

**Lesson Plan: Graphing** (Day 1 of Topic)

**Topic:** Introduction to Graphing

**Objective:** Students will be able to understand why we use Graphs.

**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 extrapolate from data.  
M2.1b- quantify patterns and trends

**Materials:**

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

**Anticipatory Set:**

Place a transparency containing a table and a graph on the overhead projector. Ask students to examine both figures. Have students answer the following questions:

1. Do both display the same information?
2. Which figure is easier to understand?
3. Explain why you think so?
4. What is the difference between the two figures?

**Methodology:**

1. Assess prior knowledge with dittos that require students to name the different types of graphs.
2. Discuss the different reasons for using the different types of graphs ( pros and cons).
3. Introduce the four different types of graphs:
  - Line Graph- two different sets of numbers
  - Bar Graph- combination of numbers and different groups
  - Pie/Circle Graph- %
  - Pictograph/Histogram- pictorial representation
4. Show powerpoint on Graphing.
5. Working in groups, students will complete worksheet determining best choice of graph for give data.

**HW:**

1. Read Textbook section on Graphing.
2. Complete Science Skills worksheet- Introduction to Graphs.