Lesson Plan: Graphing (Day 2 of Topic)

Topic: Line Graphs

Objective: Students will be able to construct and interpret a line graph.

NYS Learning Standards:

- SI 1.1- Formulate questions independently with the aid of references.
- SI 1.2- Construct explanations using visual models.
- SI 1.3- Present and defend explanations so they can be understood and assessed.

M3.1a- use appropriate tools to solve problems about the natural world.

M2.1a- interpolate and exterpolate from data.

M2.1b- quantify patterns and trends

Materials:

Worksheet, overhead and transparencies, powerpoint presentation, projector, graph paper

Anticipatory set:

Ask students to write down 5 items that must be included when constructing a Line Graph. Discuss answers.

Methodology:

- 1. Discuss what a Line Graph is.
- 2. Discuss why we would use a Line Graph.
- 3. Show overhead transparency illustrating various examples of Line Graphs.
- 4. Ask students what all the examples have in common.
- 5. Explain required information that all line graphs must include.
- 6. Ask students to interpret line graphs on overhead- do they notice trends in the "slope" of the line?
- 7. Does the "slope" have meaning?
- 8. What does it mean when the "slope" goes up? Down?
- 9. Describe horizontal and vertical axes- what does each represent?
- 10. Define and discuss variable, independent variable. Determine, from the examples on the overhead transparency, which are each of the dependent and independent variables.

HW:

Complete worksheet "Grasping Graphing".