

WAMC Lab Template

Math Concept(s): Checking Accounts, Reconcile Bank Statements

Source / Text: Financial Algebra Chapter 3-1 to 3-2

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Attach the following documents:

Lab Instructions

Tell your students they're about to do something fun – play a board game.

Many of your students will already be familiar with the game Monopoly. Others may have only a passing knowledge, or may have never heard of the game. Explain to your students that this board game was created in the early 20th century as a simple simulation of the business world. Stress that, like all games, Monopoly is just a model of what happens in the real world. It may not always be true to real life.

Tell your students that they are going to use the official rules of Monopoly – and learn about the real-world economic principles the game represents. Walk your students through the rules of the game, explaining how they relate to real-life. There is one major difference to the way you are playing the game compared to the real rules. We are not going to use the play money, we are only going to use checks!

Rent is what you pay when you live on or use someone else's property. **Income** is a source of cash flow (for this lab we will use the \$200 you get for passing "Go" or the money you collect in rent). **Liabilities** are costs you have to pay – like rent and tax. **Real property** consists of land and buildings on that land. **Wealth** is a measure of your assets minus your liabilities.

Select 4 volunteers to be the 4 major banks for our environment (these need to be well organized students that can multi-task). Using a different color check will differentiate each of these 4 banks. On the attached "Blank Check" worksheet there are four different colored checks, but I would suggest using different color paper and just using the first page of checks.

Divide up the remainder of your class into groups of 4. This group of four will play the monopoly game with each other. Each person in the group must represent a different bank.

Have the students roll the dice to find who goes first, and begin playing. Things that students need to understand.

1. There is no free parking pot.
2. If a student has to pay money to the bank (luxury tax, property, houses, income tax, etc.) will be paid to Mr. Duncanson.
3. If a student receives money from "Chance or Community Chest" they are to take the card directly to their bank and get that into their account. (card then goes back to the proper game board.)
4. People will only take their deposits to their own personal bank. Do not take a check to your other players bank. The banks will get the paperwork to the proper bank.

5. When the student passes "Go" they need to go up to their bank to deposit the \$200 into their banks records.
6. Property purchases can begin immediately.
7. Some of their checks may "disappear" (teacher take) count those as Outstanding checks or deposits.

Make sure that you stop the lab with about 10 minutes left in class. This time will allow students to properly put the board games away, and allow the banks to catch up to all the paperwork that rushes in at the end.

Student Handout(s)

Blank Checkbook Register (more then one per student may be needed, depending on how long you run the lab)

Blank Checks

Banking students will need a blank register for each student involved with their bank. (Usually 6 or 7 students per bank).

Rubric and/or Assessment Tool

Excellent 3 pts	Satisfactory 2 pts	Poor 1 pts	Unsatisfactory 0 pts	POINTS (N/A)	
Outstanding Checks & Deposits Students will understand and figure out balance information with the inclusion of outstanding checks and deposits.	Excellent Student displays a strong understand of concepts of bank reconciliation and balanced the bank statement	Satisfactory Student displays an understanding but doesn't have sufficient understanding of concepts to balance bank statement	Poor Students displays an understanding of one concept but doesn't have sufficient understanding to balance bank statement	Unsatisfactory Student does not display any understand of concepts regarding the reconciliation of a bank statement	POINTS
Participation Students will understand the concept of service fees and understand their effect on account balances.	Excellent Tries to keep people working together. Almost always focused on the task and what needs to be done. Is very self-directed.	Satisfactory Does not cause problems in the group. Focuses on the task and what needs to be done most of the time. Can count on this person.	Poor Sometimes not a good team member. Sometimes focuses on the task and what needs to be done. Must be prodded and reminded to keep on task.	Unsatisfactory Often is not a good team member. Does not focus on the task and what needs to be done. Lets others do the work.	POINTS
Bank Statement Completion Students will review bank statements and complete exercises in the completion of statements.	Excellent Student displays a strong understand of concepts of bank reconciliation and balanced the bank statement	Satisfactory Student displays an understanding but doesn't have sufficient understanding of concepts to balance bank statement	Poor Students displays an understanding of one concept but doesn't have sufficient understanding to balance bank statement	Unsatisfactory Student does not display any understand of concepts regarding the reconciliation of a bank statement	POINTS
TOTAL POINTS EARNED A 8-9 B 6-7 C 4-5 D 203	Excellent	Satisfactory	Poor	Unsatisfactory	POINTS

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

Lab Plan

Lab Title:
Monopoly Lab

Prerequisite skills:

Completion of Checking Account (lesson 3-1) and Reconcile a Bank Statement (lesson 3-2)

Lab objective:

Students see how keeping accurate records is important.
Students will be able to write checks and reconcile a bank statement to at least 90% completion.

