

## Lesson Plan

**Text:** *Financial Algebra* by Robert Gerver and Richard Sgroi

**Unit number and title:** Unit 1-3, Stock Market Data Charts

**Developed by:** David Sandefur

**Date:**

### **Short Description:**

As students think of the numerous types of data displays they have studied, they will likely come to the conclusion that none are a good fit for stock market data. Thus there is a need to learn how to create and interpret a new type of data display.

## LESSON PLAN

**TEACHER:** Teacher Prep/ Lesson Plan

- **Essential Question**  
How can stock data be displayed?
- **Lesson Objectives**  
The student can:
  1. Interpret a stock bar chart.
  2. Create a stock bar chart.
  3. Interpret a stock candlestick chart.
  4. Create a candlestick chart.
- **Statement of pre-requisite skills needed**  
Skills taught in:
  1. Creating charts using Excel
  2. Unit 1-1, Business Organizations
  3. Unit 2-2, Stock Market Data

- **New Vocabulary:**

Stock Chart	Pictorial information on stocks from a day's worth of data to multi-year data trends; most stock charts represent historical information about trading prices and volumes of a particular stock
Stock Bar Chart	A chart made up of two graphs; the top part shows daily information about the day's high, low, open, and close prices of that particular stock; the bottom part shows the daily volume
Candlestick Chart	A chart, like a stock chart, but with a top line that indicates the high price, and a low line that indicates the low price for a given period; the rectangular region, known as the real body, is displayed in two different colors; the green candlestick indicates that the closing price is greater than the opening price and the red candlestick indicates the closing price is less than the opening price

- **State Standards addressed:**

Common Core Standards:  
 Number and Quantity – Quantities N-Q

- **Set-up information (Remind students to follow these basic rules.)**
- Be Prepared to work
- No Teasing
- Proper Computer Usage

- **Teacher Assessment of student learning (scoring guide, rubric)**

Informal Assessments:

1. Walk around
2. Thumbs up or down
3. Homework

Formal Assessments:

1. End of Unit test

- **Summary of learning**

1. Introduce the vocabulary to the students.
  - a. Give the vocabulary list without definitions
  - b. Give the definitions to the vocabulary list
  - c. Discussion about each term of the vocabulary
2. Ask: How can stock data be displayed?
  - a. Tables
  - b. Charts
    - i. Stock bar chart
    - ii. Candlestick chart
3. Work on Examples to Strengthen skills
  - a. Example 1, page 17
  - b. Example 2, page 17
  - c. Example 3, page 18
  - d. Example 4, page 19
  - e. Example 5, page 19
4. Check for Understanding
  - a. Check Your Understanding 1, page 17
  - b. Check Your Understanding 2, page 18
  - c. Check Your Understanding 3, page 18
  - d. Check Your Understanding 4, page 19
  - e. Check Your Understanding 5, page 19
5. Assess with Applications

**REACHING ALL LEARNERS – Differentiated Instruction for students with**

<b>Developing Knowledge</b>	<b>On-level Knowledge</b>	<b>Advanced Knowledge</b>
<input type="checkbox"/> Needs help working Example 1, page 17 (Group work)	<input type="checkbox"/> Able to work Example 1, page 17 without assistance	<input type="checkbox"/> Able to create additional problems like Example 1, page 17

<input type="checkbox"/> Needs help working Example 2, page 18 (Group work)	<input type="checkbox"/> Able to work Example 2, page 18 without assistance	<input type="checkbox"/> Able to create additional problems like Example 2, page 18
<input type="checkbox"/> Needs help working Example 3, page 18 (Group work)	<input type="checkbox"/> Able to work Example 3, page 18 without assistance	<input type="checkbox"/> Able to create additional problems like Example 3, page 18
<input type="checkbox"/> Needs help working Example 4, page 19 (Group work)	<input type="checkbox"/> Able to work Example 4, page 19 without assistance	<input type="checkbox"/> Able to create additional problems like Example 4, page 19
<input type="checkbox"/> Needs help working Example 5, page 19 (Group work)	<input type="checkbox"/> Able to work Example 5, page 19 without assistance	<input type="checkbox"/> Able to create additional problems like Example 5, page 19
<input type="checkbox"/>	<input type="checkbox"/> Able to work the Check Your Understanding problems, pages 17-19	<input type="checkbox"/> Able to work and explain the Check Your Understanding problems, pages 17-19

- **Optional activities**

Hands-on Labs

- **Career Applications**

Banker

Stockbroker

Investment Banker

Venture Capitalist

Economist

- **Evaluation of Lesson Plan**

What went well?

What did not go as well as planned?

What would I keep and what would I toss? Why?

How well did the students master the skills? Will we need to review this in order for them to remember the information long-term?

<https://wa-appliedmath.org/>