

# Unit Plan Template

Click on any descriptive text, then type your own.

<b>Unit Author</b>	
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School District	Carroll County
School Name	J Z George
School City, State	North Carrollton, Mississippi
<b>Unit Overview</b>	
<b>Unit Title</b>	
Analysis of Olympic Sports Data	
<b>Unit Summary</b>	
Students choose two Olympic sports, use the internet to find the gold result for each Olympic game, and then graph the results using Excel. Students share their findings with the class through a powerpoint presentation. Students will evaluate each others presentations. Students will collate the student evaluations and submit a written analysis.	
<b>Subject Area</b>	
Algebra II	
<b>Grade Level</b>	
11th	
<b>Approximate Time Needed</b>	
6 50min class periods	
<b>Unit Foundation</b>	
<b>Targeted Content Standards and Benchmarks</b>	
Strand: Data Analysis and Probability Competency: Use technology to represent, analyze, and make inferences based on data.	
<b>Student Objectives/Learning Outcomes</b>	
Students will: Demonstrate research skill by gathering info from the internet. Use scatter plots and linear and quadratic regression analysis to determine an appropriate function to model real-life data. (DOK 3) Demonstrate communication skills by creating a power point presentation of their findings. Demonstrate collaborative skills of teamwork, empathy, and respecting diversity in peer review.	
<b>Curriculum-Framing Questions</b>	
<b>Essential Question</b>	Why is change over time important?
<b>Unit Questions</b>	How can data be collected to show change How can data be represented to show change?

**Content Questions**

What story does this graph relate?  
What function fits the data?

**Assessment Plan**

**Assessment Timeline**

Before project work begins		Students work on projects and complete tasks		After project work is completed	
<ul style="list-style-type: none"> <li>Handmade scatter plot</li> </ul>	<ul style="list-style-type: none"> <li>Questioning about my presentation</li> </ul>	<ul style="list-style-type: none"> <li>Pair and Share</li> <li>Questioning</li> <li>Individual and group conferences</li> </ul>	<ul style="list-style-type: none"> <li>Slideshow checklist</li> <li>Class chart showing progress</li> </ul>	<ul style="list-style-type: none"> <li>Peer review</li> </ul>	<ul style="list-style-type: none"> <li>Project Rubric</li> </ul>

**Assessment Summary**

A preproject quiz is administered to ensure that all can make a scatter plot draw a line of best fit, and perform a linear regression. Questioning is used throughout the unit to help students develop their higher-order thinking skills and process content as well as to monitor learning. Pair and share, a slideshow checklist, a class progress chart, and individual and group conferences are used to help monitor progress and answer any questions. Ask students to use the project rubric to peer-assess. Use this same project rubric to assess and grade final presentations and completed projects.

**Unit Details**

**Prerequisite Skills**

Navigate the Internet, Use Excel, Make a Power Point  
Perform a linear regression

**Instructional Procedures**

Day #1

- Students make handmade scatter plots and perform a linear or quadratic regression.
- Students watch my power point and answer and ask questions.
- Students select their Olympic events to work with.
- Mark progress on the class chart

Day #2

- Students input their data onto a spread sheet.
- Students pair and share re: projects.
- Mark progress on the class chart.

Day #3

- Students construct a chart of each Olympic Event individually.
- Students construct a chart of both Olympic Events together.

- Students pair and share re: projects.
- Mark progress on the class chart.

Day #4

- Students construct a power point presentation of there project.
- Students pair and share re: projects.
- Mark progress on the class chart.

Day #5

- Students make presentations to the class.
- Students critique each other.
- Students collate their reviews and analyze the data

Day #6

- Students turn in written analysis of their feedback.
- Test.

**Accommodations for Differentiated Instruction**

<b>Resource Student</b>	Explicit Strategy Instruction Simplify the Microsoft Office Toolbars
<b>Nonnative English Speaker</b>	Allow the student to access Internet sites in the student's first language Pair the student with a peer
<b>Gifted Student</b>	Have the student create a quadratic and exponential function for the same data, compare it to the linear function, and then answer the question, <i>Which function is more realistic and why?</i> Impress upon the students that the teacher sample is only a C.

**Materials and Resources Required For Unit**

**Technology – Hardware** (Click boxes of all equipment needed)

<input type="checkbox"/> Camera	<input type="checkbox"/> Laser Disk	<input type="checkbox"/> VCR
<input checked="" type="checkbox"/> Computer(s)	<input type="checkbox"/> Printer	<input type="checkbox"/> Video Camera
<input type="checkbox"/> Digital Camera	<input checked="" type="checkbox"/> Projection System	<input type="checkbox"/> Video Conferencing Equip.
<input type="checkbox"/> DVD Player	<input type="checkbox"/> Scanner	<input type="checkbox"/> Other
<input checked="" type="checkbox"/> Internet Connection	<input type="checkbox"/> Television	

**Technology – Software** (Click boxes of all software needed.)

<input checked="" type="checkbox"/> Database/Spreadsheet	<input type="checkbox"/> Image Processing	<input type="checkbox"/> Web Page Development
<input checked="" type="checkbox"/> Desktop Publishing	<input type="checkbox"/> Internet Web Browser	<input checked="" type="checkbox"/> Word Processing
<input type="checkbox"/> E-mail Software	<input checked="" type="checkbox"/> Multimedia	<input type="checkbox"/> Other
<input type="checkbox"/> Encyclopedia on CD-ROM		

<b>Printed Materials</b>	none
<b>Supplies</b>	none
<b>Internet Resources</b>	None

**Other Resources**

none

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