



# Teacher's Guide

**Table of Contents**  
(Click to go directly to each section)

Introduction.....	3
Content Sources .....	3
Mission Overview .....	4
Mission Format and Order of Play .....	5
Toolbar Close-up.....	12
Strategies for Using the Game .....	12
The Role of Scoring .....	14
Key to Using Operatives Well .....	16
Manage Your Students/Classes/Teams .....	18
Hints from Testing .....	30
Linkages to Voluntary National Content Standards in Economics.....	32
Linkages to Principles and Standards for School Mathematics.....	32
Linkages to National Standards in Personal Finance .....	32
Mission by Mission: Summary, Resources and Answers to All Questions .....	33
Mission 1: Help Angela build wealth over the long term.....	33
Mission 2: Help Veronica choose a tentative career .....	39
Mission 3: Help Matt decide whether to continue formal education after he graduates from high school ..	46
Mission 4: Help the O’Neils save \$300 a month for a down payment on a home .....	53
Mission 5: Teach Justin about credit .....	61
Mission 6: Advise Kai on how to invest his grandmother’s \$10,000.....	70
Mission 7: Convince Paul, Fred and Diana to reconsider their choice of financial institution .....	77
Mission 8: Help Uncle Louie learn the basics about stocks .....	84
Mission 9: Teach Tyrone and Felicia how to invest in bonds.....	92
Mission 10: Teach a group of students how to invest in mutual funds .....	100
Mission 11: Advise a Gen i donor on her \$10 million investment .....	109
Mission 12: Show Jasmine what determines stock prices .....	117
Mission 13: Advise Markos on how to weather a crash in the scholarship fund .....	125
Mission 14: Advise political leaders on their economic forecasts .....	135
Mission 15: Conduct the Red Roosters Club annual financial planning workshop .....	142
Profile Match Questions .....	149

## **Acknowledgements**

This publication was made possible by a generous grant from the FINRA Investor Education Foundation.

### FINRA Investor Education Foundation

The FINRA Investor Education Foundation, established in 2003 by FINRA, supports innovative research and educational projects that give investors the tools and information they need to better understand the markets and the basic principles of saving and investing. For details about grant programs and other new initiatives of the Foundation, visit [www.finrafoundation.org](http://www.finrafoundation.org).





### Introduction

*Gen i Revolution* is an interactive, Web-based computer game designed to teach students the basics of personal finance and investments. Although the game's 15 missions were designed to be playable as stand-alone missions, they are much more effective as a supplement to sound classroom instruction.

The storyline of *Gen i Revolution* is that people are losing confidence in their ability to save and invest because of a deep and lasting confusion, called "the Murktide" in the game. The mysterious Monique founded her movement, the *Gen i Revolution*, to fight the Murktide. Students take on the role of operatives in Monique's movement. In each of the 15 missions, players are briefed and trained by Monique to help their contacts battle the Murktide.

This Teacher's Guide is intended as a resource for you. Based on our testing, you won't need to spend much time teaching students how to play the game. Instead we recommend that you allow students to explore the game on their own, with occasional assistance if needed. In many settings, students will teach each other the basics of game play.

The object of the game is to accumulate as many points as possible by correctly answering questions and giving good financial advice to contacts. Feedback is provided by Monique, based on the soundness of submitted answers. Students may replay missions as they wish but no additional points are granted on replays. After completing missions successfully, players gain promotions in rank within the Gen i movement, starting with Private.

### Content Sources

*Gen i Revolution* is based primarily on the content of two Council for Economic Education publications: *Learning, Earning and Investing (LEI)* (financial and investment material) and *Your Credit Counts Challenge (YCCC)* (personal finance, credit and budgeting). To learn more and purchase these materials, visit <http://store.councilforeconed.org/lei.html> and <http://store.councilforeconed.org/yourcreditcounts.html>.

The mission descriptions in this guide list source material for each of the 15 game missions. The interactive game format is best for teaching some of this content, while other parts of the content are better handled in class.



## Mission Overview

Mission Number and Title	Key Concepts	Related Lessons
1. Help Angela build wealth over the long term	<ul style="list-style-type: none"> <li>• Compound interest</li> <li>• Saving</li> </ul>	<ul style="list-style-type: none"> <li>• <i>LEI</i> Lesson 1</li> <li>• <i>LEI</i> Lesson 12</li> </ul>
2. Help Veronica choose a tentative career	<ul style="list-style-type: none"> <li>• Investing in human capital</li> <li>• Opportunity cost</li> <li>• Career choice</li> </ul>	<ul style="list-style-type: none"> <li>• <i>LEI</i> Lesson 3</li> </ul>
3. Help Matt decide whether to continue formal education after he graduates from high school	<ul style="list-style-type: none"> <li>• Investing in human capital</li> <li>• Opportunity cost</li> <li>• Income</li> </ul>	<ul style="list-style-type: none"> <li>• <i>LEI</i> Lesson 3</li> </ul>
4. Help the O'Neil's save \$300 a month for a down payment on a home	<ul style="list-style-type: none"> <li>• Budgeting</li> <li>• Financial goal setting</li> </ul>	<ul style="list-style-type: none"> <li>• <i>YCCC</i> Section 1</li> </ul>
5. Teach Justin about credit	<ul style="list-style-type: none"> <li>• Credit</li> <li>• Debt</li> <li>• Interest</li> </ul>	<ul style="list-style-type: none"> <li>• <i>LEI</i> Lesson 14</li> </ul>
6. Advise Kai on how to invest his grandmother's \$10,000	<ul style="list-style-type: none"> <li>• Forms of saving and investing</li> <li>• Costs and benefits of saving</li> <li>• Risk vs. return</li> </ul>	<ul style="list-style-type: none"> <li>• <i>LEI</i> Lesson 12</li> <li>• <i>LEI</i> Lesson 15</li> </ul>
7. Convince Paul, Fred and Diana to reconsider their choice of financial institution	<ul style="list-style-type: none"> <li>• Advantages and disadvantages of non-mainstream financial services</li> </ul>	<ul style="list-style-type: none"> <li>• <i>YCCC</i> Section 2</li> </ul>
8. Help Uncle Louie learn the basics about stocks	<ul style="list-style-type: none"> <li>• Understanding stocks</li> <li>• Dividend</li> <li>• Saving</li> <li>• Reading a stock table</li> </ul>	<ul style="list-style-type: none"> <li>• <i>LEI</i> Lesson 4</li> <li>• <i>LEI</i> Lesson 5</li> </ul>
9. Teach Tyrone and Felicia how to invest in bonds	<ul style="list-style-type: none"> <li>• Understanding bonds</li> <li>• Bond ratings</li> <li>• Reading a bond table</li> </ul>	<ul style="list-style-type: none"> <li>• <i>LEI</i> Lesson 5</li> <li>• <i>LEI</i> Lesson 6</li> </ul>
10. Teach a group of students how to invest in mutual funds	<ul style="list-style-type: none"> <li>• Understanding mutual funds</li> <li>• Diversification</li> <li>• Reading a mutual fund table</li> </ul>	<ul style="list-style-type: none"> <li>• <i>LEI</i> Lesson 5</li> <li>• <i>LEI</i> Lesson 7</li> </ul>
11. Advise a Gen i donor on her \$10 million investment	<ul style="list-style-type: none"> <li>• Alternatives</li> <li>• Scarcity and Choice</li> <li>• Fundamental Analysis</li> </ul>	<ul style="list-style-type: none"> <li>• <i>LEI</i> Lesson 13</li> </ul>
12. Show Jasmine what determines stock prices	<ul style="list-style-type: none"> <li>• Equilibrium price</li> <li>• Shift in demand or supply</li> </ul>	<ul style="list-style-type: none"> <li>• <i>LEI</i> Lesson 18</li> </ul>



<p>13. Advise Markos on how to weather a crash in the scholarship fund</p>	<ul style="list-style-type: none"> <li>• Causes and effects of stock market crashes</li> <li>• The Federal Reserve</li> <li>• Monetary policy</li> </ul>	<ul style="list-style-type: none"> <li>• <i>LEI</i> Lesson 21</li> </ul>
<p>14. Advise political leaders on their economic forecasts</p>	<ul style="list-style-type: none"> <li>• Business cycles</li> <li>• Leading economic indicators</li> <li>• Expansion</li> <li>• Contraction</li> <li>• Economic forecasting</li> </ul>	<ul style="list-style-type: none"> <li>• <i>LEI</i> EI Lesson 20</li> </ul>
<p>15. Conduct the Red Rooster Club annual financial planning workshop</p>	<ul style="list-style-type: none"> <li>• Forms of saving and investing</li> <li>• Diversification</li> <li>• Risk vs. return</li> <li>• Financial goal setting</li> </ul>	<ul style="list-style-type: none"> <li>• <i>LEI</i> Lesson 23</li> </ul>

### Mission Format and Order of Play

The descriptions below assume that a teacher has activated the game, and that students have successfully registered. For details on activating the game, see the ending section of this guide on the “Manage Your Students/Classes/Teams” section.

Each mission has a common format. Here is a brief list of mission steps, followed by a more detailed outline:

1. Login and introduction, general briefing from Monique and optional tour.
2. Mission selection from the Situation Map.
3. Selection of operatives to form a team, then pushing **Start Mission** button.
4. Profile Match questions (a handful of preliminary questions).
5. Mission briefing from Monique, with opportunity to view the Player’s Guide.
6. Working through tutorial information (“4-1-1,” as Monique refers to it), gaining points and knowledge.
7. Answering credibility questions from other members of the team, gaining points and knowledge.
8. Answering of Battle questions, gaining points and knowledge.
9. Mission solution (final chance to win points). Notice that each mission has self-contained points and scoring. Scores are only kept within missions, not across missions.



Detailed Outline

Step:	Screen view:
<p>1.a. Students log in using the name and password they chose during registration.</p>	
<p>1.b. The first screen that students see is their account screen. This screen displays their score, the Missions that are enabled/disabled, and a green Play Game button.</p>	
<p>1.c. When they click the Play Game button, Monique offers a general briefing, starting with the signature line, “Things are dire.” She then offers a tour: “Would you like me to show you around?”</p>	



1.d. The optional tour introduces students to the game and basic navigation.



2. Mission selection from the Situation Map.

- ◆ Students will only be able to select the missions you have unlocked from the Manage My Class page.
- ◆ Choosing a mission automatically brings up a mission briefing with narration.

*Important note: Until students click on the Situation Map and choose a mission, they will not be able to do anything else.*



3. Selection of operatives to form a team, followed by pushing the **Start Mission** button

Students preview the operatives by pushing the arrow buttons. They choose by dragging the operative to the operative bar at the bottom of the screen. Available swap points are updated as operatives are added. (See Key to Using Operatives Well, later in this guide)

When operatives are chosen, it's time to push the **Start Mission** button at the lower right.



<p>4. Profile Match questions</p> <ul style="list-style-type: none"> <li>◆ These are pre-assessment questions for each mission.</li> <li>◆ You may use them to see how your students are progressing.</li> <li>◆ There are no points assigned for Profile Match questions.</li> <li>◆ All Profile Match questions, with suggested answers, are included later in this Guide.</li> </ul>	
<p>5.a. Mission briefing from Monique</p> <ul style="list-style-type: none"> <li>◆ Monique narrates the mission basics, and then offers an optional tour on how to complete a mission.</li> <li>◆ Students likely will choose to take the tour once, and decline to do so in later missions.</li> </ul>	
<p>5.b. Optional Tour</p> <ul style="list-style-type: none"> <li>◆ Narrated and animated</li> <li>◆ Based on Mission 1, but this same tour opens any time a player requests it in other missions</li> <li>◆ A more detailed Player Guide file is available by clicking on the "Book" icon in the upper left corner</li> </ul>	



<p>6.a. Finding tutorial information (4-1-1)</p> <ul style="list-style-type: none"> <li>◆ Click on the portable reading device to bring this up; this device can be found somewhere in each mission</li> <li>◆ Or, access is always available through the Backpack on the Toolbar (more on the Toolbar, below)</li> </ul>	
<p>6.b. Working through tutorial information</p> <ul style="list-style-type: none"> <li>◆ Students gain points and knowledge</li> <li>◆ Usually the lengthiest part of any mission, but also the part with the most information</li> </ul>	
<p>7. Answering credibility questions</p> <ul style="list-style-type: none"> <li>◆ These come from clicking on the operative's picture at the lower left</li> <li>◆ Students gain points and knowledge as they answer</li> <li>◆ There are credibility questions and answers for each of the Mission Steps listed in the bar at the top of the screen; for maximum points, answer all of them</li> </ul>	



<p>8. Answering Battle questions</p> <ul style="list-style-type: none"> <li>◆ These come from clicking on the burst symbol on the lower right at any time (Note that the burst will glow yellow when all credibility questions have been answered in the step)</li> <li>◆ Students gain additional points and knowledge as they answer</li> <li>◆ There are Battle questions and answers for each of the Mission Steps listed in the bar at the top of the screen</li> <li>◆ Students must answer all Battle questions to proceed to Solve the Mission</li> </ul>	
<p>9. Solve the Mission</p> <ul style="list-style-type: none"> <li>◆ This is the final chance to win points.</li> <li>◆ Each mission has self-contained points and scoring (scores are only kept within missions, not across missions)</li> <li>◆ After mission solution is entered, the player will be given congratulations and a promotion, or a “sorry” message that explains the player failed to solve the mission (i.e. scored less the 80% on the Solve the Mission questions)</li> </ul>	

For video tutorials on game play, please visit <http://www.genirevolution.org/demonstration2.php> and watch the Player's Guide and Mission Guide.



The Game Screen (with notes on features)

The screenshot shows the game interface with several callouts:

- Top Left:** "Get instant access to the player's guide" (points to a book icon) and "Find out what to do next" (points to a question mark icon).
- Top Center:** "Keep track of your mission number and step number ('where you are')" (points to the mission progress bar).
- Top Right:** "Mute or restore sound" (points to a speaker icon) and "Exit the game" (points to an 'X' icon).
- Center:** "Portable reading device (leads to 4-1-1 tutorial)" (points to a tablet on the desk).
- Bottom Left:** "Click on yellow arrows to cycle through available operatives" (points to yellow arrows on a character portrait).
- Bottom Center:** "Click on yellow arrows to cycle through available operatives" (points to yellow arrows on a character portrait).
- Bottom Right:** "Clickable items (contain clues)" (points to a document on the desk).
- Bottom Row (Operatives/Tools):**
  - "Currently selected operative (click to ask questions)" (points to the character portrait).
  - "See the mission brief again (short summary)" (points to a briefcase icon).
  - "Open the backpack for access to tools and tutorials" (points to a backpack icon).
  - "Monique's Goggles help you see into the future. Costs 500 points, except for occasional free peeks" (points to a pair of goggles).
  - "These are your notes (text of questions and answers already explored with operatives)" (points to a notepad icon).
  - "Battle (click to answer Battle questions and solve the mission)" (points to a starburst icon).
  - "Geo-locator (Click triangle to preview locations, or click directly in the geo-locator to go to a displayed location)" (points to a play button icon).

