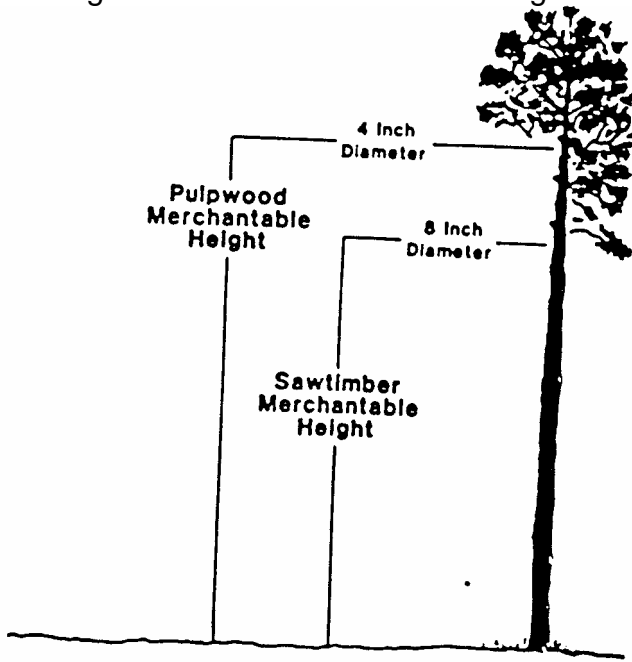
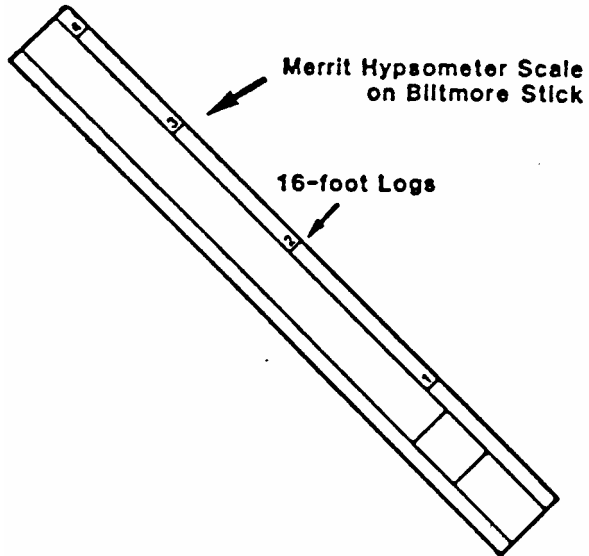


Tree Measurement Attachment

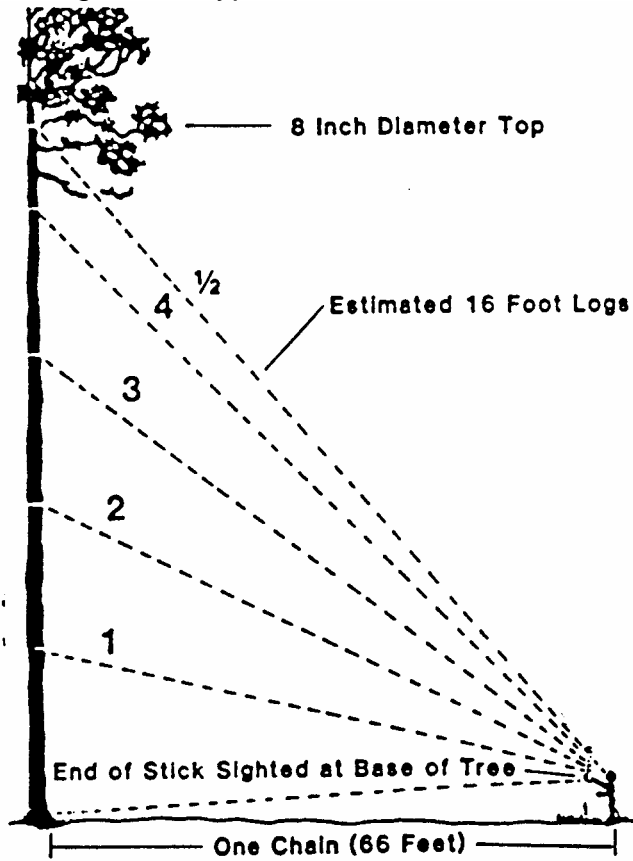
1. Diagram of Merchantable Tree Height



2. Diagram of Merrit Hypsometer Scale on Biltmore Stick



3. Diagram of Hypsometer in Use.



Data Sheet

Tree Measurement (Partner #1)

A. Diameter of Tree at Breast Height (DBH)

B. Merchantable Tree Type

Pulpwood _____

or

Sawtimber _____

C. Estimate of Merchantable Tree Height _____

Merchantable Tree Height

Partner #1

Tree #1	Number of 16 foot Logs	Actual Merchantable Height
Measurement – Merrit Hypsometer Trial #1		
Measurement – Merrit Hypsometer Trial #2		
If #1 and #2 differ measure again and average all three		
AVERAGE		

D. Margin of Error _____

Tree Measurement (Partner #2)

A. Diameter of Tree at Breast Height (DBH)

B. Merchantable Tree Type

Pulpwood _____

or

Sawtimber _____

C. Estimate of Merchantable Tree Height _____

Merchantable Tree Height

Partner #2

Tree #1	Number of 16 foot Logs	Actual Merchantable Height
Measurement – Merrit Hypsometer Trial #1		
Measurement – Merrit Hypsometer Trial #2		
If #1 and #2 differ measure again and average all three		
AVERAGE		

D. Margin of Error _____

Presentation Rubric

Presentation Rubric	3 mostly 2 somewhat 1 a little 0 none
Student Name	
◆ Uses measuring models in explanation	
◆ Thoroughly covers: Saw timber, Pulpwood, Merchantable height and how it differs from true height of a tree, Measurement process, Importance of measurement accuracy.	
◆ Demonstrates concept being presented.	
◆ Discusses correct math formulas needed	
• Completes Data Sheet accurately and completely	

Assessment Scale:

1 or 0 in any category indicates a need to see the teacher immediately for feedback and discussion.

Laboratory Assessment – Rubric

1. Estimates reasonably	
2. Knows formulas needed	
3. Chooses appropriate measuring devices	
4. Uses measuring devices correctly	
5. Each partner measures and records merchantable tree height twice (three times, if measurement differs).	
6. Checks partner's measurements and initials data sheet.	
9. Fills out data sheet (s) accurately and hands in	
10. Can explain the real-world connection of this lab	

Assessment Scale:

1 or 0 in any category indicates a need to see the teacher immediately for feedback and discussion.