



***Island Sting***  
 Graphing Lesson Plans  
Lesson 1 - Line Graphs

**Skills:** Students will transfer data from table to a triple line graph. Students will choose appropriate intervals and construct their own graph key.

**Teacher Information:** The provided information on key deer populations and deaths is based on data from Texas A & M research. Data has been manipulated (rounded off) for purposes of this activity. (<http://apc.tamu.edu/keydeer/>)

**Introduction:** Teacher will provide the table below and grid paper for graphing. Students will interpret data and discuss possible reasons for Key deer deaths (examples: traffic, disease, loss of habitat).

**Work time:** Students will work individually or in small cooperative groups to transfer data from the table provided and construct triple line graphs documenting Key deer deaths over a period of four years. Based on the data provided students must determine appropriate intervals to best display the statistics.

**Conclusion and Evaluation:** Students will share individual line graphs with the class, compare and discuss, correct if necessary and submit for final evaluation.

Key Deer Deaths 1994-1997: Table 1

Key Deer Deaths	1994	1995	1996	1997
Male Key deer	42	63	61	86
Female Key deer	21	24	29	27
Total Key deer deaths	63	87	90	113



## Lesson 2 – Line Graphs

**Introduction:** Teacher will review tables and graphs. Teacher will provide Key Deer Population Table 2 and grid paper for graphing. Discussion follows on the data in the table, including trends observed. (Examples: there are fewer male than female key deer, populations of both male and female deer rise over the seven year research. Include discussion concerning possible reasons for population rise.)

**Work Time:** Students will create triple line graphs determining their own appropriate intervals and design, then record data from the Key Deer Population table.

**Conclusion and Evaluation:** Students will share graphs with class, compare and discuss, correct if necessary, and submit for final evaluation.

Key Deer Population 1993-1999: Table 2

Key Deer Population	1993	1994	1995	1996	1997	1998	1999
Male Key deer	68	87	109	134	155	169	187
Female Key deer	223	267	292	304	321	357	389
Total Key deer population	291	354	401	438	476	526	576

**Graphing Lesson Extension:** Given the following data from Table 3, students will convert male, female, and total Key deer mortality statistics to percentages and construct a line graph to record data.

Key Deer Mortality 1995-1999: Table 3

Key Deer deaths	1995	1996	1997	1998	1999
Male Key deer	32/109	51/134	64/155	78/169	82/187
Female Key Deer	29/292	46/304	51/321	45/357	49/389
Total Key deer deaths	61/401	97/438	115/476	123/526	131/576



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Lesson 3  
Bar Graphs

Introduction: Teacher will review bar graphs, including double and triple bar graphs.

Using data from Table 1, the teacher will lead the class in constructing, on the board or SMARTboard, a double bar graph, comparing the male and female Key Deer deaths. Next the class will construct a triple bar graph including the same data plus total deaths. The class will also construct a key and interval scale on the board explaining the graph. After discussion and questions, teacher will distribute copies of Tables 2 and 3, and graphing grid paper. Students will create double and triple bar graphs using data from Tables 2 and 3.

Work Time: Students work alone or in cooperative groups to convert data from tables above, to double and triple bar graphs. They will distinguish different bars using colors or design (striped, black, gray, dotted). Students will choose their own intervals, and make their own keys.

Conclusion: Students will gather to compare, explain, and discuss their bar graphs.

Evaluation: The teacher will collect the graphs for grading and posting in the room.

Extension: Students construct a bar graph on Key Deer Population and a percentages bar graph.

# Generic Graph Template