## Toolbar Close-up

Notice that the bottom of the game screen is taken up with a useful toolbar. (Toolbar buttons are also available within 4-1-1 tutorials.) From left to right, the toolbar includes:



- Operative window, with a picture of the currently selected operative (click to ask questions). Click on the arrows to the left and right of the operative to toggle between operatives.
- Briefcase (click to review the brief of the current mission)
- Backpack (click for tools, resources and calculators, or for a quick link to the current mission's 4-1-1. Note that the backpack is also available during 4-1-1 tutorials).
- Monique's Goggles (click to see into the future; except for occasional free peeks it requires 500 points to take a look)
- Notes (text of questions and answers already explored with the operative)
- Battle (click to answer Battle questions and solve the mission)
- Geo-locator (Click "play" ► button to cycle through all available locations, or click directly in the geo-locator to go to a displayed location).

## Strategies for Using the Game

*Gen i Revolution* is best used in conjunction with the high school edition of *Learning, Earning and Investing*, published by the Council for Economic Education in 2004. You can purchase *LEI* at <http://store.councilforeconed.org/lei.html>. Depending on your students' level of comfort with technology and finance, you may wish to use an "early introduction" or "late introduction" strategy.

In the "early introduction" strategy, you have students play the game in groups before you cover the corresponding material in *LEI*. To an important degree, the students teach each other the material and how to manage the game. Your classroom sessions then follow up to cement and complete their learning. This strategy is advisable only with students who are very comfortable with technology and finance.

In the "late introduction" strategy, you teach several lessons from *LEI*, and only then give students access to the game. The "late introduction" strategy is more suitable for a variety of students with different ability levels.

A separate decision concerns team vs. individual play:



- With teams, you get all the benefit of a group learning setting and a greater scope for diverse groups to help each other learn. The teacher workload, especially with computer support issues, is less. The game is specifically designed to allow you to create and modify teams, and to keep team point totals for each mission. On the downside, teams may have a tendency to “free-ride” on the efforts of their best members, requiring additional teacher attention.
- With individual play, students may use free time to learn on their own. Depending on computer access, you may also be able to assign missions as homework. If you are considering assigning missions as homework, note that most of the missions have a single best solution. Diverse solutions are most likely in Mission 11, where students have a free choice of stocks and mutual funds to recommend.

*Gen i Revolution* missions are designed to be almost entirely self-contained, so that they do not rely extensively on previous missions or *LEI* material. Therefore, the order in which you cover missions is not critical. Even so, some ordering is useful; here is a table showing a possible ordering for those who plan to cover all the *LEI* material and *Gen i Revolution* missions:

<b><i>LEI</i> lessons</b>	<b><i>Gen i Revolution</i> follow-up missions</b>
1. Why Save?	1. Help Angela build wealth over the long term
2. Investors and Investments	
3. Invest in Yourself	2. Help Veronica chose a tentative career 3. Help Matt decide whether to continue formal education after he graduates from high school
4. What is a Stock?	6. Advise Kai on how to invest his grandmother’s \$10,000
5. Reading the Financial Pages	
6. What is a Bond?	9. Teach Tyrone and Felicia how to invest in bonds
7. What are Mutual Funds?	10. Teach a group of students how to invest in mutual funds
8. How to Buy and Sell Stocks and Bonds	11. Advise a Gen i donor on her \$10 million investment
9. What is a Stock Market?	
10. The Language of Financial Markets	
11. Financial Institutions in the U.S. Economy	
12. Building Wealth Over the Long Term	(Review Mission 1: Help Angela build wealth over the long term)
13. Researching Companies	8. Help Uncle Louie learn the basics about stocks
14. Credit: Your Best Friend or Your Worst Enemy?	4. Help the O’Neils save \$300 a month
15. Why Don’t People Save?	5. Teach Justin about credit
16. What We’ve Learned	7. Convince Paul, Fred and Diana to reconsider their choice of financial institution
17. How Financial Institutions Help Businesses Grow	12. Show Jasmine what determines stock prices
18. How are Stock Prices Determined?	



19. The Role of Government in Financial Markets 20. The Stock Market and the Economy	14. Advise political leaders on their economic forecasts
21. Lessons from History: Stock Market Crashes 22. Investing internationally: Currency Value Changes	13. Advise Markos how to weather a crash in the scholarship fund
23. Investing Involves Decision Making	15. Conduct the Red Roosters Club annual financial planning workshop

*Gen i Revolution* is also complementary with the Stock Market Game and other stock market simulations. These simulations concentrate on stock picking and trading, generally involving a short time horizon because of the limited duration of the competition. *Gen i Revolution* allows a greater emphasis on long-term financial planning, as players aid contacts who are making a broad spectrum of financial decisions. Here is a list of missions especially useful to Stock Market Game teachers:

- Mission 1: Help Angela build wealth over the long term
- Mission 6: Advise Kai on how to invest his grandmother's \$10,000
- Mission 8: Help Uncle Louie learn the basics about stocks
- Mission 9: Teach Tyrone and Felicia how to invest in bonds
- Mission 10: Teach a group of students how to invest in mutual funds
- Mission 11: Advise a Gen i donor on her \$10 million investment
- Mission 12: Show Jasmine what determines stock prices
- Mission 13: Advise Markos on how to weather a crash in the scholarship fund

### The Role of Scoring

Although teachers are primarily interested in the learning that occurs in a game, students are accustomed to being motivated by points. You may also want to use the game to award some fraction of class points.

Students get the highest scores from answering all the questions in a given mission, with more points assigned if they get questions right the first time. To get the highest scores, students should (1) make sure they thoroughly explore each environment to get all the clues, (2) avoid guessing, (3) choose operatives with relevant skills, since they will have more Credibility Questions, and (4) make sure to complete all of the Credibility Questions. There are Credibility Questions for each step of each mission. When an operative says, "I'm all out of questions for this step," there are still questions remaining for later mission steps. This means that if a student does the first part of the Battle but then moves directly to the second Battle sequence without doing the second set of Credibility Questions, points will be less than maximum.



Here are some of the details about scoring in the *Gen i Revolution*:

1. Students get *Credibility Points* by answering questions from mission operatives. Each question has a point value of 100, for a correct answer on the first try. A correct answer on the second try yields 50 points; on the third try, it's 25 points. After the third attempt, a correct answer is worth only 10 points. A student who answers all the Credibility Questions in a given mission step correctly the first time gets 500 bonus points. For correct answers the first time around on all questions in a Mission, the bonus is 1,000.
2. Students earn *Knowledge Points* during the 4-1-1 tutorials. Point values vary, but they decline with the number of tries required to get the answer right. On a 100-point question, for example, the point values are 100, 50, 25, 10. For 100 percent correct answers on all mini-games in a 4-1-1, the bonus is 1,000.
3. Students earn *Battle Points* during each mission's Battle segment by correctly answering questions or solving a puzzle. The highest points are awarded for correct answers the first time, with declining values for later correct answers in the same pattern as Credibility and Knowledge Points. For example, a 200-point Battle question has declining values of 200, 100, 50 and 20. A student who answers all Battle questions in a mission correctly the first time receives a 1000-point bonus.
4. At the end of each mission, points are assigned to those who *Solve the Mission*. Students have only one opportunity to solve. Each part of the solution is assigned 100 points and partial credit is given. Partial credit schemes are individual to each mission. Students who score 80 percent or higher on the mission solution receive a promotion in rank. *Note: Students should be cautioned to work carefully in the Solve the Mission section. The points may be relatively small but rank promotions and Monique's narrated feedback at the end of the mission will depend on these points alone.*

In addition to accumulating points, students may also spend them by borrowing Monique's goggles or swapping operatives. Borrowing Monique's goggles, when they become available in a mission, incurs a flat charge of 500 Knowledge Points. That is expensive, but Monique's goggles will always offer valuable information, sometimes almost "giving away" the mission solution. As for swapping operatives, each operative has a point value of 200. A two-operative mission starts with 400 points and a three-operative mission starts with 600. If students swap an operative without having asked all available questions, they get a partial refund.

Although Solve the Mission is the culminating activity of each mission, and Monique's decision to promote an operative is based purely on a student's Solve the Mission answers, Solve the Mission points are only a small fraction of the possible points. Therefore they are not as accurate for grading as total mission points.



Total mission points are defined as:

Credibility + Knowledge + Battle + Solution + Bonus points

- (Points Used on Monique's Goggles or swapping operatives)

Below is a summary of all available points by mission:

Mission	Total excluding Bonus points	Credibility	Knowledge	Battle	Solution	Bonus
1	3,060	800	960	900	400	4,500
2	4,000	1,100	1,600	900	400	4,500
3	3,800	1,100	1,400	900	400	4,500
4	4,700	1,400	1,700	1,200	400	5,000
5	6,400	1,500	3,600	900	400	4,500
6	3,320	1,600	520	900	300	4,500
7	3,900	1,700	900	900	400	4,500
8	4,400	1,600	1,400	900	500	4,500
9	4,700	1,700	1,600	900	500	4,500
10	4,440	1,600	1,440	900	500	4,500
11	3,180	1,400	580	1,000	200	4,500
12	3,800	1,100	1,200	1,000	500	4,500
13	6,000	2,200	2,200	1,500	100	5,500
14	3,700	1,600	900	900	300	4,500
15	3,280	1,200	780	1,000	300	4,500

This table is also available within the Teacher Admin pages in the "Reports" as "Mission Points Possible" from the pull-down menu.

Note that scoring in *Gen i Revolution* takes place on a mission-by-mission basis. Scores do not carry over from one mission to the next and do not aggregate if a student plays multiple missions.

### Key to Using Operatives Well

When playing a mission, players may choose operatives to gain knowledge and score credibility points. To get the most points, players must pick the right team of operatives for each mission. How? The idea is that students will read the mission brief, think about the skills necessary, and choose operatives that fit the description.

For example, Mission 2 is "Help Veronica choose a tentative career." As the player clicks through the operatives, Rebecca's specialty in "Career & Work" and Miguel's specialty in "Education" should seem attractive for this mission. Rebecca and Miguel will have more questions for this mission, allowing players to earn more knowledge points. Other operatives, such as Deacon and John know less about education and will therefore have less advice.



Following the operative descriptions is a table showing which operatives are best on which missions. We encourage you not to give this table to players of the game, but instead to allow them to search out the best operatives for each mission.

Operative	Specialty	Gender	Special Powers
<p>John</p> 	Finance	Male	<p>Budgets, Basic Investing, Making your money grow, Avoiding debt</p> <p><i>John is the 'Answer Man' on personal finance. He's got the smarts to help you on managing financial 'tight spots' and has a complete utility belt of financial savvy. (John is the operative who appears first in the operative selection screen.)</i></p>
<p>Deacon</p> 	Investment	Male	<p>Investment Strategy, Diversification, Market Trends, Knows when to buy and hold</p> <p><i>Deacon knows how to follow the numbers. He's the go-to resource on investments. Got questions on Mutual Funds, Stocks, the best investment strategies, Deacon is the perfect backup to have.</i></p>
<p>Rebecca</p> 	Career & Work	Female	<p>Career selection, Professional development, Work trends and benefits</p> <p><i>Rebecca knows how to "work" the system. She's expert at finding the right fit, if you're picking a career or finding a better one. Any questions on compensation, general benefits, pay scales, industry career trends, she's there.</i></p>
<p>Mei-Li</p> 	Credit	Female	<p>Managing credit, Getting out of debt, Knows how to benefit from credit</p> <p><i>Mei-Li is the 'Go to Person' for everything related to credit. She's expert at reading a credit card statement and understanding finance charges. Need help knowing when to use credit and when not to? Mei-Li has the answer.</i></p>
<p>Miguel</p> 	Education	Male	<p>Education strategy, Human capital, Opportunity cost</p> <p><i>Miguel is the 'brainiac' of the group. He's got the smarts to help you plan for your future after high school. He's an expert at assessing strengths and interests, then finding the right type of education or training to fit.</i></p>
<p>Terrell</p> 	Corporate Analyst	Male	<p>Corporate financial statements, Industry trends</p> <p><i>Terrell is a genius when it comes to analyzing a company's financial statement. He can help you understand what the numbers really mean. Any questions about revenue, earnings per share, or industry trends, Terrell's got your back.</i></p>
<p>Erica</p> 	Economist	Female	<p>Economic forecasting, Business cycles, Monetary policy</p> <p><i>Erica is an expert on the economy. She knows how to cope with ups and downs in the market. If you need to know about the GDP, money supply, or leading economic indicators, she's standing by.</i></p>



Best Operatives (X) for Each Mission															
Mission #:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
John	X			X	X	X	X	X	X	X					X
Deacon	X					X		X	X	X	X	X	X	X	X
Rebecca	X	X	X												
Mei-Li				X	X		X								
Miguel		X	X												
Terrell								X	X	X	X	X	X	X	
Erica												X	X	X	

## Manage Your Students/Classes/Teams

### Getting Started

The very first thing you do to get Gen i Revolution set up for your classes is to visit <http://www.genirevolution.org/join.php> and set up an account.

Once you complete the registration, you will receive an email at the address you provided. This email will contain instructions on activating your account. You only have to activate once; subsequent visits to the site will only require entering your login information. *(Note: you must register yourself before your students are able to access the site. See Student Registration for more information about signing your students up to play.)*

Once you receive the email, click on the account activation link to activate your account. You will be redirected to the account management main page (shown below).





## Managing Classes

To start setting up Gen i Revolution for your students, click on the “Classes” tab at the top of the screen. The Classes screen (shown below) will allow you to create and manage classes.



To create a class, click on the “Create Class” button just underneath the tab menu. This page will walk you through the process of creating a class. Once the class is created, you will be able to see its information on the Classes page, as shown below. You will also be able to send a mass e-mail to all of your students by using the “Email All Active Classes” link, located next to the “Create Class” link at the top of the page.

## Student Registration

Once you have created a class, your students may register. Provide them with the **Class Code** associated with your newly-created class; with that code, your students will be able to create their own profiles from <http://www.genirevolution.org> in the same manner as you created your profile.

## The View Class Page

Click on the name of a class to access the View Class page. There are seven tools on this page (shown below). They are:

1. Edit
2. Delete
3. Deactivate
4. Assign Teams



5. Email Class
6. View Teams
7. Enable Missions



Some information about each tool:

1. **Edit**

This tool allows you to edit the information for a certain class. Clicking on the link will take you to a page very similar to the “Create Class” page, where you will be able to change the Class Name, Class Description, etc.



2. **Delete**  
This allows you to delete a class. Upon clicking this link you will be asked to confirm. (Note: Deleting a class will also delete any users and teams associated with the class.)
3. **Deactivate**  
Allows you to deactivate a class. Deactivating a class deletes any teams you may have created and will disallow users from logging into Gen i Revolution, but will NOT delete user accounts.
4. **Assign Teams**  
This section allows you to break your class up into teams, if you choose to play the game in teams instead of individually. You can also use this section to view other classes, helping you to keep better track of students playing the game. (Note: This page is covered in more detail in the section titled Managing Teams.)
5. **Email Class**  
Clicking this link will enable you to send an email to each student associated with the class. Each student is asked to provide a valid email address when signing up; these are the addresses to which the message will be sent.
6. **View Teams**  
Clicking this link will enable you to view all the teams that are associated with the current class. (Note: This page is covered in more detail in the section titled Managing Teams.)
7. **Enable Missions**  
Allows you to enable or disable missions in Gen i Revolution for the current class. Upon clicking the link you will be taken to the Enable Missions page. By clicking the small checkboxes along the right side of the screen you can select certain missions if you wish to restrict your students to particular activities. (Note: *Your students will not be able to play the game until you have enabled at least one Mission.*)

## Managing Teams

To separate your students into teams, click on the “Teams” tab at the top of the screen.

As previously mentioned, Gen i Revolution allows you to separate your classes into different teams. Creating teams and assigning your students to teams is an optional feature. You do not need to create teams to have your students play the game.



Aside from viewing the teams associated with each of your classes, the Teams page also allows you to:

1. Assign students to teams you have already created
2. Create teams and assign them to classes

To create a team, click the “Create Team” link located at the top of the page. You will be asked to name the team, assign it to a class, and give a short description. (Note: It is good practice to utilize the “description” attribute well, as different classes are allowed to have teams with identical names.)

Once a team is created it will show up on the Teams page (shown above). You can sort the list of teams by clicking on the column headings. Simply click once to sort the list by that particular column, in ascending order; click again to reverse the order.

Now that a team has been created, you can start assigning students. Click the “Assign Teams” link at the top of the screen to access the Assign Teams page (shown below).



There is one drop-down menu that controls the Assign Teams page. Clicking the box will cause a list of all of your classes to appear; clicking on a class will bring you to that class's Assign Teams page.

The Assign Teams page has a table with two columns and a row for each student in the class. The first column (Students) displays each student's name as a link. Clicking a student's name will take you to a page with information about that student. (Note: This page is covered in more detail in the section titled Managing Students.) The second column (Team Name) contains a drop-down menu. Each student will have one of these menus next to his/her name.

Clicking the box will cause a list of all the teams associated with that class to appear. To assign a student to a team, simply click on the team. After all the students have been assigned to teams, you can click the "Accept" button at the bottom of the page to finalize your changes. (Note: The changes will not be finalized until you click the "Accept" button.) At any time you may click the "Cancel" button to discard any changes and return to the Teams page.

### The View Team Page

Clicking on the name of a class will take you to that class's Class Page. Clicking on the name of a team will take you to that team's Team Page.

There are four tools on this page (shown below). They are:

1. Edit
2. Delete



3. Assign Teams
4. Email Team



Some information about each tool:

1. **Edit**  
Clicking this link will allow you to edit the team's name and description.
2. **Delete**  
This will delete the team. The page will ask you to confirm before deleting. (*Note: Students will no longer be associated with this team, but their records will NOT be deleted.*)
3. **Assign Teams**  
Directs you to the Assign Teams page.
4. **Email Team**  
Clicking this link will allow you to draft an email to all members of the currently selected class. Each student is asked to provide a valid email address when signing up; these are the addresses to which the message will be sent.

You can also click on any student's name to go to a page with information about that student.

## Managing Students

To access a listing of your students, click the "Students" tab at the top of the screen. This will bring you to the View Students page (shown below), which allows you to view all the



students who are signed up for Gen i Revolution using the access code(s) you've distributed.



Aside from listing all of your students, the View Students page also allows you to:

1. Add a new student to your roster
2. Save a list of your students in .csv format (*Note: This is explained in more detail in the section titled [Exporting Your Students](#).*)
3. Print a list of your students

## Exporting Your Students

If you want to save a copy of your students and their usernames/email addresses, you can use the “Export” tool found on the View Students page. Clicking on that link will generate a .csv file, which you will be able to save to your computer. The .csv format is supported by Microsoft Excel, OpenOffice Calc, and many other spreadsheet programs.



The Add Student tool allows you to manually add students to Gen i Revolution. After you click the link you will be asked to input the student's age, name, username, password, etc. You must also assign that student to a class.

The View Students page provides two tools to help you organize your students.



At the top of the screen is the Status drop-down box. With it you can choose to look at active students, inactive students, or both. Below that is the Class drop-down box. It allows you to choose a particular class to view, or to view all classes. As before, you can click on the name of a class to view its Class Page. Additionally, each student's email address is displayed; by clicking on it you can email him/her individually. *(Note: Clicking on a student's email address will open your default email client; it is not an internal system, as with the Class and Team emails.)* Clicking on the name of a student will bring you to his/her Student Page (shown below).



Teacher

Students > View All Students > View Student Hello, Teacher User

Home Profile Classes Teams **Students** Reports Play Game Logout

View Student Edit Delete Deactivate Reset Scores

Student Name: Student User Status: Active  
 Email: Class: Class1  
 Username: Team: Team 1  
 Address:

Class: Class1

Mission 1									
Date Started	Date Completed	Passed/Failed	Total Score	Cred.	Knowledge	Battle	Solution	Bonus	Elapsed Minutes
06/10/2010	—	—	400	100	0	300	0	0	3

Mission Totals									
			Total Score	Cred.	Knowledge	Battle	Solution	Bonus	Elapsed Minutes
			400	100	0	300	0	0	3

The Student Page has four tools:

1. Edit a student's information. You can manually change the student's name, address, password, etc. You can also assign the student to another class and activate/deactivate him/her.
2. Delete a student. Clicking this link will delete the current student. This will remove him/her from your records and disassociate the student from any classes and teams. You will be asked to confirm the deletion before any actions are completed.
3. Deactivate a student. If a student is no longer playing Gen i Revolution, but you still want to keep his/her information, you can deactivate the student's account. This will disallow the student from logging in, but will retain all information – including any class and team assignments. You can reactivate the student later by clicking the same link.
4. Reset the student's scores.

## Reports

To access different reports, click on the “Reports” tab at the top of the screen. That will bring you to the Reports screen (shown below).



This screen has two tools:

1. Save a list of the current information in .csv format
2. Print a list of your students

## Exporting Reports

If you want to save a copy of any reports, you can use the “Export” tool found on the View Students page. Clicking on that link will generate a .csv file, which you will be able to save to your computer. The .csv format is supported by Microsoft Excel, OpenOffice Calc, and many other spreadsheet programs.

Different reports are available on the Reports page, such as maximum scores for each mission, game play statistics arranged by mission, and many others. To navigate, simply click the “Report” drop-down box (demarcated by the vertical arrow in the image below). A list of the different reports will appear; click on one to view it. Any information contained within the report will show up at the bottom of the page. As with other tables, some of the report information can be sorted by different columns. When a column appears



underlined, you can click it to sort by that field in ascending order. Click again to reverse the order.

The screenshot shows the 'Teacher' interface for a 'Student Report'. At the top, there is a navigation bar with tabs: Home, Profile, Classes, Teams, Students, Reports, **Play Game**, and Logout. Below this, the 'Student Report' section includes a 'Report:' dropdown set to 'Student', and two other dropdowns: 'User Status' set to 'All' and 'Class' set to 'All'. Red arrows point to these two dropdowns. Below the filters is a table with the following data:

Name	Email	Username	Class	Missions		
				Complete	Passed	Scores Total
User Student			Class	0	0	400

Depending on the report, other drop-down boxes may appear (demarcated by the horizontal arrows above). These additional tools are there to help you navigate the information. For example, in the above image there are two boxes: “User Status” and “Class”. Changing the “User Status” box will display only active or inactive students; changing the “Class” box will allow you to select a specific class for viewing.

Throughout the pages you will be able to click on class names, team names, student names, and other pieces of information to view individual information pages.

**As a teacher you are also allowed to play the game by clicking the large, green tab at the top of the screen.**

If you find yourself lost or confused, remember that the “Home” tab at the top of the screen will bring you back to the screen you see when you log in.

To log out, click the “Log Out” tab at the top of the screen.



We would welcome your input on the types of reports that would be useful to you. If you have ideas please email them to: [geni@councilforeconed.org](mailto:geni@councilforeconed.org).

## Hints from Testing

Here are some hints from the volunteer teachers and students who tested the game during development:

- Advise students to keep a calculator and notepad handy. Although the game provides a calculator that can be used, the game works better if screens are kept clear. Also, although it's possible to keep word processor windows open while the game plays to go back and forth, testers found that a physical notepad was easier.
- Testers reported that the 4-1-1 tutorials take up the most time as students play the game, but also provide the most information. Battle questions and mission solution go relatively quickly.
- Students find the navigation of the game relatively easy. Each time they log on to the game, they are offered an optional guided tour. If students get stuck at all, it will probably be at one of two points:
  1. After logging on and before choosing a mission. At this point, players need to go to the Situation Map to choose a mission. (Notice on this screen that Monique's advice is to go to the Situation Map.)
  2. After choosing a team and hearing the mission briefing. At this point, players may go directly to the tutorial (4-1-1) in their Backpack or answer questions from their operatives. They may also click on the various clickable items in the gaming environment or review items in the Backpack. Students will discover their own natural order of proceeding. However, they should not go straight to the Battle questions, since they would then be forgoing opportunities to earn points and would have a lower chance of answering correctly.
- Mission 1 provides a comprehensive introduction to personal finance and investing, and therefore is best played first. However, it also calls for a large amount of math and computations. We recommend that you first play the mission on your own to estimate how much time it will take your students; this is a mission that is better if it is not rushed. If you have inadequate time to do Mission 1 at the start and would prefer to demonstrate the game with an easier mission, use Mission 2 ("Help Veronica choose a tentative career").
- It's best not to say much to your students about the Profile Match questions. Your students will soon notice that they never get turned down for a mission, no matter how they answer. However, Profile Match questions provide a quick and informal means of assessment. After Mission 7, Profile Match questions are repeated. You will have the



opportunity to see whether students' attitudes have changed since their first encounter with the questions.

- The game places multiple-choice answers in random order, so that the correct answer might be first in order on one student's screen and last on another's. Correct answers in this Teacher's Guide are denoted by the asterisk\*. Credibility Questions are numbered in this guide (1.1.1, for example) to coordinate with numbered mission steps but the numbers do not appear on-screen.

### Linkages to Voluntary National Content Standards in Economics

Mission #:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Scarcity	X	X	X	X		X	X				X				X
2. Marginal costs/ marginal benefits			X	X	X	X	X			X	X				
3. Allocation of goods and services				X		X									
4. Role of incentives	X	X	X	X		X	X						X		X
5. Gains from trade								X							
6. Specialization and trade															
7. Markets; price and quantity determination												X	X		
8. Role of prices in market system								X	X			X	X		
9. Benefits of competition															
10. Role of economic institutions	X					X	X	X		X	X		X		
11. Role of money															X
12. Role of interest rates	X					X	X	X	X		X		X		
13. Role of resources in determining income		X													
14. Profit and the entrepreneur															
15. Growth															
16. Role of government															X
17. Costs of government policies															
18. Circular flow; interdependence													X	X	
19. Unemployment and inflation															X
20. Monetary and fiscal policy													X	X	

### Linkages to Principles and Standards for School Mathematics

Mission #:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Numbers and operations	X	X	X	X	X		X	X	X	X			X		
2. Algebra												X		X	
3. Geometry															
4. Measurement	X								X	X					
5. Data analysis and probability									X					X	
6. Problem solving															
7. Reasoning and proof															
8. Communication													X		
9. Connections															
10. Representation													X		

### Linkages to National Standards in Personal Finance

Mission #:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Income	X	X	X	X	X		X		X						
2. Money management	X			X	X	X	X	X	X						
3. Spending and credit	X			X	X	X	X								
4. Saving and investing	X	X		X	X	X		X	X	X	X	X	X		X



## Mission by Mission: Summary, Resources and Answers to All Questions

### Mission 1: Help Angela build wealth over the long term

#### Mission brief

Your mission is to convince Angela to invest in her company's 401(k) plan so she can start building wealth for the long run.

#### Mission objectives

Angela needs to understand the three most important principles of wealth building:

1. Start early
2. Buy and hold
3. Diversify

She needs to start investing now for the best shot at building lifetime wealth. You and your team of operatives need to help her make the right choices in her 401(k) plan.

#### Cross-references to print materials

LEI lesson 12; also, LEI lesson 1 on compounding

(To order the LEI materials, visit <http://store.councilforeconed.org/lei.html>)

#### Best Operatives

John, Deacon, Rebecca

#### In the Backpack for this mission

##### Tools

- ◆ Calculator
- ◆ Glossary
- ◆ Compound Interest Calculator

##### The 4-1-1

- ◆ Simple Versus Compound Interest
- ◆ Three Rules for Building Wealth

#### Mission Points Possible

Total excluding Bonus points	Credibility	Knowledge	Battle	Solution	Bonus
3,060	800	960	900	400	4,500

#### Learning objectives

1. Explain and apply the principle of compound interest.
2. Explain why an early start is important to lifetime financial success.
3. Explain why long-term investors do not have to worry about moving money around but instead “buy and hold.”



4. Explain why long-term investors do not have to worry about picking 'hot' assets but instead diversify their holdings.
5. Explain why it is important to take advantage of employers' matching employee retirement contributions.

**Profile match questions**

(There are no wrong answers and no points at stake. The preferred answers are indicated with asterisks.\*)

1. When you have money to invest for the long term, what do you plan to do with it?
  - A. Buy and sell stocks and bonds frequently
  - \*B. Buy and then hold onto stocks and bonds
  - C. Hold the money in a bank account
2. Which do you think is a better savings strategy?
  - \*A. Put all of your savings in different types of investment instruments.
  - B. Choose one type of investment and stick to it.
  - C. Keep it in my piggy bank.
3. What's a good time to begin retirement planning?
  - A. When you are fifty years old, or about 15 years before you retire
  - B. When you're about 30 and have your career established
  - \*C. When you're in your early twenties, at your first opportunity.

**Credibility questions and answers**

- 1.1.1 What is Angela's gross monthly income?  
\*\$2,667, filled in blank
- 1.1.2 What is the percentage her employer will match?  
\*3%, filled in blank
- 1.1.3 Looking at Angela's budget, which of these expenses could Angela reduce to free up money for her 401(k)?  
\*Clothing  
Housing  
Transportation  
Utilities
- 1.2.1 Which is better for building long-term wealth, simple interest or compound interest?  
\*Compound interest  
Simple Interest



- 1.2.2 If Angela starts saving \$80 a month now at age 21 in an account earning 5% interest, how much more money will she have by age 65 if she leaves the money in the account (compound interest) rather than withdrawing the interest each month (simple interest)?  
\*\$65,313, filled in blank

(Solution: Enter starting balance 0, age 21, age 65, \$80 and 5% in compound interest calculator to get \$153,929 *compound interest and principal*.  
Note that calculator gives \$88,616 as *simple interest and principal*  
Finally, subtract:  $\$153,929 - \$88,616 = \$65,313$ .)

- 1.2.3 What are the three rules for building wealth over the long term?

\*Start early, buy and hold, and diversify  
Buy low, sell high, use caution  
Pay yourself first, save regularly, set goals

- 1.3.1 What is meant by the third rule of building wealth, diversify?

\*Choose a plan with a mix of mutual funds, stocks, bonds, and cash to earn a good return while controlling risk  
Choose a plan that will invest most of your money in the company's stock

- 1.3.2 Trying to "time the market" by frequent buying and selling violates which rule for building wealth?

\*Buy and hold  
Start early  
Diversify

#### **4-1-1 questions and answers**

##### Simple vs. Compound Interest

###### Slide 4

Angela's savings account balance was \$133.10 after 3 years. What would the balance be after 5 years if the interest rate remains at 10% compounded annually?

\*\$161.05

(Solution: In Year 4 Angela earns  $\$133.10 * 0.10 = \$13.31$  interest. Add that to the starting \$133.10 and she has \$146.41 at the end of Year 4.

In Year 5 Angela earns  $\$146.41 * 0.10 = \$14.64$  interest. Add that to \$146.41 and she has \$161.05 at the end of Year 5.)

Slide 8

### Simple **VERSUS** Compound Interest

Slide 8 of 9

**Run the Numbers Game**

Monique's Hint

If you save \$160 a month at 8% interest, what is the difference in interest you will earn with compound interest versus simple interest if you save for 50 years?

Years You Save	Principal Saved	Savings with Compound	Savings with Simple Interest	Difference
20	\$ 38,400	\$ 94,872	\$ 68,992	\$ 25,880
30	\$ 57,600	\$ 240,047	\$ 126,528	\$ 113,519
40	\$ 76,800	\$ 562,285	\$ 199,424	\$ 362,861
50	\$ 96,000	\$ 1,277,537	\$ 287,680	\$ 989,857

Points Possible: 400  
Score: 0

**Check Answer**

The Three Rules for Building Wealth

Slide 4

### The **THREE RULES** for Building Wealth

Slide 4 of 11

**Run the Numbers Game**

Monique's Hint

How much money will Angela's 401(k) account have in each of these investment scenarios?

Starting age: 21 Ending age: 70 Monthly investment: \$ 160 Interest rate: 8% Total amount: \$ 1,177,777	Starting age: 31 Ending age: 70 Monthly investment: \$ 160 Interest rate: 8% Total amount: \$ 517,341
Starting age: 41 Ending age: 70 Monthly investment: \$ 160 Interest rate: 8% Total amount: \$ 219,799	Starting age: 21 Ending age: 70 Monthly investment: \$ 80 Interest rate: 8% Total amount: \$ 588,888

Points Possible: 400  
Score: 350

## Slide 10



The screenshot shows a game interface titled "The THREE RULES for Building Wealth" (Slide 10 of 11). The game is a "Match 'em Up Game" featuring a character named Manique. The instructions are: "Click an item on the left, then click an item on the right." The left side lists three rules: "Start early", "Buy and hold", and "Diversify". The right side lists three corresponding phrases: "Give your money a long time to grow.", "Don't put all your eggs in one basket.", and "Don't move your money around." Lines connect "Start early" to "Give your money a long time to grow.", "Buy and hold" to "Don't put all your eggs in one basket.", and "Diversify" to "Don't move your money around." The interface also shows "Points Possible: 60" and "Score: 60".

**Battle questions and answers**

- 1.1 What is the minimum monthly amount Angela should invest to use her 401(k) to best advantage?  
\* \$80, filled in blank

(Solution: Gross pay of \$2667 x 3% = \$80, rounded to nearest dollar.)

- 1.2 If Angela decides to take full advantage of her employer's matching contribution and her account earns an average of 8% interest, what is the difference between the amount Angela will have at age 70 if she starts investing now at age 21 rather waiting until she's 31 to start investing?  
\* \$660,436, filled in blank

(Solution: Compound interest calculator, starting at 21, \$160 per month: \$1,177,777.

Compound interest calculator, starting at 31, \$160 per month: \$517,341.

Finally, subtract to get the difference: \$1,177,777 - \$517,341 = \$660,436.)

- 1.3 Pick the 401(k) plan that's best for Angela.  
\*Option 1  
Option 2  
Option 3



**Solve the mission questions and answers**

Part 1 Should Angela invest in her employer's 401(k) plan?

\*Yes

No

Part 2 At what age should Angela join her employer's 401(k)?

\*Age 21, filled in blank

Part 3 How much money should she contribute each month?

\*\$80, filled in blank

Part 4 Which type of investment plan do you recommend?

\*Option 1

Option 2

Option 3

**Insider's note**

“Angela” was named after a student assistant who worked for one of the authors. Immediately after graduation she faced the 401(k) problem at her employer, the home office of a leading consumer electronics firm.



**Mission 2: Help Veronica choose a tentative career**

**Mission brief**

Guide Veronica through a process to choose a tentative career cluster and a tentative career, understanding that her career goals may change over time.

**Mission objectives**

To complete the mission, help Veronica:

1. Analyze her career inventory
2. Use the results of the career inventory to identify a tentative career cluster
3. Research three specific careers within the cluster
4. Help Veronica make a tentative career choice

**Cross-references to print and online materials**

*LEI*, lesson 3

*LEI* online lesson 4, <http://lei.councilforeconed.org/about/lessons.php?bk=45>

*Financial Fitness for Life*, Student Workouts, grades 6-8

Online resource: Occupational information from the Bureau of Labor Statistics:

<http://www.bls.gov/bls/occupation.htm>

(To order the *LEI* materials, visit <http://store.councilforeconed.org/lei.html>; to order the *FFFL* materials, visit <http://fffl.councilforeconed.org>)

**Best Operatives**

Rebecca, Miguel

**In the Backpack for this mission**

Tools

- ◆ Calculator
- ◆ Glossary
- ◆ The 16 Career Clusters
- ◆ Career Inventory
- ◆ Occupational Outlook Handbook
- ◆ Veronica's Report Card

The 4-1-1

- ◆ Exploring Careers

**Mission Points Possible**

Total excluding Bonus points	Credibility	Knowledge	Battle	Solution	Bonus
4,000	1,100	1600	900	400	4,500



**Learning objectives**

1. Explain the concept of human capital.
2. Recognize the importance of investing in human capital.
3. Identify a tentative career area.
4. Use Occupational Outlook Handbook information to identify what an occupation career is like, the education requirements, and the typical salary.
5. Identify occupations that match a given set of skills, abilities, and interests.

**Profile match questions**

(There are no wrong answers and no points at stake. The preferred answers are indicated with asterisks.\*)

1. When considering career choices, which approach appeals most to you?  
A. Follow traditions in my family  
\*B. Research careers that match my skills and interests  
C. Allow fate to determine my career
2. People with more education are likely to earn more income than people with less education.  
\*A. Strongly agree  
B. Agree  
C. Undecided  
D. Disagree  
E. Strongly disagree
3. When deciding whether or not to attend college full time, an important cost to consider is the four years of full-time salary you won't receive.  
\*A. Strongly agree  
B. Agree  
C. Undecided  
D. Disagree  
E. Strongly disagree

**Credibility questions and answers**

2.1.1 What makes up an individual's human capital? (check all that apply)

- \*Knowledge
- \*Skills
- \*Health
- Wealth

2.1.2. Which one of these would be on Veronica's list of human capital?

- \*Problem solving ability
- Her piano
- College savings fund

2.1.3 You can invest in your human capital by which of the following? (Check all that apply)



- \*Going to school
- \*Participating in extracurricular activities
- \*Volunteering
- \*Teaching yourself a new skill
- Neglecting your homework

2.2.1 What is a Career Cluster?

- \*A group of occupations with similar knowledge and skill requirements
- Jobs that have the same pay scale
- Occupations with similar working conditions

2.2.2 Which of these web sites would be the best choice for career exploration?

- \*Occupational Outlook Handbook (OOH)
- USAJOBS
- Employment Standards Administration (ESA)

2.2.3 Which of these types of information would you NOT find in the OOH?

- \*A list of job openings by state
- Job search tips
- Tomorrow's jobs
- Information about the job market by state

2.3.1 Which of these occupation categories in the Occupation Outlook Handbook best matches Veronica's top ranked Career Cluster?

- \*Computer and Mathematical
- Life Scientists
- Education, Training, Library and Museum

2.3.2 What was the average starting salary in 2007 for a Computer Programmer?

- \*\$49,928, filled in blank

2.3.3 Which of the following occupations is projected to experience job growth of 38% between 2006 and 2016?

- \*Computer Software Engineer
- Computer Programmer
- Computer Support Specialist

2.3.4 Which of these occupations often involves working with people on a daily basis to solve their computer hardware and software issues?

- \*Computer Support Specialist
- Computer Software Engineer
- Computer Programmer

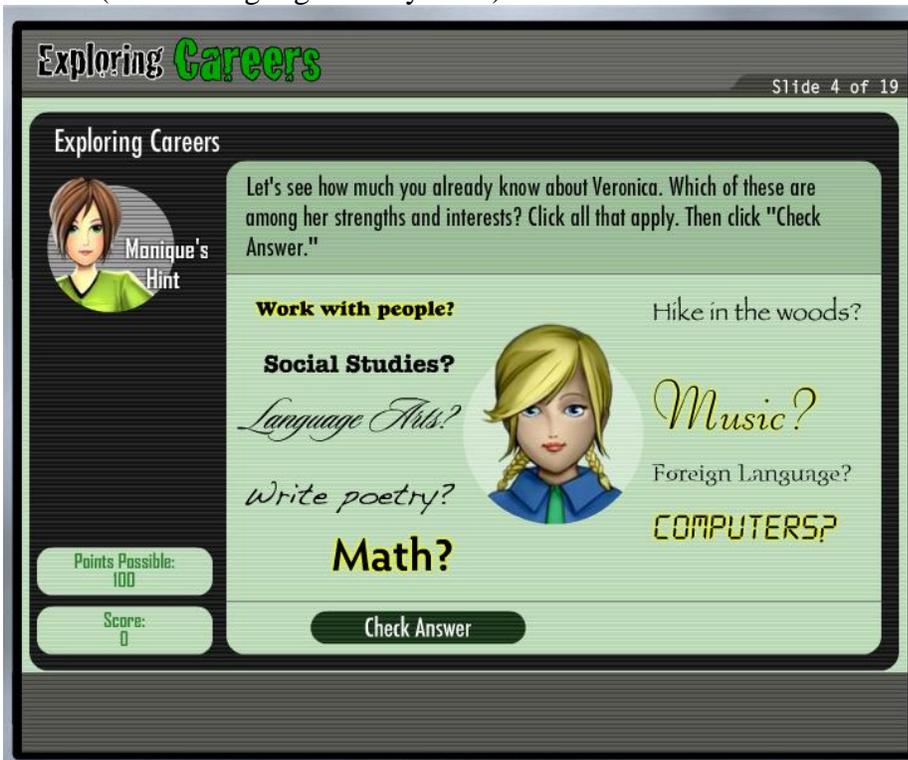
2.3.5 Which of these occupations typically requires the MOST education for its entry-level positions?

- \*Computer Software Engineer
- Computer Programmer
- Computer Support Specialist

### 4-1-1 questions and answers

#### Exploring careers

Slide 4 (answers highlighted in yellow)



**Exploring Careers** Slide 4 of 19

Exploring Careers

Monique's Hint

Let's see how much you already know about Veronica. Which of these are among her strengths and interests? Click all that apply. Then click "Check Answer."

**Work with people?** Hike in the woods?

**Social Studies?** *Language Arts?* *Music?*

*Write poetry?* Foreign Language?

**Math?** **COMPUTERS?**

Points Possible: 100

Score: 0

Check Answer

Slide 10



Slide 15

This career involves helping people do exercises to reestablish mobility.

- Podiatrist
- Occupational Therapist
- Audiologist
- \*Physical Therapist

Slide 16

The number of jobs in this occupation is expected to grow 51% between 2006 and 2016.

- Flight Attendant
- \*Personal and Home Care Aide
- Dental Assistant
- Child Care Worker

Slide 17

This occupation requires a master's degree.

- \*Librarian
- Graphic Designer
- Teacher Assistant
- Public Relations Specialist

**Battle questions and answers**



- 2.1 Which of the following skills and attributes does Veronica possess in her human capital? (check all that apply)
- \*Math ability
  - \*Ability to play a musical instrument
  - \*Works well with others
  - Foreign language ability
- 2.2 What are Veronica's top 3 Career Clusters? (you must check 3)
- \*Information Technology
  - \*Education & Training
  - \*Science, Technology, Engineering & Mathematics
  - Health Science
  - Arts, A/V Technology & Communications
- 2.3 Which of the following occupations will experience the highest job growth between 2006 and 2016?
- \*Computer Software Engineer
  - Computer Systems Analyst
  - Computer Programmer
  - Computer Support Specialist

**Solve the mission questions and answers**

- Part 1 Which Career Cluster is the best match for Veronica's strengths and interests at this point in her life?
- \*Information Technology
  - Education & Training
  - Science, Technology, Engineering & Mathematics
- Part 2 Which of these occupations has the best combination of future job growth and earning potential?
- \*Computer Software Engineer
  - Computer Programmer
  - Computer Support Specialist
- Part 3 Which occupation best meets Veronica's desire to work with people?
- \*Computer Support Specialist
  - Computer Programmer
  - Computer Software Engineer (half credit)
- Part 4 Taking everything into consideration--job growth, earnings, Veronica's strengths and interests--which occupation would you recommend for her?
- \*Computer Software Engineer
  - Computer Support Specialist (half credit)
  - Computer Programmer



### **Insider's note**

Completely apart from the game – and before introducing this mission – it's a good idea to pass out printed copies of the career inventory and have students complete them. Students find results of self-tests interesting. This one may also be useful as they contemplate career choices. Even if you don't do this as an activity, you might remind students that there's a blank career inventory in the Backpack for this mission.



**Mission 3: Help Matt decide whether to continue formal education after he graduates from high school**

**Mission brief**

Help Matt decide whether to continue formal education after he graduates from high school.

