

Excel Tutorial

Time: 1 class period

National Benchmarks: Benchmarks 9D:Uncertainty; 12B:Computation and Estimation; 12D:Communication Skills; 12E:Critical-Response Skills.

National Science Content Standards: *Science and Technology: E:* Abilities of Technological Design; Understandings about Science and Technology;

New York State Standards: 1, 2, 4, 5, 6, 7

Objective: Students will know how to use Excel to graph data and be able to create a graph using Hudson River data.

Lesson Outline:

1. Students will use the tutorial to make a spreadsheet, graph, and complete a basic analysis of provided Hudson River data
2. Students create their own graphs based on provided data

Materials: computers with Excel, copies of worksheet

Engage: Ask: What do scientists do with all of the data they collect? How do they organize it, understand it, and decide whether their results are significant?

Explore: Students will use the Excel Tutorial to learn how to use Excel, beginning with making a spreadsheet, entering data, creating simple graphs, and adding in trendlines and secondary axes. By the time students finish the tutorial, they will be able to create the other graphs in the Changing Hudson Project.

Explain: Excel allows you to enter in a lot of data, keep it organized, and perform simple statistics. It is useful to learn excel for a number of different applications, including keeping track of expenses or even just knowing how many people are coming to a large event.

The first step is to enter data into the cells, either numbers or words. You can then create a simple graph, calculate averages, sums, and a number of other functions, and display your information professionally.

Extend: Students can try collecting simple data in the classroom (height of all students, number of siblings, etc) and graphing that in Excel.

Evaluate: There are several sections to the Excel Tutorial; decide how much you would like to collect each day, and assign the appropriate amount to your students.

Comments:

