Deer in the Environment Technology Integration Lesson Plan

CONTENT AREA: Math/Science
TOPIC: Spreadsheet
GRADE LEVEL: 5th   **TIME TO COMPLETE:** 1 hour
TECHNOLOGY FOCUS/APPLICATION TEKS: 10A, B, C
CONTENT AREA TEKS: Math 5.13 C, Science 5.5 B, 5.6 B, 5.9 A-C.

CONTENT OBJECTIVE(S):
1. Students will identify a spreadsheet.
2. Students will enter data into spreadsheets.
3. Students will graph data from spreadsheets.
4. Students will use problem solving skills.

RESOURCES/MATERIALS:
Microsoft Excel

LESSON PROCEDURE:
1. Divide the class into two groups – the deer and the environment.
2. Take the students outside (or to the cafeteria) and place the two groups at opposite ends. The students should have their backs to each other. When the teacher tells the students to turn around, the students on both sides will choose to be water (move arm in ocean wave motion), food (move hands to mouth like eating) or shelter (hands meet above head like a roof). The deer find an "environment" that matches their need. (Only one deer for each environment.) The deer and its need will return to the deer side. Any deer who did not find a match will return to the environment side. The teacher will record the number of deer for that year on the tally sheet.
3. This will be repeated nine times for a total of ten years.
4. The students will return to the computer lab and enter the data in an Excel spreadsheet. See "Using Excel Spreadsheet" handout below.

Extension: See attached extension sheet.

Websites:

http://www.dnr.state.md.us/wildlife/wtailfs.html

http://wildwnc.org/af/whitetaildeer.html

http://www.zoo.pgh.pa.us/wildlife_lookUpAnimal_detail.asp?categoryname=Mammals&animal=20

TYPE(S) OF ASSESSMENT: Completed spreadsheets and graphs.

CREATED BY: adapted from "Project Wild" by LISD technologists

Using the Excel Spreadsheet

1. Open Excel Spreadsheet.

2. Enter "Year" in cell A1.

3. Enter "2001" in cell A2. Enter "2002" in cell A3, "2003" in cell A4, etc. until you have entered all years to "2010."

4. In cell B1, enter "Deer."

5. In cells B2 through B11 enter the results from the tally sheet.

6. Click on cell B1 and drag to cell B11 so that all the cells in the "Deer" column are highlighted.

7. Click on the graph icon (it looks like a little graph) on the toolbar to make a graph.

8. Choose Column graph.

9. Click next.

10. Make sure the circle by Columns is checked. Then click next.

11. In "Category(X) axis:" write the word "Years."

12. In Chart Title, change to "White-Tailed Deer Population."

13. Click next.

14. Choose the second dot: As object in:

15. Click Finish.

16. Move your graph on your page.

17. If you right click on one of the columns, you can change the color of the columns.

18. To print the spreadsheet and the graph:

19. Select File, Print, Properties.

20. Choose Landscape and OK. Then OK again.

Extension – Paragraph Writing

Write a paragraph about the White-Tailed Deer. Be sure to include the following in your paragraph.

1. A description a White-Tailed Deer.
2. The habitat of the White-Tailed Deer.
3. What the White-Tailed Deer eat.
4. Three facts about the White-Tailed Deer.