Differentiated Unit
Exploring Data and Graphs

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About the Authors: Katherine F. Milano

• Katherine has always had a passion for children, learning, and teaching. Milano is excited about completing her Bachelors of Arts degree in Interdisciplinary Studies as well as her minor in English, and Non-Profit Leadership Alliance Certification. Her teaching philosophy is to empower, encourage, and restore students who believe they cannot achieve.
7th Grade TEKS require students to be able to:

• 5A: Use tables, graphs, and equations to solve problems.
• 12B: Draw conclusions, predict using scatterplots.
• 12C: Construct circle graphs, bar graphs, histograms.
• 13 B: Recognize deceptive graphs and conclusions.
• 14A: Apply math to everyday experiences.
• 15A: Evaluate effectiveness of communication.
Differentiation is needed because:

- Many of the gifted students have already mastered the material.
- If not completely mastered, then only a quick review is necessary.
- If mastered, then more depth and complexity can be explored.
- Material can be learned quickly.
The Plan

• Divide the students into 7 groups of 3 to 4 students each.
• Randomly assign a topic to each group.
• Students are to research their topic by using the text, the internet, the newspaper, or magazines.
• The students will teach their topic to the class.
• Visuals must be used.
• The use of technology is encouraged.
• The team must prepare 5 questions for the class in order to check for understanding.
• The class needs to pay attention, take notes, and ask questions.
Topics

- Pictographs and time lines
- Bar graphs and histograms
- Line graphs
- Choosing an appropriate graph
- Misleading graphs
- Line plots
- Scatterplots
Time Limits

• 2 full class periods to do research.
• Presentation is due on the fourth day.
• Presentation is to be a minimum of 10 minutes, but no more than 15 minutes.
Student Evaluation

- Group presentation grade based on scoring rubric.
- Individual grade from teacher made test on material covered based on TEKS.
Scoring Rubric

• Topic fully explained..................30 points
• Visuals used.............................20 points
• 5 guided practice questions.........25 points
• Within 10-15 minutes...............5 points
• All students participated.........10 points
• Good eye contact.....................5 points
• Loud and clear voice..............5 points