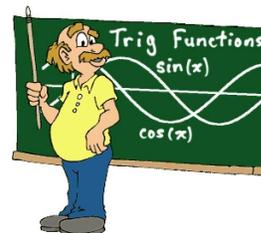
Act as anchors in the soil and also collect minerals and water from the soil.

Tree Trunk



Help get the leaves above obstacles so they can absorb the sun's rays. Supports its crown of leaves and serves as a plumbing system, carrying water and minerals up from the roots and food down from the leaves where they are needed.

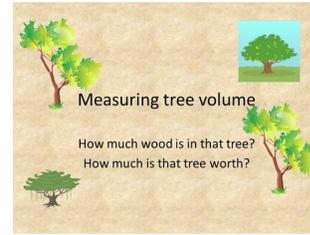
Trigonometry



Branch of mathematics dealing with the relationships among the sides and angles of triangles.

BioBox Unit 9 Essential Vocabulary Dictionary

Volume



Total amount of wood present in a stand.

Wide Tree Rings



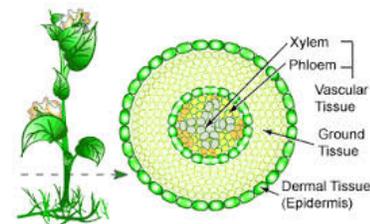
Demonstrates that the tree grew a lot during a given season: fast growth.

Wood



Tree trunk layer composed of the sapwood and the heartwood.

Xylem



Tissues that carry water in a tree.