Measuring a Forest

NIMBioS
National Institute for Mathematical and Biological Synthesis

Part A: Forested Area and Distribution

What percentage of the United States' land area is covered in forest?

$$\frac{Part}{Whole} \times 100\% =$$

Shade in the areas you think are currently forested:

Biomass is: _____

Where are the areas of greatest forest biomass density in the United States?

Part B: Measuring Forests: Why and How

Name one reason why it's important to measure and monitor forests:

A **dendrologist** is: _____

A tree's **crown** is: _____

DBH is: _____

Practice using $C=\pi D$ (where C = circumference, D = diameter, and $\pi \sim 3.14$)

1. D = 2, C = ?

2. D = 6, C = ?

3. D=1, C = ?

4. C = 3.14, D = ?

5. Radius (R) = 3, D = ?

6. For every 1 inch increase in diameter, the circumference increases _____ inches.

What is the diameter of your tree cookie using a ruler? _____

What is the diameter of your tree cookie using DBH tape? _____

What is the diameter of your head? _____

Part C: Stand Density

Stand Density is: _____

Calculate the stand density of the example plot:

If everyone in this room were trees, what would be our stand density?