

Lab Template

Text: Cord

Volume: _____

Chapter: _____

Unit number: 11

Title of unit: Using signed numbers and

Vectors

Developed by (*Include contact information*): Rob

Ashler _____

Date: 6/28/12

Attach the Following Documents:

- 1. Lab Instructions**
- 2. Student Handout(s)**
- 3. Rubric and/or Assessment Tool**

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

This is the introduction to reinforce the use of positive and negative numbers and the use of number lines.

The Money Value of Signed Numbers

LAB PLAN

TEACHER: (*Teacher Prep/Lab Plan*)

- ⤴ **Students will learn how their use of money can positively or negatively affect their financial well being**
- ⤴ **Statement of prerequisite skills needed** (*Vocabulary, Measurement Techniques, Formulas, etc.*)
Basic addition and subtraction
Understand positive and negative numbers
Using a number line
- ⤴ **Vocabulary**
Number lines
Positive Integers
Negative Integers
Gain = profit
Loss = debt

^ **State Standards addressed:** (*Highlight "Green" Standards, you may use your District's Power Standards if applicable*)

^ **Math:** A1.2.A, A1.2.B

^ **Reading:**

^ **Writing:**

^ **Leadership:**

^ **SCAN Skills/Workplace Skills:**

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

^ Materials: 6 games (1 per group)

^ 24 recording sheets (1 per student)

^ Rulers

^ Pencil

^ Paper

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^ Set-Up Required: Pass out card stock, rulers, and cutting tools to each student.

Tape will have to be shared.

^ **Lab Organizational Strategies:**

^ Grouping/Leadership/Presentation Opportunities: teams of 4

^ Cooperative Learning: students are invited to compare and share their results

^ Expectations: Each student will record their own results on a number line.

^ Time-line: %minutes for instruction and materials distribution, 1 hour

^ **Post Lab Follow-Up/Conclusions** (*to be covered after student completes lab*)

^ Discuss real world application of learning from lab:

All people should be concerned with money

^ Career Applications:

All careers where you get paid

^ Optional or Extension Activities:

the knowledge of the pitfalls of credit and debt

knowledge of the advantage of savings and investments

and taking advantage of opportunities

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Lab Instructions

1. Each team of 4 will need a Game of Life/Monopoly and each player will need recording sheet.
2. Every time any money transaction takes place in the game, that player will record it as a gain + or a loss – or a break-even 0.
3. At the end of 10 turns, the numbers will be recorded on a number line and the ending value will be determined by adding all of the numbers together. At which time, each player will be able to see if they were financially successful or not.
4. Players will look for both positive and negative events that can affect their retirement after 10 turns.

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Rubric for Roof Ratios

	Criteria	
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	1	2	3	4	Value
Problem Solving	Little or no understanding of the problem is evidenced.	Numerous errors when solving problems	Few errors when solving problems.	No errors when solving problems	
Math Content	Demonstrates little or no knowledge or application of math skills.	Demonstrates limited knowledge and application of math skills.	Demonstrates a general knowledge and application of math skills.	Demonstrates a clear knowledge and application of math skills.	
Math Communication	Inaccurately communicates solutions to problems and concepts.	Limited communication of solutions to problems and concepts.	Satisfactorily communicates solutions to problems and concepts.	Accurately communicates solutions to problems and concepts.	
Presentation	The reader is unable to follow the steps taken in the solution.	Solution is difficult to follow at times.	Solution is presented in a logical manner.	Solution is presented in an easy follow step-by-step model.	
Use of Mathematical Terminology	No mathematical terminology is used or attempted.	Some math terminology is presented, but not correctly used.	Mathematical terminology correctly used.	Mathematical terminology is prevalent and used correctly.	

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