ST Activity
Population Study

Name_____
Partner_____

Purpose: To use random sampling in order to estimate the population of dandelions in the LaurenHill field on a day in May.

Materials Per Student: 12 m of string per student; T for right angles; 4 small posts; meter stick.

Procedure: 1. Choose one of the randomly selected plots from the map below. Use the house and shrubs as a guideline for where the plot is located. No more than one group of two per plot.

2. Using the meter stick, T for right angles, four posts and string , mark off a 3 meter by 3 meter square.

3. Count the dandelions in your square area. Include any that have not blossomed. The plants look like this:

4. Record your data and the data of the rest of your class in the table below. Date_____

Plot	1	2	3	4	5
Number of dandelions per 9 m^2					

Plot	6	7	8	9	10
Number of dandelions per 9 m^2					

Plot	11	12	13	14	15
Number of dandelions per 9 m^2					

Analysis

1. a) Using the 15 data points find the average population density of dandelions per 9 m^2.

b) Calculate the average population density of dandelions per m^2.

2. Using the google area calculator at http://www.daftlogic.com/projects-google-maps-areacalculator-tool.htm, I estimated the area of the field to be 18780.05 m^2 .

Use the total area to estimate the total number of dandelions in the entire field. Show calculations with units.

Conclusion: Answer the purpose using the final estimate and date. List error sources, including what you think was the most important error source.