**Mission objectives**

To complete the mission, help Matt:

1. Understand the concept of human capital
2. Consider his current set of human capital and what knowledge and skills he may need to acquire to meet his goals
3. Consider the differences in wages for various levels of educational attainment (calculate lifetime high school vs. college)
4. Decide on an appropriate plan for Matt after high school, considering the costs and benefits of his potential choices

**Cross-references to print and online material**

LEI lesson 3

LEI online lesson 4, <http://lei.councilforeconed.org/about/lessons.php?bk=45>

Online resource: Bureau of Labor Statistics <http://www.bls.gov>

(To order the LEI materials, visit <http://store.councilforeconed.org/lei.html>)

**Best Operatives**

Rebecca, Miguel

**In the Backpack for this mission**

Tools

- ◆ Calculator
- ◆ Glossary
- ◆ Human Capital Review
- ◆ Jobs and Wages
- ◆ College Tuition
- ◆ Median Income by Education
- ◆ Careers and Human Capital
- ◆ Education Attainment Types

The 4-1-1

- ◆ Invest in Yourself

**Mission Points Possible**

Total excluding Bonus points	Credibility	Knowledge	Battle	Solution	Bonus
3,800	1,100	1,400	900	400	4,500



**Learning objectives**

1. Understand and apply the concept of human capital.
2. Explain that human capital is related to education choices, career choices, opportunities, and income.
3. Define and give examples of opportunity cost.
4. Weigh the costs and benefits of a choice to make an informed decision.

**Profile match questions**

(There are no wrong answers and no points at stake. The preferred answers are indicated with asterisks.\*)

1. For people to accomplish anything financially, good advice is to
  - \*A. Spend less than you receive
  - B. Receive less than you spend
  - C. Quit high school and get a job
  - D. Hope you get a bonus payment at work
2. When it comes to saving money, which plan do you think is easiest for most families?
  - A. Put aside a large amount every now and then
  - \*B. Put aside a small amount every month
  - C. Pay bills automatically from your checking account
3. Using credit to make a purchase is always a bad idea.
  - A. Strongly agree
  - B. Agree
  - C. Undecided
  - D. Disagree
  - \*E. Strongly disagree

**Credibility questions and answers**

- 3.1.1 What is human capital?
  - \*Knowledge, skills, and health an individual possesses
  - Money an individual possesses
  - Property an individual possesses
- 3.1.2 Which of the following is an example of human capital?
  - \*Ability to build a house
  - A house
  - Certificates of Deposit



- 3.1.3 Which of the following is not an investment in human capital?  
\*Buying a new computer  
Finishing high school  
Attending a trade school  
Practicing to improve a skill
- 3.1.4 Which of the following skills and attributes is NOT in Matt's list of human capital?  
\*Likes to give talks or speeches  
Physical coordination  
Positive attitude  
Likes to build things  
Math ability
- 3.1.5 Why is going to college considered a form of investment?  
\*People give up something in the short run (time and money) in order to gain larger return (a good job) in the future.  
College costs money.  
People save their money to send their kids to college.
- 3.2.1 Payments people receive for selling or renting their productive resources are called what?  
\*Income  
Cost  
Investment  
Human capital
- 3.2.2 What does the term "median income" mean?  
\*Half of the workers in a group earn more than the amount and half of them earn less.  
The average income of all workers in the group.  
The midpoint of an individual's salary.
- 3.2.3 What is the median yearly income for workers with a high school diploma if they work 52 weeks a year?  
\*\$30,732, filled in blank
- 3.3.1 Each day after school, Matt practices shooting hoops. Instead, he could be playing video games with his friends. Playing video games with friends is Matt's \_\_\_\_\_?  
\*Opportunity cost  
Income  
Favorite thing to do  
Investment in human capital
- 3.3.2 Which of the following is NOT an opportunity cost associated with attending college?  
\*Room and board  
Textbooks  
Tuition and fees



- 3.3.3 Matt can choose one elective the last semester of his senior year in high school. The options he prefers are woodworking, horticulture, and art. He chooses woodworking. What is his opportunity cost?  
 \*Either horticulture or art; whichever is his next-best alternative.  
 Both horticulture and art.  
 Neither horticulture nor art.

**4-1-1 questions and answers**

Invest in Yourself

Slide 5

Slide 10

Suppose Matt decides to go to a private university, rather than taking a full-time job as a Carpenter's Helper. What is his opportunity cost over four years?

\*\$192,812, filled in blank

Annual tuition and fees for four years (from "College Tuition" in Backpack)	$\$25,143 \times 4 = \$100,572$
Forgone Carpenter's Helper income for four years (from "Jobs and Wages" in Backpack)	$\$23,060 \times 4 = \$92,240$
<hr/>	
Total opportunity cost	$\$192,812$

## Slide 12

## Invest in Yourself

Slide 12 of 13

### Run the Numbers



Monique's Hint

Points Possible:  
300

Score:  
300

Use the Jobs and Wages document in your Backpack. Calculate the estimated lifetime earnings of someone working 50 years in the jobs listed below, based on current salary information.

#### Carpenter's Helper

Post-secondary education required: None

Lifetime earnings estimate: \$

#### Carpenter

Post-secondary education required: Trade school, apprenticeship

Lifetime earnings estimate: \$

#### Architect

Post-secondary education required: Bachelor's degree

Lifetime earnings estimate: \$

Solutions:

Carpenter's helper:  $\$23,060 \times 50 = \$1,153,000$

Carpenter:  $\$36,546 \times 50 = \$1,827,300$

Architect:  $\$64,150 \times 50 = \$3,207,500$

### Battle questions and answers

3.1 Matt took Introduction to Woodworking his junior year. He hopes to continue building things and may someday choose a career in construction or architecture. By taking another class in woodworking, what is Matt doing?

\*Investing in his human capital.

Fulfilling his high school graduation requirements.

Doing something he enjoys.



- 3.2 If Matt works 45 years, how much more is he likely to earn with a bachelor's degree than with a high school diploma?  
\*\$905,580, filled in blank

Solution:

Weekly Bachelor's degree earnings x 52 weeks/year x 45 years (from "Median Income by Education" in Backpack)	$\$978 \times 52 \times 45 = \$2,288,520$
Weekly High School grad earnings x 52 weeks/year x 45 years (from "Median Income by Education" in Backpack)	$-\$591 \times 52 \times 45 = \$1,382,940$

---

Difference in career earnings (by subtracting) \$905,580

- 3.3 If Matt pursues a 4-year degree in architecture at the public university instead of taking his boss' job offer to be a Carpenter's Helper, what is his opportunity cost?  
\*\$118,580

Solution:

Annual tuition and fees for four years (from "College Tuition" in Backpack)	$\$6,585 \times 4 = \$26,340$
Forgone Carpenter's Helper income for four years (from "Jobs and Wages" in Backpack)	$\$23,060 \times 4 = \$92,240$

---

Total opportunity cost \$118,580

**Solve the mission questions and answers**

- Part 1 What are Matt's estimated lifetime earnings if he works 52 weeks a year for 54 years and receives the median income for someone with a High School Diploma?  
\*\$1,659,528, filled in blank

Solution:  $\$591 \text{ weekly} \times 52 \text{ weeks/year} = \$30,732 \text{ per year}; \$30,732 \times 54 \text{ years} = \$1,659,528$

- Part 2 What are Matt's estimated lifetime earnings if he works 52 weeks a year for 50 years and receives the median income for someone with a Bachelor's Degree?  
\*\$2,542,800, filled in blank

Solution:  $\$978 \text{ weekly} \times 52 \text{ weeks/year} = \$50,856 \text{ per year}; \$50,856 \times 50 = \$2,542,800$

- Part 3 What is the difference between Matt's estimated lifetime earnings with a Bachelor's Degree versus a High School Diploma?  
\*\$883,272, filled in blank

Solution:  $\$2,542,800 - \$1,659,528 = \$883,272$



Part 4 Knowing that Matt will need to spend at least \$118,580 to get a four-year degree in architecture, what advice would you give him?

\*Pursue the 4-year degree in architecture at the State University

Enroll in drafting classes at the Community College and work part-time (half credit)

Take his boss's job offer of an apprenticeship as a Carpenter's Helper (1/4 credit)

**Insider's note**

Independently of this mission, some students may mention the possibility of careers as professional athletes. Talented high school athletes are prone to over-estimate their chances of succeeding as college and pro athletes. Even athletes that succeed have to manage their money well or face financial distress. It is estimated that 78 percent of National Football League players are in bankruptcy or in financial distress within two years after their football retirements. (Yes, 78 percent!) Sports Illustrated online has a good article on this:

<http://sportsillustrated.cnn.com/vault/article/magazine/MAG1153364/1/index.htm>



**Mission 4: Help the O'Neils save \$300 a month for a down payment on a home**

**Mission brief**

Help the O'Neils save \$300 a month for a down payment on a home.

**Mission objectives**

To complete this mission, help the O'Neils:

1. Set a financial goal of saving for a down payment on a house
2. Examine their online checking account record and place the amount of each withdrawal into one of 8 categories
3. Calculate a total percent of spending in each category
4. Identify the categories in which they can reduce spending
5. Revise their budget to save \$300 a month
6. Identify the best way to put the money they save out of sight

**Cross-references to print materials**

*Your Credit Counts Challenge*. The example of Clayton and Casey's checkbook comes from Section 1, pages 6-9 of the Participant's Guide. Also, be sure to check the Trainer's Guide for Section 1.

(To order the YCCC materials, visit <http://store.councilforeconed.org/yourcreditcounts.html>)

**Best Operatives**

John, Mei-Li

**In the Backpack for this mission**

Tools

- ◆ Calculator
- ◆ Glossary
- ◆ Financial Goal Types

The 4-1-1

- ◆ Budgeting – How to Make the Most of What You Earn

**Mission Points Possible**

Total excluding Bonus points	Credibility	Knowledge	Battle	Solution	Bonus
4,700	1,400	1,700	1,200	400	5,000

**Learning objectives**

1. Recognize that setting financial goals can help people be successful at saving.
2. Recognize that in order to accomplish their financial goals, people have to spend less than they receive.
3. Identify a simple way – examination of an online check register – to estimate family expenditures and develop a family budget.
4. Identify ways of saving by keeping income "out of sight as a way to start saving.



**Profile match questions**

(There are no wrong answers and no points at stake. The preferred answers are indicated with asterisks.\*)

1. Would you be willing to put your own savings into the stock market?
  - A. No, there's too much chance of losing it.
  - B. No, I don't know enough about it.
  - \*C. Yes, if I could expect my money to grow.
  
2. It's important to have a checking or savings account at a bank or credit union
  - \*A. Strongly agree
  - B. Agree
  - C. Undecided
  - D. Disagree
  - E. Strongly disagree
  
3. You would pay about the same for a TV whether you purchase it through a rent-to-own plan or pay cash for it.
  - A. Strongly agree
  - B. Agree
  - C. Undecided
  - D. Disagree
  - \*E. Strongly disagree

**Credibility questions and answers**

- 4.1.1 What must a person do in order to save?
  - \*Spend less than they receive
  - Open a savings account at a bank
  - Stop making purchases with cash
  
- 4.1.2 What is a budget?
  - \*A plan to help make spending and saving decisions
  - A plan to increase your income
  - A list of your financial goals
  
- 4.1.3 What is the first step in budgeting?
  - \*Set goals
  - Find out where the money is going
  - Find a way to save small amounts and get them out of sight



- 4.1.4 Why is it important to set financial goals?  
\*It reminds you of the rewards you get when you succeed in saving your money  
It helps you categorize your spending  
It makes you feel guilty if you don't stick to your budget
- 4.1.5 What are the 3 types of financial goals?  
\*Short-term, medium-term, long-term  
Small, medium, large  
Low, medium, high
- 4.1.6 If you wanted to save money to make sure you could pay next month's rent on time, which type of financial goal would you set?  
\*Short-term  
Medium-term  
Long-term
- 4.2.1 It's not easy to see where your money goes if you pay for everything with what?  
\*Cash  
Check  
Debit Card
- 4.2.2 What's the easiest way for the O'Neils to get a rough idea of where their money goes?  
\*Analyze their online check register for a normal month  
Write down every penny they spend for a month  
Ask the bank to send them a quarterly statement showing all of their income and expenses
- 4.2.3 To analyze their expenses, the O'Neils will first need to do what?  
\*Divide their expenses into categories  
Add up all the deposits (income) in a month  
Add up all the withdrawals (expenses) in a month
- 4.3.1 What are fixed expenses?  
\*Expenses that do not vary month to month  
Expenses that change from month to month  
Expenses that can never change
- 4.3.2 What are variable expenses?  
\*Expenses that vary month to month  
Expenses that do no change from month to month  
Expenses over which you have no control



- 4.3.3. Which of the following expenses are fixed expenses in the O'Neil's budget? (check all that apply)
- \*Housing
  - \*Transportation
  - Utilities
  - Medical Care
  - Food
  - Clothing
  - Miscellaneous,
  - Recreation/Entertainment
- 4.4.1 Which of these is an effective principle of saving?
- \*Pay yourself first
  - Pay others first
  - Save what's left after paying bills at the end of the month
- 4.4.2 Why is it important to put saved funds out of sight? (check all that apply)
- \*If you don't think you have it, you won't spend it
  - \*Putting a barrier between people and their money helps them save
  - \*Money in a checking account or in cash is too easily spent

**4-1-1 questions and answers**  
**Budgeting – How to Make the Most of What You Earn**

Slide 7

**Budgeting – How to Make the Most of What You Earn** Slide 7 of 21

**Get a Clue**

Monique's Hint

Drag each clue to the matching briefcase

Pay my car payment next month	Buy a birthday present next month	Go to the prom in six weeks	
			Short-term
Go on vacation next year	Get my own apartment in two years	Buy a big screen TV in six months	
			Medium-term
Send my children to college	Start a business in five years	Go to college in four years	
			Long-term

Points Possible: 900

Score: 900

Slide 14

**Budgeting – How to Make the Most of What You Earn** Slide 14 of 21

**Run the Numbers**

Monique's Hint

Click the box in the category that matches the expense type.

No.	Date	Description	Payment	Food	Trans.	Housing	Clothing	Recreation
1210	9/4	Foodland — groceries	\$135.7	\$135.7				
1211	9/6	Game Depot — video game	\$51.23					\$51.23
1213	9/10	Quick Lube — oil change for car	\$29.99		\$29.99			
1214	9/15	American properties — rent	\$550			\$550		
1215	9/20	Target — work shoes	\$65				\$65	
Total:				\$135.7	\$29.99	\$550	\$65	\$51.23

Points Possible: 500

Score: 500

Slide 15

**Budgeting** – How to Make the Most of What You Earn Slide 15 of 21

**Challenge Me**

Manique's Hint

Click the two categories in which there is overspending.

Expense Category	Total Expenses	Percent of Income
Food	\$388.04	15%
Clothing	\$153.36	6%
Housing	\$475.00	19%
Utilities	\$149.59	6%
Transportation	\$320.08	13%
Medical Care	\$84.41	3%
Recreation	\$562.45	22%
Miscellaneous	\$405.00	16%

Points Possible: 200

Score: 200

Slide 19

(Answers will vary, but Food, Clothing and Recreation/Entertainment are the most likely places to cut. The game discourages cutting the fixed expense categories, Housing and Transportation. Below is one possible solution.)

