

Topic: Data Collection, Organization of Data, and Graphing

Course Title: 7th or 8th Grade Science

Lesson Length: 2-3 day project

Materials:

- Copy of the survey questions
- Copy of the survey form
- Copy of the survey response sheet
- Copy of the scientific method form
- Copy of rubric
- Graph paper

Objective: Alabama Course of Study (8th Grade Physical Science) - 1a: Apply process skills to interpret data from graphs, tables, and charts.

Procedure:

1. Upon completion of graphing concepts and the scientific method, I use this project.
2. The teacher assigns each student a survey question. Each student will have a different question.
3. In class, we start the survey form, project graph, and the scientific method form. They will finish these for homework using their data.

On the survey form--

4. Using the assigned survey question, the students are to come up with 6 responses. The last response should be "other". For example, How many people live in your house?, their responses might be...2, 3, 4, 5, 6, and other.
5. My students surveys 25 CMS 7th or 8th grade students (no teachers). They record their names, grade, and answer in the 25 blanks. The lines at the bottom (summary) are to tally the responses. I usually allow one day to complete the survey.

You make your own title here	Student Responses
2	You will put the number of responses here.
3	
4	
5	
6	
other	

6. On the **scientific method form**, the student will use their survey question to state the problem. They will come up with a hypothesis by using an if....then....because.....statement. They complete the steps using their data and observations.

7. The final part of this project is graphing the results. Using the **project graph**, the students copy their survey question and responses at the top of the form. Using that data, they create a graph.

Assessment: Included is the rubric that I use. Each six weeks, I do a 200 point project that all students (both high and low achieving) should be able to complete.

The students will present their data and graphs will be displayed.