Standards:

CCSS-M:

- Create equations in one variable and use them to solve problems. (A-CED)
- Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. (A-REI)

Standards for Mathematical Practice:

-

State Standards addressed (2008 Washington State Mathematics Standards):

-

Reading:

-

Writing:

-

Leadership/21st Century Skills:

<p><u>21st Century Interdisciplinary themes</u> (Check those that apply to the above activity.)</p> <input type="checkbox"/> Global Awareness <input type="checkbox"/> Financial/Economic/Business/Entrepreneurial Literacy <input type="checkbox"/> Civic Literacy <input type="checkbox"/> Health/Safety Literacy <input type="checkbox"/> Environmental Literacy			
<p><u>21st Century Skills</u> (Check those that students will demonstrate in the above activity.)</p>			
<p>LEARNING AND INNOVATION</p> <p><u>Creativity and Innovation</u></p> <input type="checkbox"/> Think Creatively <input type="checkbox"/> Work Creatively with Others <input type="checkbox"/> Implement Innovations <p><u>Critical Thinking and Problem Solving</u></p> <input type="checkbox"/> Reason Effectively <input type="checkbox"/> Use Systems Thinking <input type="checkbox"/> Make Judgments and Decisions <input type="checkbox"/> Solve Problems <p><u>Communication and Collaboration</u></p> <input type="checkbox"/> Communicate Clearly <input type="checkbox"/> Collaborate with Others	<p>INFORMATION, MEDIA & TECHNOLOGY SKILLS</p> <p><u>Information Literacy</u></p> <input type="checkbox"/> Access and Evaluate Information <input type="checkbox"/> Use and manage Information <p><u>Media Literacy</u></p> <input type="checkbox"/> Analyze Media <input type="checkbox"/> Create Media Products <p><u>Information, Communications and Technology (ICT Literacy)</u></p> <input type="checkbox"/> Apply Technology Effectively	<p>LIFE & CAREER SKILLS</p> <p><u>Flexibility and Adaptability</u></p> <input type="checkbox"/> Adapt to Change <input type="checkbox"/> Be Flexible <p><u>Initiative and Self-Direction</u></p> <input type="checkbox"/> Manage Goals and Time <input type="checkbox"/> Work Independently <input type="checkbox"/> Be Self-Directed Learners <p><u>Social and Cross-Cultural</u></p> <input type="checkbox"/> Interact Effectively with Others <input type="checkbox"/> Work Effectively in Diverse Teams	<p>Productivity and Accountability</p> <input type="checkbox"/> Manage Projects <input type="checkbox"/> Produce Results <p>Leadership and Responsibility</p> <input type="checkbox"/> Guide and Lead Others <input type="checkbox"/> Be Responsible to Others

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

Materials

- Blank registers (attached) 2 for each student to start. 1 for the bank and one for the student themselves. More will be needed depending on how long you run the lab.
- Blank checks (attached) have at least 25 per each student. Students will need to print their names on them in upper left corner and number them all. (checks need to be done in 4 different colors to help the bankers know who the student belongs to.
- 7 complete monopoly boards.

Set-Up Required:

- I recommend going over the rules of the game the day before. Also handing out the paper work (checks and registers) to allow the students the opportunity to get them all labeled ahead of time.
- Have classroom set up so that students can easily sit in groups of 4. Also have the bankers set up in a specific part of the classroom, where all students will use as the central finance area.

Lab Organization Strategies:

Grouping/Leadership/Presentation Opportunities:

- Have 4 of the most organized/strongest mathematic students be the bankers.
- Don't put the most competitive student with the ones that can be intimidated.
- Have each bank use a different color check, allowing the students to know whose bank they belong to.

Cooperative Learning:

- Consumer/Family

Expectations:

- Students will write checks and keep accurate records of each purchase, and deposit that they make.

Timeline:

- Minimum of 3 days. One day of instruction, and two days of playing.
- Be sure to close the lab early to allow the materials to be stored correctly and to allow the players to document where their pieces were and which properties each player owned. This also allows the bankers to catch up on all the paperwork that is turned in at the end of the class period.

Post Lab Follow-Up/conclusions:

Discuss real world application of learning from lab

- Banking
- Checking accounts

- Real estate
- Rent

Career Applications

- Banking

Optional or Extension Activities

- You can alter the amounts that players pay, by informing the entire class on the 2nd day that all left over properties are 30% off, or all rent is 150% today.

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