Graphing Calculator Investigation

A Follow-Up of Lesson 1-7

TI-82

Scatter Plots

You have learned that graphing ordered pairs as a scatter plot on a coordinate plane is one way to make it easier to "see" if there is a relationship. You can use a TI-82 graphing calculator to create scatter plots.

SCIENCE **A zoologist studied extinction times (in years) of island birds. The zoologist wanted to see if there was a relationship between the average number of nests and the time needed for each bird to become extinct on the islands. Use the table of data below to make a scatter plot.**

Bird Name	Bird Size	Average Number of Nests	Extinction Time
Buzzard	Large	2.0	5.5
Quail	Large	1.0	1.5
Curlew	Large	2.8	3.1
Cuckoo	Large	1.4	2.5
Magpie	Large	4.5	10.0
Swallow	Small	3.8	2.6
Robin	Small	3.3	4.0
Stonechat	Small	3.6	2.4
Blackbird	Small	4.7	3.3
Tree-sparrow	Small	2.2	1.9

Step 1 *Enter the data.*

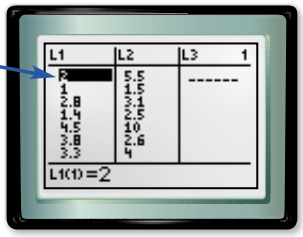
- Clear any existing lists.

  KEYSTROKES: [STAT] [ENTER] [▲] [CLEAR] [ENTER]

- Enter the average number of nests as **L1** and extinction times as **L2**.

  KEYSTROKES: [STAT] [ENTER] 2 [ENTER] 1 [ENTER] … 2.2 [ENTER] [▶] 5.5 [ENTER] 1.5 [ENTER] … 1.9 [ENTER]

The first data pair is (2, 5.5).



Step 2 *Format the graph.*

- Turn on the statistical plot.

  KEYSTROKES: [2nd] [STAT PLOT] [ENTER] [ENTER]

- Select the scatter plot, **L1** as the **Xlist** and **L2** as the **Ylist**.

  KEYSTROKES: [▼] [ENTER] [▼] [ENTER] [▼] [▶] [ENTER]

www.pre-alg.com/other_calculator_keystrokes