

Lesson Plan

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Subject: Math

Grade Level: 2

Objectives:

1. Students will retrieve information from the internet.
2. Students will graph the information and data.
3. Students will compare and contrast similarities and differences in the data using the graph.

Key Vocabulary: oil well, production, barrel, database

Materials: Internet access, chart paper, colored markers.

Anticipatory Set:

Prior to beginning this lesson, create a bulletin board with everyday products made from petroleum such as toothpaste, plastic products, clothing, tape, shoes etc. Discuss the importance of petroleum products in our everyday life. In conjunction, do some quick lessons on the geological and production aspects of petroleum products such as the lesson plan "Drilling For Oil" provided at the Derricks to Desks seminar.

Direct Instruction:

- As a whole group discuss the idea of computerized data. Make sure the learners understand the idea of organized data. Introduce the idea of data from individual oil wells. Demonstrate how to access oil well production numbers from the Division of Oil and Gas' Web site.
<http://opi.consrv.ca.gov/opi/opi.dll>
- Assign each student an "API" number for his or her oil well . As a whole group activity in the computer lab have them access the information about their individual well. Either have them copy and paste the data or have them write it down on a piece of paper. On their initial visit they will gather data for a five month period.
- Either have the students graph their information on a large piece of butcher paper that is displayed on the bulletin board or have them make an individual graph in a graphing program such as Excel. They can also use graph paper.
- Make sure that each graph includes incremental amounts, color-coding and dates.
- Have the students calculate at least three to five equations demonstrating the value of the data. Have them also compare the data by pointing out which month produced the most/least etc.

Evaluation: Share good examples of work, pointing out clarity, neatness and accuracy.

Closure and Follow-up: Each month have the learners check back at the web site for new data. Have them update their graphs and recalculate the data.