

## Explorations at the Fort Worth Botanic Garden

### Math Applications at the Trial Garden



High School Math 111.36

(3) Collecting and analyzing data in order to make decisions.

(A) Formulate a meaningful question, determine the data needed to answer the question, gather the appropriate data, analyze the data, and draw reasonable conclusions

The hundreds of perennial plants growing in the Trial Garden attract many insect visitors. Many insect behaviors may be noted. Plant factors such as size, shape, color, and scent affect insect choices, as well as the weather and season.

What question do you have? (Example: Are butterflies the most common visitor to *Salvia* flower?)

What information (data) is needed to answer your question? (Example: the number and kind of insects visiting *Salvia*)

Gather your data. (Example: watch the flower and make a tick mark for each butterfly, bee or fly you see.)  
Create a table or other recording method below.

Analyze your data. (Example: # Vists by: Butterfly = 9. Bee = 18. Fly = 6. Bees are more numerous than other insects.) Make a chart, graph, histogram or scatterplot to explain your data.

What is your conclusion? (Example: Bees visit *Salvia* twice as often as butterflies.)