

WAMC Lab Template

Math Concept(s): Percentage and data

Source / Text: Financial Algebra (Cengage), internet resources

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Attach the following documents:

- Lab Instructions:

This is a consolidation of all the data you have collected all semester for your stock portfolio. We will have opportunities to work on this project in class every Friday the last five weeks of the semester. This project is due Monday of the last week of the semester. Below is what needs to be included in the project:

- Rise or drop in stock dollar value (\$) each week since the beginning of the semester based on the week before plus the per cent (%) rise or drop.

- Rise or drop in each stock dollar value (\$) from the beginning of the semester until January 15 plus the per cent (%) rise or drop.

- Write a 2-3 page paper on what you noticed about each stock. This should include:

1. Why your stock may have gone up or down
2. Whether you think each stock is a good short term or long term investment
3. Why you initially picked each stock.

In addition to the paper above, look at all 10 stocks and determine if you would change your investment in each stock and why or why not.

- List your sources

- Student Handout(s)

This is the first handout I will give out during the 8.2 lesson:

Starting today, each student will be receiving \$10,000 (fake money) to invest in 10 stocks:

- You may distribute the money any way you want, but you may not change that initial investment during the semester.
- You will be recording the price of the stock today, along with the amount you invested in each stock.
- I suggest you invest in stocks where you know something about the company. **Do not copy another student's selections!** Make it your own!
- You will need a journal dedicated to the recording of your stock information; I suggest you use one page for each stock. Make weekly observations in this journal about each stock.

- You will be recording the change in stocks each week, which will include the new price of the stock and the percent change.

You will use all this information the final 5 weeks of the semester, so make sure you keep accurate records of your stock data.

- Rubric and/or Assessment Tool

Initial stock selection and recording of data	10 points
Weekly recording of stock data and reflections	20 points
Final percentage change and dollar value of portfolio	40 points
Final paper	30 points
Total points	100 points

Short Description (Be sure to include where in your instruction this lab takes place):

This lab is an opportunity for students to learn about the stock market by actively participating in monitoring stocks they have selected. The math used reinforces lessons learned in section 8.2 and other sections in Chapter 8.

I will introduce this lab during the instruction for section 8.2 and continue throughout the semester on a weekly basis.

Lab Plan

Lab Title: My Stock Portfolio

Prerequisite skills: Instruction from teacher, Section 8.2, and research skills

Lab objective: To show how math can help in decision-making about stocks and how to invest in stocks. The lab is designed for 11th and 12th grade high school students.

Standards: (Note SPECIFIC relationship to Science, Technology, and/or Engineering)

Mathematics K–12 Learning Standards:

- N.Q.A.1- 3
- A.SSE.A.1
- A.REI.B.3 - 4
- A.CED.A.1 - 4

Standards for Mathematical Practice:

- 11 - 12

K-12 Learning Standards-ELA (Reading, Writing, Speaking & Listening):

- RST.9 – 10. 2, 4, 7

Technology

- 1.1.2
- 1.3.2
- 2.2.2

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Leadership/21st Century Skills:

21st Century Interdisciplinary themes (Check those that apply to the above activity.)

- Global Awareness
 Financial/Economic/Business/Entrepreneurial Literacy
 Civic Literacy
 Health/Safety Literacy
 Environmental Literacy

21st Century Skills (Check those that students will demonstrate in the above activity.)

LEARNING AND INNOVATION

Creativity and Innovation

- Think Creatively
 Work Creatively with Others
 Implement Innovations

Critical Thinking and Problem Solving

- Reason Effectively
 Use Systems Thinking
 Make Judgments and Decisions
 Solve Problems

Communication and Collaboration

- Communicate Clearly
 Collaborate with Others

INFORMATION, MEDIA & TECHNOLOGY SKILLS

Information Literacy

- Access and Evaluate Information
 Use and manage Information

Media Literacy

- Analyze Media
 Create Media Products

Information, Communications and Technology (ICT Literacy)

- Apply Technology Effectively

LIFE & CAREER SKILLS

Flexibility and Adaptability

- Adapt to Change
 Be Flexible

Initiative and Self-Direction

- Manage Goals and Time
 Work Independently
 Be Self-Directed Learners

Social and Cross-Cultural

- Interact Effectively with Others
 Work Effectively in Diverse Teams

Productivity and Accountability

- Manage Projects
 Produce Results

Leadership and Responsibility

- Guide and Lead Others
 Be Responsible to Others

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Teacher Preparation: (What materials and set-up are required for this lab?)

Materials

-

Set-Up Required:

-

Lab Organization Strategies:

Leadership (Connect to 21st Century Skills selected):

-

Cooperative Learning:

-

Expectations:

-

Timeline:

-

Post Lab Follow-Up/Conclusions:

Discuss real world application of learning from lab

-

Career Applications

-

Optional or Extension Activities

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