

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.