**Budgeting** – How to Make the Most of What You Earn Slide 19 of 21

**Run the Numbers**

Manique's Hint

Change the budget so you save a total of \$500 over six months.

Fixed Expenses		Your monthly income
Housing	\$395 <input type="button" value="Change"/>	<b>\$1000</b>
Transportation	\$295 <input type="button" value="Change"/>	
<b>Fixed Expenses \$690</b>		
Variable Expenses		Vacation
Food	\$65 <input type="button" value="Change"/>	Amount saved each month
Medical Care	\$30 <input type="button" value="Change"/>	<b>\$85</b>
Clothing	\$10 <input type="button" value="Change"/>	Total savings after six months
Recreation/Entertainment	\$15 <input type="button" value="Change"/>	<b>\$510</b>
Utilities	\$105 <input type="button" value="Change"/>	Goal
<b>Variable Expenses \$225</b>		<b>\$500</b>
<b>Total Expenditures \$915</b>		<input type="button" value="RESET"/>

Points Possible: 100

Score: 100

**Battle questions and answers**



- 4.1 The O'Neils want to save enough money for the down payment on a house. They can qualify for a mortgage on an \$84,000 house. Their bank requires a 10% down payment. If the O'Neils intend to save \$300 a month, what type of financial goal should they set?  
 \*Medium-term  
 Short-term  
 Long-term
- Solution:  $10\% \times \$84,000 = \$8,400$  down payment. At \$300/month, that takes more than two years. Therefore it is a medium-term goal (between 2 months and 3 years into the future)
- 4.2 Finish placing the O'Neil's expense categories in the correct order, from the most expensive (1) to the least expensive.(4)  
 Recreation/Entertainment (1)  
 Housing (2)  
 Miscellaneous(3)  
 Food (4)
- 4.3. Which two expense categories should the O'Neils consider first when cutting expenses? (check only 2)  
 \*Recreation/Entertainment  
 \*Miscellaneous  
 Food  
 Housing  
 Medical Care
- 4.4 Which of these small expenses could the O'Neils eliminate to save funds for their down payment?  
 \*Pep Boys-speed parts  
 Quick Lube-Clayton's car  
 Corners Exxon-Clayton's brakes

**Solve the mission questions and answers**

- Part 1 What is the primary area in which the O'Neils are overspending?  
 \*Clayton's race hobby  
 Casey's clothing (half credit)  
 Dining out (half credit)
- Part 2 What should the O'Neils do to reduce their Miscellaneous expenses?  
 \*Pay by debit card (full credit answer)  
 \* Pay by check (full credit answer)  
 Pay by credit card (half credit answer)



Part 3 Make changes to the O'Neil's monthly budget to help them save \$300 a month for the down payment on a house they want to buy in 28 months.

Correct answers will vary:

\*As long as students take money from Recreation/Entertainment *and* Miscellaneous *only* to make up the \$300, they receive **full credit**.

If students take money from *only* Recreation/Entertainment *or* Miscellaneous, but not both, they receive **half credit**.

If students take money from categories other than Recreation/Entertainment and Miscellaneous, they receive **one-fourth credit**.

If students take money from any fixed category, they receive **zero credit**.

Part 4 What advice would you give the O'Neils for putting the funds they want to save out of sight?

\* Ask their employers to automatically withdraw funds from their paycheck to be deposited in a savings or investment account. (**full credit** answer)

Ask their bank to automatically withdraw funds monthly from their checking account to be deposited to a savings or investment account. (**half credit** answer)

Deposit their paychecks at the bank. Then get cash back for the funds they want to save and put them in a safe place at home. (**zero credit** answer)

**Insider's note**

This mission was inspired by an activity in *Your Credit Counts*; in that activity Casey's original name was "Katrina." Her name changed after Hurricane Katrina hit New Orleans.



## Mission 5: Teach Justin about credit

### Mission brief

Show Justin that credit can be his friend or his enemy, depending on how he chooses to use it.

### Mission objectives

To complete this mission, help Justin:

1. Develop a plan to pay off his credit card debt
2. Identify advantages and disadvantages to using credit
3. Identify three criteria to apply when deciding to use credit in future purchasing situations
4. Practice applying the three criteria to purchasing decisions he might encounter in the future

### Cross-references to print materials

LEI, Lesson 14, activities 1, 2 and 3

(To order the LEI materials, visit <http://store.councilforeconed.org/lei.html>)

### Best Operatives

John, Mei-Li

### In the Backpack for this mission

#### Tools

- ◆ Calculator
- ◆ Glossary
- ◆ Types of Credit
- ◆ Credit Card Payment Calculator

#### The 4-1-1

- ◆ Credit: Enemy or Friend?

### Mission Points Possible

Total excluding Bonus points	Credibility	Knowledge	Battle	Solution	Bonus
6,400	1,500	3,600	900	400	4,500

### Learning objectives

1. Calculate interest payments, minimum balances, and the cost of credit.
2. Develop and apply criteria for determining when the use of credit is appropriate.
3. Explain the damage to a credit score that results from missing payments.
4. Explain the various costs, including annual fees and finance charges, found on credit card statements.



**Profile match questions**

(There are no wrong answers and no points at stake. The preferred answers are indicated with asterisks.\*)

1. What do you think is the primary disadvantage of using a check-cashing store?
  - A. Lack of convenience
  - \*B. High fees
  - C. Slow service
  
2. I think it is riskier to buy stock than it is to gamble at a Las Vegas casino.
  - A. Strongly agree
  - B. Agree
  - C. Undecided
  - D. Disagree
  - \*E. Strongly disagree
  
3. The average American would be better off if companies didn't try to make a profit.
  - A. Strongly agree
  - B. Agree
  - C. Undecided
  - D. Disagree
  - \*E. Strongly disagree

**Credibility questions and answers**

- 5.1.1 Using credit is the same as which of these?
  - \*Borrowing money
  - Saving money
  - Investing money
  
- 5.1.2 What is revolving credit?
  - \*Credit that is automatically renewed as debts are paid off or paid down
  - Credit that is not renewed until the balance is paid in full
  - Credit that has a fluctuating interest rate
  
- 5.1.3 What is the definition of "interest" as it relates to credit?
  - \*Money paid by borrowers for the use of money they borrowed
  - The fee assessed for making late payments
  - The minimum payment on a credit account
  
- 5.1.4 If you have a credit card charging 18% annual interest, the total amount you owe each month is which of the following?
  - \*The unpaid balance on your credit card plus 1.5 percent interest on the previous balance
  - The unpaid balance on your credit card plus 18 percent interest on the previous balance
  - The unpaid balance plus 18 percent on the current balance



5.1.5 What was the minimum payment Justin was required to make on his January credit card balance?

\*\$30.00, filled in blank

Solution: Charges of \$250 (ski shop) + \$150 (skiing) + \$200 (dinner) = \$600.  
Minimum payment is 5 percent. 5 percent x \$600 = \$30.00

5.1.6 How much was the finance charge applied to the January unpaid balance?

\*\$8.55, filled in blank

Solution: January balance of \$600 - \$30 payment = \$570 unpaid balance.  
Finance charge is 1.5 percent of unpaid balance. 1.5 percent x \$5.70 = \$8.55

5.1.7 Justin mailed his February credit card payment, then his car broke down in March. He didn't have the cash to pay the repair bill, so he paid the bill using his credit card. What is the outstanding balance for March, if Justin didn't put any other charges on the card?

\*\$1103.98, filled in blank

Solution: Justin's February new balance was \$904.55. He paid the minimum of \$45.23, leaving an unpaid balance of \$904.55 - \$45.23 = \$859.32  
Finance charge was 1.5 percent x \$859.32, or \$12.89.  
New charge for car repair was \$231.77  
So the new balance was \$859.32 + \$12.89 + \$231.77 = \$1103.98

5.2.1 Which of these is a disadvantage of a revolving credit card?

- \*Balances can rise quickly if only the minimum payment is made each month.
- It's difficult for borrowers to qualify for this type of account.
- The balance on the card must be paid in full every month.

5.2.2 Making a purchase on credit is often a good idea when the purchase involves obtaining what?

- \*An asset
- A liability
- A vacation

5.2.3 Making a purchase on credit is often a bad idea when the purchase involves what?

- \*High interest payments
- Taking advantage of a sale
- An emergency

5.2.4 Which of the following is a bad use of credit?

- \*To purchase clothing
- To purchase a car
- To pay for education



- 5.2.5 Which of the following is a good use of credit?  
\*To purchase an appliance on sale  
To buy holiday presents  
To buy things you cannot afford on your income
- 5.3.1 Which one of the following is a question Justin should ask himself before deciding to make a purchase using credit?  
\*Am I purchasing an asset?  
Will this purchase make me happy?  
Can I pay off the balance within a year?
- 5.3.2 In what type of situation is using credit almost always acceptable?  
\*Emergencies  
Holiday gift giving  
Charitable contributions
- 5.3.3 Which of the following is a valid reason for deciding to use credit to make a purchase?  
\*The purchase is important and using credit will save money in the long run  
The item costs more money than you can save in a year  
You have not reached the allowable credit limit

#### **4-1-1 questions and answers**

##### Credit: Enemy or Friend?

###### *Slide 2*

Credit is the ability to use goods and services

- \*After you promise to pay for them later
- With no interest payments
- After you pay for them
- After you are approved for a loan, with a promise to pay later

###### *Slide 3*

Revolving credit is a type of credit that

- \*Automatically renews up to a certain limit as the debt is paid down or off
- Automatically raises your credit limit when you go over it
- Lets you pay just the interest every month, if you want

###### *Slide 4*

Interest on a credit card is

- \*The money you pay for the use of the money you borrowed
- The annual fee you pay to use a credit card
- The penalty you must pay if your credit card payment is late
- The minimum amount you must pay on the outstanding credit card balance

Slide 7

**Credit: Enemy or Friend?** Slide 7 of 26

**Credit Challenge**

Manique's Hint

Click the correct briefcase

Home Mortgage	Car Loans	College Loans	Personal Loans	Credit Cards

The interest paid is tax deductible	Makes it easier to work and earn an income	This is a good investment in human capital	Relatively high interest rates	Provides a record of charges
Involves extensive credit checks	The vehicle may have little value when the last payment is made	Makes it easier to work and earn an income	Makes it easier to work and earn an income	Relatively high interest rates
Requires a long-term commitment		The interest paid is tax deductible		
		New graduates may face difficulty repaying it		

Points Possible:  
900

Score:  
900

Slide 11

**Credit: Enemy or Friend?** Slide 11 of 26

**Run the Numbers**

Manique's Hint

Consult Justin's journal to complete this Run the Numbers game.

<b>January</b>		
Purchases:	\$ 600.00	
Minimum payment:	- \$ 30.00	
Unpaid balance:	\$ 570.00	
<b>February</b>		
Purchases:	\$ 326.00	
Unpaid balance:	+ \$ 570.00	
Finance charge (18% annual interest):	+ \$ 8.55	
Total owed:	= \$ 904.55	
Minimum payment:	- \$ 45.23	
Unpaid balance:	= \$ 859.32	

Round amounts to the nearest cent.

Points Possible:  
900

Score:  
900



Solution: January purchases of \$250 (ski shop) + \$150 (skiing) + \$200 (dinner) = \$600.  
 Minimum payment is 5 percent. 5 percent x \$600 = \$30.00  
 Unpaid balance = \$600 - \$30 = \$570

February purchases of \$110 (tickets) + \$105 (dinner) + \$36 (2 CDs) + \$75 (roses) = \$326.

Finance charge on unpaid balance of \$570 = 1.5 percent x \$570 = \$8.55

Total owed = \$570 + \$326 + \$8.55 = \$904.55

Minimum payment is 5 percent x \$904.55 = \$45.23

Unpaid balance = \$904.55 - \$45.23 = \$859.32

Slide 15

**Credit: Enemy or Friend?** Slide 15 of 26

**Run the Numbers**

How many months it will take Justin to pay off his credit card if he pays a certain amount every month?

Unpaid balance: \$859.32  
 Annual interest rate: 18%

Monthly payment: \$45 Balance paid off in <input type="text" value="23"/> months Interest paid: \$ <input type="text" value="160.9"/>	Monthly payment: \$75 Balance paid off in <input type="text" value="13"/> months Interest paid: \$ <input type="text" value="90.8"/>
Monthly payment: \$100 Balance paid off in <input type="text" value="10"/> months Interest paid: \$ <input type="text" value="67.74"/>	Monthly payment: \$150 Balance paid off in <input type="text" value="7"/> months Interest paid: \$ <input type="text" value="45.97"/>

Points Possible: 400  
 Score: 400

Slide 18

- This is the amount Justin must pay by the due date to avoid a penalty. *Minimum Amount Due*
- This is the amount owed that was not paid by the due date. *Past Due*
- This is the phone number Justin should call if he finds any errors in the statement. *Customer Service*
- This is the date by which the credit care provider must receive Justin's payment to avoid a late penalty. *"Payment must be received by 5:00 pm local time on 3/25/2009"*
- This area shows the purchases Justin made during the billing cycle. *Activity Since Last Statement*
- This is the annual percentage rate that Justin pays for purchases if he does not pay the balance in full every month. *Annual Percentage Rate*



- This is the unpaid balance from the previous billing cycle. *Previous Balance*
- This amount is the total of purchases and cash advances made during this billing cycle, plus the previous balance and any finance charges and late fees. *New Balance*

**Credit: Enemy or Friend?** Slide 18 of 26

Where It's At

Monique's Hint

Roll your cursor over the highlighted areas.

**MetroBank Gold Preferred Card** Account Number - 5555 7212 6383 7000

Total Credit Line	Available Credit	Cash Advance Limit	Available Cash Limit	New Balance
\$2,000	\$1,065.40	\$500	\$500	\$304.50

Statement Closing Date	Amount Over Credit Line	Past Due	Purch/Adv Min Due	Minimum Amount Due
2/25/2009	\$0.00 [-]	\$0.00 [-]	\$45.23	[+] \$45.23

Date	Post date	Reference #	Activity Since Last Statement	Amount
			Payments, Credits & Adjustments	\$20.00
2/10/2009	2/10/2009	1982698A	Ticketmaster	\$110.00
2/10/2009	2/10/2009	8610121F	Booker & Baber Theatre, Inc	\$110.00
2/10/2009	2/10/2009	822261FK	Walmart.com Credit Refund	\$100.00
2/14/2009	2/15/2009	99A28207	Telephone	\$15.00

Account Summary	Previous Balance	(+) Purchases & Advances	(-) Credits	(+) Finance Charge	(=) New Balance
	\$690.00	\$200.00	\$200.00	\$95.50	\$695.50
ADVANCES	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TOTAL	\$690.00	\$200.00	\$200.00	\$95.50	\$695.50

Rate Summary	Balance Subject to Finance Charge	Periodic Rate	Normal APR	ANNUAL PERCENTAGE RATE
FINANCIALS	\$690.00	1.92%	18%	18%
ADVANCES	\$0.00	2%	24%	24%

Points Possible: 800

Score: 800

PAYMENT MUST BE RECEIVED BY 5:00 PM LOCAL TIME ON 3/25/2009

ANNUAL FEE: \$25

SEND PAYMENTS TO:  
MetroBank-Credit  
PO Box 790  
Anytown, State 99999

Customer Service:  
1-800-655-1212  
MetroBank-Credit  
PO Box 790  
Anytown, State 99999

Slide 23

Bill needs a new mattress and box spring. He's been sleeping on the same set he used as a kid, and his back is killing him. He was planning to save \$50 a month toward a set that retails for \$400. The set he wants is now on sale for \$300, but only for a limited time. If Bill has to pay 18% annual interest on his card, is it a good idea or a bad idea for him to buy the set on credit?

