

POPULATION DENSITY EFFECTS ON GROWTH



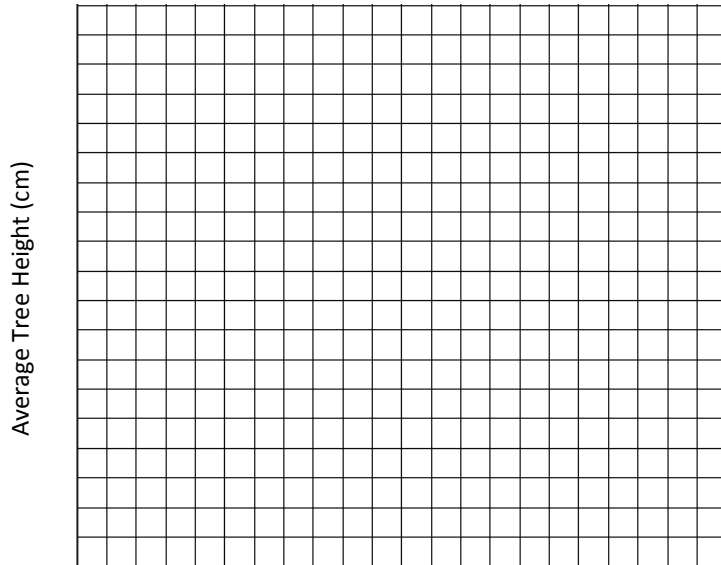
Name: _____

Class: _____

Date: _____

1. Does tree population density affect tree growth? Use your data on tree population density at various sites and your data on tree height to plot a graph of density vs height below. Use the height averages for a given species at all of your sites. If you wish to plot all of your species, use different colors for each species and different shapes for each site.

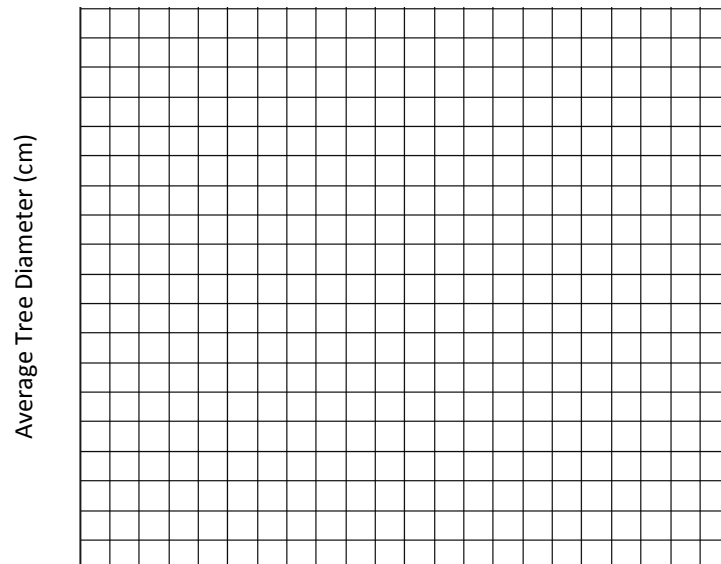
Title: _____



Total Population Density (trees/hectare)

2. Now do the same thing, but use your diameter data instead of your height data. Do you see any correlations?

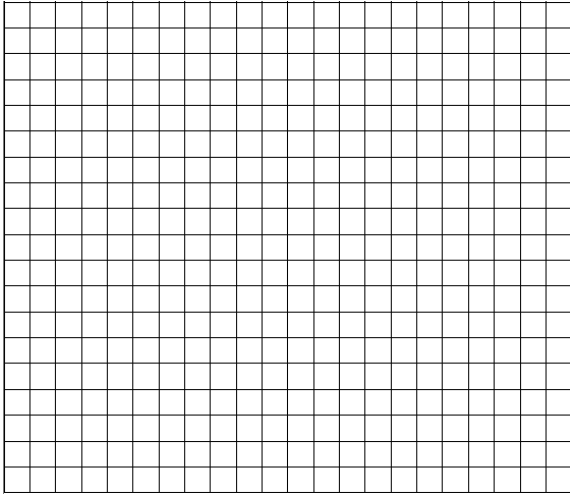
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Total Population Density (trees/hectare)

2. Use the two plots below to test your own hypotheses about the effects of tree population density on the growth of certain species. For example: Does the density of Species 1 affect the height of Species 2? Does the density of Species 1 affect its own height? Does the total density of an area affect the diameter of a given Species?

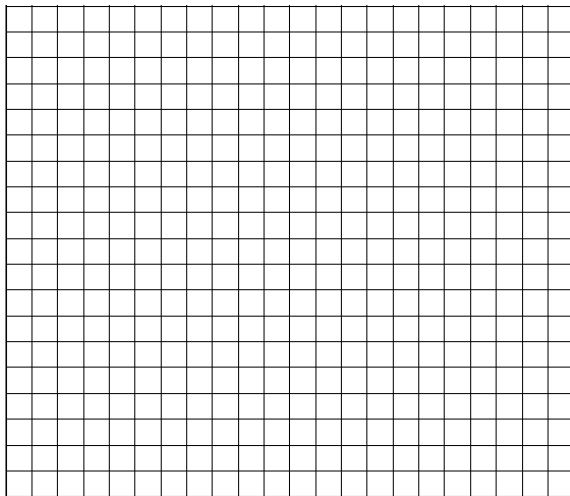
Title: _____



Hypothesis: _____

Outcome: _____

Title: _____



Hypothesis: _____

Outcome: _____

3. Is there an optimal population density for tree growth? Have you seen any evidence of density hindering growth? Why do you think a higher density would result in less growth?