☼ Group Assignment #3: Wood Kits: Tree Identification and Dendrochronology

Worth 5 points
Each group member sign in and print name

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Background: *Many trees and other woody plants produce growth rings in their central trunk. These rings may or may not be annual, record climatic and environmental variables, or have enough variability to be used in dendrochronology. Before being included in a dendrochronological study, scientists evaluate the potential of a species using criteria based on growth form, age, and response of the plant to climate and the environment*

Objectives: *When you conclude this assignment, you should be able to look at the structure of a cross-section of wood and, by understanding and applying terms and principles of dendrochronology, generally determine if the piece might be suitable for use in a dendrochronological study.*

Instructions:
• Remove all wood samples and white envelope from your wood kit box.

• Place a label (from the white envelope) on the corresponding correct wood sample from the kit.

• Using terminology from lecture, pp 117 + 118 of class notes and from the illustrations below, describe (in the table on the second page) how each of the species is suitable to use for dendrochronology.

• Write down at least three descriptive features for each species; there can and will be reasons for and against using each individual piece of wood for dendrochronology.

• Finally, write yes or no in the right hand column to indicate if you would use this piece of wood in your own laboratory for a dendrochronological study.
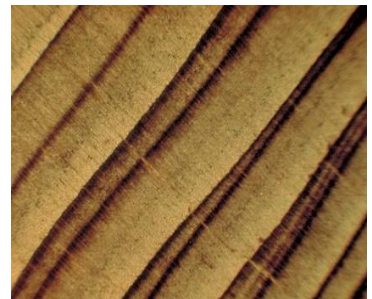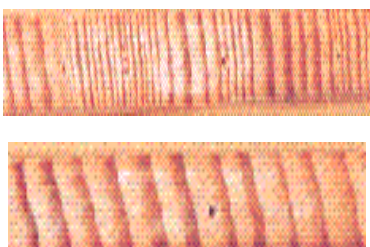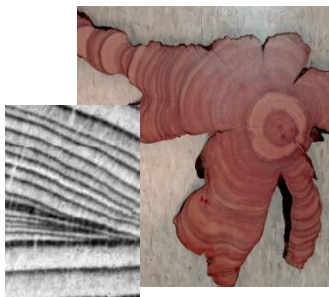
1. Has Rings:	2. Distinct Ring Boundaries:	3. Rings are Annual:
4. Sensitive Growth:	5. Circuit Uniformity:	6. Long Ring Record:

Dendrochronological Criteria		
Tree species	Reasons FOR using	Reasons for NOT using	Y/N
Bristlecone pine (*Pinus longaeva*)			
Fan palm (*Washingtonia spp.*)			
Lodgepole pine (*Pinus contorta*)			
Mesquite (*Prosopis spp.*)			
Mulberry (*Morus spp.*)			
Saguaro (*Carnegiea gigantea*)			
Giant redwood (*Sequoiadendron giganteum*)			
White pine (*Pinus strobus*)			