\*Good Idea

Slide 24

Mike has 2 credit cards, both charged close to the limit. Mike manages to make the minimum payments each month, thanks to his part-time job delivering pizza. Mike really wants to go on a spring-break trip with his friends, but doesn't see how he can afford it. Then he gets a friendly letter from one of his credit card companies. The letter says that because he always makes his payments on time, the company is raising his credit limit by \$2,000. Mike is thrilled! Now he can go on the spring break trip with his friends and charge his expense to his credit card. Is this a good idea or a bad idea?

\*Bad Idea

*Slide 25*

Ana graduated from high school last year near the top of her class. She works as a receptionist at a physical therapy clinic making \$8.50 an hour. She'd like to train to be a physical therapist – the work is appealing and she could earn more than \$50,000 a year. But Ana's parents cannot afford to pay for the training and Ana doesn't have the money either. She would need to take out a student loan and pay it back over a ten-year period after she completes her training. Is getting a student loan a good idea or a bad idea for Ana?

\*Good Idea

**Battle questions and answers**

5.1.1 If Justin stops using his credit card after the car repair purchase, and he makes a payment of \$55 every month, how many months will it take Justin to pay off his credit card?

\*25, filled in blank

Solution: Fill in credit card calculator: Balance of \$\*\*, \$55 per month,

5.1.2 How much money will Justin pay in interest from the time he decided to stop using the credit card until the balance is paid off?

\*\$219.51, filled in blank

Solution: Fill in credit card calculator: Balance of \$\*\*, \$55 per month, yields \$219.51 interest

5.2.1 Which of Justin's credit card purchases was a good use of credit?

\*Car repair

Ski trip

Concert tickets

5.3.1 What are the three questions Justin should ask himself before he uses credit to make a purchase? (Check only three)

\*Is this an asset?

\*Is this an emergency?

\*Is this an important purchase and will using credit save me money on it?

Is this something I cannot do without?

Will the charge take me over my credit limit?

Will I be able to make the minimum monthly payment?

**Solve the mission questions and answers**

Part 1 Justin is anxious to pay off his credit card debt so he can start saving money for college again. He has re-evaluated his budget and decided he can afford to pay the balance off in 6 months. How much will he need to pay every month to achieve this goal?

\*\$200

\$100

\$150

\$250



Part 2 After Justin graduates, he'd like to go to college and study economics. Although Justin is working part time, he knows he won't be able to save enough money to afford the tuition. His parents can't afford to help him either. Justin has investigated student loans and knows he would have to pay back anything he might borrow over a ten-year period after he graduates from college. Should Justin take out a student loan?

\*Yes

No

Part 3 Justin has invited the most popular girl in the senior class to the prom. He has saved up enough money to rent a tux and take her to dinner, but now she's begging him to rent a limo and go with another couple they are friends with. The limo will cost each couple \$250, and Justin doesn't have the cash. Senior prom is a once-in-a-lifetime event, and Justin really wants to impress his date. Should Justin agree to the limo and pay for it with his credit card?

\*No

Yes

Part 4 Justin's car is an old junker that his older sister gave him when he got his driver's license. The car has been breaking down a lot lately. In fact, he spent over \$200 to repair the car just recently. Justin has been late to work twice in the last week because of car problems. His boss has told Justin if it happens again, he'll have to let him go. Justin gets paid a good salary, and he has no other source of income. He's wondering if he should buy a better used car, even if it means borrowing the money and taking on monthly car payments for a couple of years?

\*Yes

No

**Insider's note**

This mission calls for students to explore Justin's journal for relevant amounts of money. Part of the challenge is the scavenger hunt to find the figures.



**Mission 6: Advise Kai on how to invest his grandmother's \$10,000**

**Mission brief**

Persuade Kai to invest his grandmother's \$10,000 in a type of asset with the appropriate risk and return for the time when he will need the money for college.

**Mission objectives**

To complete this mission, help Kai understand:

1. Why people don't do what they should do
2. The alternative asset vehicles
3. The tradeoff between risk and return and
4. The importance of time horizon

Then you must recommend an appropriate investment for his grandmother's \$10,000.

**Cross-references to print materials**

*LEI* lesson 1 on "pay yourself first" and compounding; *LEI* lesson 15 on why people don't do what they should do; *LEI* lesson 12 risk pyramid and asset selection (floor marker) game.

(To order the *LEI* materials, visit <http://store.councilforeconed.org/lei.html>)

**Best Operatives**

John, Deacon

**In the Backpack for this mission**

Tools

- ◆ Calculator
- ◆ Glossary
- ◆ Guide to Investments

The 4-1-1

- ◆ Risk Versus Return

**Mission Points Possible**

Total excluding Bonus points	Credibility	Knowledge	Battle	Solution	Bonus
3,320	1,600	520	900	300	4,500

**Learning objectives**

1. Explain the costs and benefits of saving.
2. Show why a goal with tangible short-term costs and less tangible long-term benefits may be harder to achieve.
3. Describe the relationship between risk and return across asset categories.
4. Choose an appropriate investment vehicle for someone with a specified time horizon and risk tolerance.



**Profile match questions**

(There are no wrong answers and no points at stake. The preferred answers are indicated with asterisks.\*)

1. Investing in corporate bonds carries less risk than investing in a company's stock
  - \*A. Strongly agree
  - B. Agree
  - C. Undecided
  - D. Disagree
  - E. Strongly disagree
  
2. You will always get your money back when you buy a bond.
  - A. Strongly agree
  - B. Agree
  - C. Undecided
  - D. Disagree
  - \*E. Strongly disagree
  
3. Investing in mutual funds carries the same risk as investing in an individual stock or bond
  - A. Strongly agree
  - B. Agree
  - C. Undecided
  - D. Disagree
  - \*E. Strongly disagree

**Credibility questions and answers**

- 6.1.1 What are costs?
  - \*The highest valued alternative that you give up when you make a choice.
  - Money spent
  - Money received
  
- 6.1.2 What are benefits?
  - \*Monetary or non-monetary gains you receive when you make a choice
  - Money received
  - Intangible assets
  
- 6.1.3 What is cost/benefit analysis?
  - \*The process of examining the advantages and disadvantages of each alternative in arriving at a decision
  - The process of identifying alternative choices
  - The process of setting goals



- 6.1.4 What does the term "saving" refer to?  
\*Income not spent on consumption or taxes  
Getting a discount when you buy something on sale at a store  
Borrowing at a low interest rate
- 6.1.5 Which of the following are benefits of saving? (check all that apply)  
\*Ability to attain your financial goals  
\*A feeling of security and satisfaction  
Ability to buy now, pay later
- 6.1.6 Which of the following is a cost of saving?  
\*Having less money to buy things now  
Having more money to buy things in the future  
A feeling of financial well being
- 6.1.7 Which of the following is an incentive that encourages people to save money?  
\*Earning interest on money saved  
The opportunity cost of saving  
The marginal cost of saving
- 6.2.1 In which of the following would you put money you use to pay monthly bills?  
\*Checking account  
Certificate of deposit  
Savings account
- 6.2.2 With this type of asset, in effect you are making a loan.  
\*Bond  
Stock  
Money Market Fund
- 6.2.3 You become part-owner of the corporation when you invest in this type of asset.  
\*Stock  
Bond  
Real Estate
- 6.2.4 Which of the following is an advantage of mutual funds?  
\*Diversification  
Consolidation  
Guaranteed rate of return
- 6.2.5 Being a landlord is sometimes a requirement of owning this type of asset.  
\*Real Estate  
Stock mutual fund  
Bond mutual fund



- 6.3.1 Which of the following statements describes the relationship between risk and return as it relates to investments?  
\*The greater the return, the higher the risk  
The greater the risk, the lower the return  
Risk and return are not related
- 6.3.2 Which of the following asset types has the least risk?  
\*Checking account  
Money market mutual fund  
Bond mutual fund  
Stock mutual fund
- 6.3.3 Which of the following asset types has the greatest potential return?  
\*Individual stocks  
Stock mutual fund  
Real estate  
Certificate of deposit
- 6.3.4 Which of the following factors affect a person's level of risk tolerance? (check all that apply)  
\*Time horizon (when you will need the money)  
\*Financial goals  
\*Comfort level with risk  
Knowledge of finance  
Attitude toward saving

#### **4-1-1 questions and answers**

##### Risk Versus Return

###### *Slide 4*

Stock Mutual Funds: Pool funds from individual investors to buy shares in publicly held corporations.

Bond Mutual Funds: Pools securities that were originally issued by corporations and governments.

Certificates of Deposit: Issued by banks; very safe, however, instant access carries a penalty because they have a predetermined maturity date.

Real Estate: The risks and benefits of owning property such as land as an investment.

Money Market Mutual Funds: Usually very safe because they pool high quality short-term investments, often offer somewhat higher returns than similar accounts issued by banks.

Checking Accounts: Provide little or no return and are eligible for federal insurance protection.

Savings Accounts: Provide a small but steady return and are eligible for federal insurance protection.

Individual Stocks: Part ownership, higher risks and, potentially, higher returns than mutual funds.

Slide 9



**Risk VERSUS Return** Slide 9 of 15

**Match 'em Up Game**

Monique's Hint

Click an item on the left, then click an item on the right.

- Financial goals: When you will need the money that you're investing—Next year? 5 years? 25 years?
- Time horizon: Will you be able to sleep at night knowing your money is invested in a high risk asset?
- Comfort level with risk: Your incentive for saving. Examples: home, car, vacation, college

Points Possible: 60  
Score: 60

Slide 12

Jeff: Stock mutual funds

Slide 13

Kit: Certificate of Deposit

Slide 14

Pedro: Bond Mutual Funds



**Battle questions and answers**

- 6.1.1 Kai knows he should save the money for college, but why might he not do what he should do?  
\*The costs of saving are immediate and certain, while the benefits are in the future and uncertain.  
The benefits of saving are immediate and certain, whereas the costs are in the future and uncertain.  
The benefits of saving outweigh the costs
- 6.2 Which of the following types of assets are insured by the federal government? (check all that apply)  
\*Checking account  
\*Savings account  
\*Certificate of deposit  
Bond  
Stock
- 6.3. Order these types of assets from least risk (1) to most risk (8)  
1. Checking account  
2. Savings account  
3. Certificate of deposit  
4. Money market fund  
5. Bond mutual funds  
6. Stock mutual funds  
7. Real estate  
8. Individual stocks

**Solve the mission questions and answers**

- Part 1 Which of the following time horizons should Kai use in determining the type of asset to invest in?  
\*Intermediate term (2-10 years)  
Short term  
Long term
- Part 2 Given that Kai is nervous about the risks that come with investing, which asset type would you recommend he avoid?  
\*Individual stocks  
Money market mutual funds  
Bond mutual funds



Part 3 Knowing Kai's risk tolerance, which of the following types of assets is the best choice for Kai?

- \*Bond mutual fund (**full credit** answer)
- Money market fund (**85% credit** answer)
- Stock mutual fund (**50% credit** answer)
- Certificates of deposit (**50% credit** answer)
- Savings account (**25% credit** answer)
- Individual stocks (**zero credit** answer)

**Insider's note**

This mission was originally called “Grandma’s 10 Grand” but was changed to reflect a more respectful tone toward older persons, and also to acknowledge that “grand” as a substitute for “thousand” is not universal slang. The mission objective on “Why people don’t do what they should do?” provides an introduction to one of the hottest fields in current economic research: behavioral economics.



**Mission 7: Convince Paul, Fred and Diana to reconsider their choice of financial institution**

**Mission brief**

Convince Paul, Fred and Diana to reconsider their decision to use alternative financial institutions in favor of less expensive choices.

**Mission objectives**

To complete this mission:

1. Help Paul, Fred and Diana with some basic information about alternative financial institutions
2. Present the advantages and disadvantages of each alternative financial institution
3. Help your contacts calculate the cost of using alternative financial institutions
4. Guide them to choose less expensive ways to meet their financial needs

**Cross-references to print materials**

*Your Credit Counts Challenge*. The examples for check-cashing outlets, payday loans and rent-to-own stores are drawn from Section 2 of the Participants' Guide. Also, see the Trainer's Guide for Visuals 2.5 to 2.14.

(To order the YCCC materials, visit <http://store.councilforeconed.org/yourcreditcounts.html>)

**Best Operatives**

John, Mei-Li

**In the Backpack for this mission**

Tools

- ◆ Calculator
- ◆ Glossary
- ◆ Types of Financial Institutions

The 4-1-1

- ◆ Financial Institutions

**Mission Points Possible**

Total excluding Bonus points	Credibility	Knowledge	Battle	Solution	Bonus
3,900	1,700	900	900	400	4,500

**Learning objectives**

1. Identify the types of alternative financial institutions, such as check-cashing stores, rent-to-own stores, and payday lenders.
2. Recognize the advantages and disadvantages of using alternative financial institutions.
3. Recognize the advantages and disadvantages of using mainstream financial institutions.

**Profile match questions**



(There are no wrong answers and no points at stake. The preferred answers are indicated with asterisks.\*)

1. To get the highest long-term gains, investors should:
  - A. Buy the stock of companies they know and like
  - B. Buy the stock of companies if they are the subject of favorable rumors on the internet
  - \*C. Buy and hold a diversified set of stocks
  
2. A market system based on supply and demand is an efficient way to allocate goods and services.
  - \*A. Strongly agree
  - B. Agree
  - C. Undecided
  - D. Disagree
  - E. Strongly disagree
  
3. I plan to avoid investing in stocks because stock markets can crash
  - A. Strongly agree
  - B. Agree
  - C. Undecided
  - D. Disagree
  - \*E. Strongly disagree

**Credibility questions and answers**

- 7.1.1 Which of the following are considered mainstream financial institutions? (check all that apply)
- \*Credit Unions
  - \*Banks
  - \*Brokerage Firms
  - Title loan companies
- 7.1.2 What does it mean for a person to be "unbanked?"
- \*The person does not have a relationship with a mainstream financial institution
  - The person does not have a bank-approved health insurance plan
  - The bank has closed the person's checking account for writing bad checks
- 7.1.3 Which of the following are considered alternative financial institutions? (check all that apply)
- \*Check cashing outlets
  - \*Rent-to-own stores
  - \*Payday loan companies
  - Banks
  - Credit Unions
- 7.1.4 Which of the following will give you a small loan for a short term?



- \*Payday loan company
  - Rent-to-Own store
  - Brokerage firm
- 7.1.5 If you own a car and don't owe any money on it, you can use it as collateral to get a short-term loan at this type of institution.
- \*Title loan company
  - Buy here, pay here car dealer
  - Rent-to-own store
  - Brokerage firm
- 7.1.6 This alternative financial institution deals in appliances, furniture, televisions, and CD systems.
- \*Rent-to-own stores
  - Payday loan company
  - Title loan company
  - Check-cashing outlet
- 7.1.7 Which of these will sell you a money order?
- \*Check-cashing outlet
  - Brokerage firm
  - Payday loan company
- 7.1.8 Which of these institutions offers home equity loans?
- \*Bank
  - Payday loan company
  - Brokerage firm
  - Title loan company
- 7.2.1 Which of the following is an advantage of a check-cashing store?
- \*Identification is the only requirement
  - Signing some forms is the only requirement
  - Proof of employment is the only requirement
- 7.2.2 An advantage of this type of institution is that you can obtain a major appliance immediately.
- \*Rent-to-own store
  - Payday loan company
  - Title loan company
- 7.2.3 Which of the following is an advantage of a payday loan?
- \*You receive the money immediately
  - You can pay the loan off over several months with no additional interest
  - Low interest rates



- 7.2.4 The risk of falling further and further behind is a disadvantage of doing business with which of the following? (check all that apply)
- \*Title loan company
  - \*Payday loan company
  - Rent-to-own store
  - Check-cashing outlet
- 7.2.5 Which of the following is a disadvantage of doing business with a check-cashing outlet?
- \*Failure to establish a financial history with a bank
  - Risk being short of cash again by the next payday
  - Low interest rates
- 7.2.6 Which of the following is a disadvantage of mainstream financial institutions?
- \*Don't offer short-term loans for small amounts of cash
  - Inconvenient locations
  - High interest rates
- 7.3.1 How much is the check cashing fee at the QuikMart Check Cashing store for a check of \$500 or less?
- \*3 percent of the check amount
  - \$15
  - It's free if you buy something in the store.
- 7.3.2 What is the monthly payment on a new 52" flat screen TV at Rick's Rent-to-Own store?
- \*\$100
  - \$75
  - \$50
- 7.3.3 What interest rate does Fast Cash Payday Loans charge for a two week loan up to \$500?
- \*15 percent, filled in blank



**4-1-1 questions and answers**

Financial Institutions

*Slide 4.3.3*

Imagine that you take out a \$200 payday loan for two weeks with a 20% interest rate. If you take 3 months to pay off this loan (making 5 renewals) how much interest will you have paid?

\*\$400

\$200

\$600

Solution:

	Weeks elapsed	Loan amount	Interest @ 20%	New balance
Original loan	0	\$200	\$40	\$240
First renewal	2	\$240	\$48	\$288
Second renewal	4	\$288	\$57.60	\$345.60
Third renewal	6	\$345.60	\$69.12	\$414.72
Fourth renewal	8	\$414.72	\$82.94	\$497.66
Fifth renewal	10	\$497.66	\$99.53	\$597.19

The new balance to be paid off is \$597.19. Since the original amount borrowed was \$200, the part of the new balance due to interest is  $\$597.19 - \$200 = \$397.19$ , rounded to \$400.

*Slide 6*

**Financial Institutions** Slide 6 of 11

**Click to Win**



Monique's Hint

Points Possible: 800

Score: 800

Drag the description to the business it matches.

No record of the money	Risk losing the cash	Cash the check immediately	 <p><b>Check-Cashing Store</b></p>
Return the product at any time	Obtain the product immediately	Goods cost 2-5 times as much as at ordinary stores	 <p><b>Rent-to-Own Store</b></p>
	Identification and proof of employment are the only requirements	Renewals cause the borrower to fall further and further behind	 <p><b>Payday/Title Loan Company</b></p>



**Battle questions and answers**

- 7.1 What are three reasons why many families use alternative financial institutions?  
 \*They provide useful services, such as short-term loans, check cashing, and wire transfers  
 \*Convenient locations  
 \*Services are quick, no hassle  
 No fees  
 Low effective rates of borrowing

- 7.2.1 Which of the following are advantages of using mainstream institutions? (check all that apply)  
 \*Credit history  
 \*Security  
 \*Record keeping  
 \*Encourages saving  
 Higher cost

- 7.2.2 Which of the following are disadvantages of being "unbanked"? (check all that apply)  
 \*It's expensive  
 \*It's risky  
 It's convenient  
 It's hassle-free

- 7.3.1 How much will Paul pay annually to cash his pay check at the QuikMart?  
 \*\$780, filled in blank

Solution: Paycheck of \$500 per week x 0.03 (3 percent fee) = \$15 per week  
 Paul gets 52 paychecks per year  
 $\$15 \text{ per week} \times 52 = \$780$

- 7.3.2 How much will Fred pay for a 52" flat screen TV if he follows the rent-to-own plan at Rick's Rent-to-Own store?  
 \*\$3,105, filled in blank

Solution: 30 months' rental @ \$100 per month = \$3,000  
 Service fee is \$30  
 Sales tax on original purchase price (5% of \$1,500):  $0.05 \times \$1,500 = \$75$   
 Total:  $\$3000 + \$30 + \$75 = \$3,105$ .

- 7.3.3 If Diana takes out a two-week payday loan for \$500, how much interest will she pay?  
 \*\$75, filled in blank

Solution: Handbill says interest rate is 15 percent:  $\$500 \times 0.15 = \$75$

**Solve the mission questions and answers**

Part 1 Which of the following recommendations would you make to Paul?

\*Open a checking account and have his paycheck deposited automatically each month  
(**full credit** answer)

Open a savings account at the bank, then cash his paycheck at the bank each month (**half credit** answer)

Continue to cash his paycheck at the QuikMart (**zero credit** answer)

Part 2 The Right Price electronics store is selling 52" flat screen TVs for \$1,500 (plus 5% tax). How much money would Fred save if he waits until he can afford to buy the TV at Right Price rather than at Rick's Rent-to-Own?

\*\$1,530, filled in blank

Solution: At Rick's, as previously calculated, 30 months' rental @ \$100 per month = \$3,000

Service fee is \$30

Sales tax on original purchase price (5% of \$1,500):  $0.05 \times \$1,500 = \$75$

Total:  $\$3,000 + \$30 + \$75 = \$3,105$ .

At The Right Price,  $\$1,500 + 5\% \text{ tax} = \$1,500 + (\$1,500 \times 0.05) = \$1,500 + \$75 = \$1,575$ .

The difference is  $\$3,105 - \$1,575 = \$1,530$

Part 3 Which of the following recommendations would you make to Fred?

\*Borrow a TV for the big game, and then save the \$99 a month until he can buy the TV at Right Price. (**full credit** answer)

Buy a used TV at a second-hand store for \$100. (**half credit** answer)

Buy the TV at Rick's Rent-to-Own. It's worth the extra cost to be able to watch the Super Bowl in high def. (**zero credit** answer)

Part 4 Which of the following recommendations would you make to Diana?

\*Ask the dentist to spread the payment over three months for little to no interest charge. (**full credit** answer)

Apply for a short-term loan at a credit union at 10% interest (**half credit** answer)

Get a \$500 loan at Fast Cash payday loans [**15% credit** answer]

**Insider's note**

The content for this mission was developed as part of a pioneering workshop held at the Bougahoma Missionary Baptist Church in Lowndes County, Alabama, a famous site in the civil rights movement of the 1960s.



## Mission 8: Help Uncle Louie learn the basics about stocks

### Mission brief

Teach Uncle Louie the basics about stocks, so he can choose appropriate stocks for his nephew Patrick's portfolio.

### Mission objectives

To be successful in this mission you must:

1. Help Uncle Louie understand the basics of investing in stocks
2. Teach Uncle Louie about the advantages and disadvantages of owning stocks
3. Show Uncle Louie how to read a stock table
4. Guide Uncle Louie in using the stock table to pick stocks to meet various investment criteria

### Cross-references to print materials

LEI lessons 4 and 5; Lesson 5 Activity 1 shows how to read a stock table.

(To order the LEI materials, visit <http://store.councilforeconed.org/lei.html>)

### Best Operatives

John, Deacon, Terrell

### In the Backpack for this mission

#### Tools

- ◆ Calculator
- ◆ Glossary
- ◆ Understanding a Stock Table

#### The 4-1-1

- ◆ Stocks

### Mission Points Possible

Total excluding Bonus points	Credibility	Knowledge	Battle	Solution	Bonus
4,400	1,600	1,400	900	500	4,500

### Learning objectives

1. Define stock, dividend, stockholder, savings, income.
2. Understand why corporations issue stock.
3. Understand why people buy stock.
4. Identify the main advantages and disadvantages to owning stock.
5. Understand the risks of stock and ways that stockholders can reduce these risks.
6. Read stock tables presented in a newspaper or online.

### Profile match questions



(There are no wrong answers and no points at stake. The preferred answers are indicated with asterisks. \*)

1. If a company makes a huge profit from selling its products to consumers, the government should require the company to lower the price of its products.
  - A. Strongly agree
  - B. Agree
  - C. Undecided
  - D. Disagree
  - \*E. Strongly disagree
  
2. Before you start investing, you should have enough money in a savings account for emergencies.
  - \*A. Strongly agree
  - B. Agree
  - C. Undecided
  - D. Disagree
  - E. Strongly disagree
  
3. Young people should invest most of their money in stocks.
  - \*A. Strongly agree
  - B. Agree
  - C. Undecided
  - D. Disagree
  - E. Strongly disagree

**Credibility questions and answers**

- 8.1.1 Which of the following gives you part ownership in a corporation?
  - \*Stock
  - Bond
  - Commercial paper
  - Annuity
  
- 8.1.2 Why do corporations issue stock?
  - \*To raise money to operate the business and help the company grow
  - To reduce the corporation's income taxes
  - To get publicity
  
- 8.1.3 Who receives the money when stock is sold in an IPO?
  - \*The company that issued the stock
  - The secondary market
  - The public buying the stock



- 8.1.4 The NYSE Euronext and NASDAQ are examples of which of the following?  
\*Secondary stock market  
Primary stock market  
American Stock Exchange
- 8.1.5 Who receives the money when stock is sold in the secondary stock market?  
\*The investor selling the stock receives the money  
The investor buying the stock receives the money  
The corporation that issues the stock receives the money
- 8.1.6 What is a stock dividend?  
\*The part of the company profits paid by the corporation to the shareholders  
A capital gain  
The price for which stock is sold in an IPO
- 8.2.1 What is the reason people buy stock?  
\*People expect to earn a return on their investment  
Stocks are insured by the federal government against loss  
People receive guaranteed interest payments every year
- 8.2.2 How do people earn money from stocks? (check all that apply)  
\*By selling stock at a higher price than they paid for it  
\*By receiving dividends from the stock they own  
By selling stock at a lower price than they paid for it  
By buying stock from an investment banker
- 8.2.3 Which of the following statements is true?  
\*People buy stock with the understanding that they may lose money.  
People buy stock knowing they will receive guaranteed annual dividends.  
People buy stock with the understanding that they will be able to sell it at a higher price than they paid for it.
- 8.2.4 What are the main advantages of owning stock? (check all that apply)  
\*Sharing in the company's profits as the corporation grows  
\*Having the opportunity to earn an above-average return on a financial investment  
Having an investment that is guaranteed by the federal government  
Having an investment in which the return is greater than the risk
- 8.2.5 What is the main disadvantage of being a stockholder?  
\*The risk of losing all or part of the investment  
The cost of buying and selling the stock versus the potential for return  
The records you have to keep for tax purposes



- 8.3.1 Which of the following information does NOT appear on a stock table?
- \*Opening price
  - Stock symbol
  - Closing price
  - Volume
  - Net change
- 8.3.2 In a stock table, DIV stands for what?
- \*Dividend
  - Divided by
  - Diversified
- 8.3.3 In a stock table, YLD stands for yield, which is what?
- \*The dividend as a percentage of the stock's closing price
  - The opening stock price for the trading day
  - The percentage of stock owned by the investor
  - The ratio of price to earnings
- 8.3.4 In a stock table, NET CHG is the difference between the closing price and which of the following?
- \*The previous day's closing price
  - The previous day's opening price
  - The 52 week high
  - The 52 week low
- 8.3.5 In a stock table, VOL is the number of shares that were traded when?
- \*On the previous trading day
  - On the current trading day
  - Over the past 52 weeks

#### **4-1-1 questions and answers**

##### **Stocks**

###### *Slide 2*

Equity is another term for

- \*Stock
- Company
- Return
- Risk



*Slide 3*

Income is

- \*Earnings from work performed or from investments
- Another name for equity
- Payments made for goods or services received
- Earnings not spent on consumption or taxes

*Slide 4*

The part of profits that a company pays to shareholders is called

- \*Dividends
- Equity
- Stock
- Income

*Slide 5*

Income not spent on consumption or taxes is

- \*Savings
- Budget
- Earnings
- Interest

*Slide 13*

- What is the annual dividend for Huge Aircraft? *0.68*
- What is the 52-week low stock price for Souper Supper? *6.94*
- What is the name of the stock whose share price declined the most from the previous day?  
*Giant Electronics*
- What is the name of the stock whose price remained unchanged from the previous day?  
*Vitamaker*
- What is the 52-week high stock price for Pop's Pizza? *68.03*
- What is the name of the stock that has the highest price-to-earnings ratio? *Giant Electronics*
- What is the name of the stock that pays the highest dividend? *Tasty Foods*
- What is the name of the stock that has the highest volume? *Giant Electronics*
- What is the yield for Tasty Foods? *2.5*
- What is the name of the stock that closed at less than a dollar per share? *Dorm Computer*

**Stocks** Slide 13 of 14

Where It's At

Monique's Hint

Points Possible: 1000

Score: 1000

Today's Financial News

52-WK		STOCK (SYM)	DIV	YLD	P/E	VOL 100S	CLOSE	NET CHG
HI ↑	LO ↓							
46.03	24.73	Huge Aircraft (HAC)	0.68	2.5	9	35,407	26.78	0.13
42.65	29.75	Giant Electronics (GEL)	0.60	1.8	36	66,675	33.36	-0.90
22.61	11.91	Vitamaker (VTM)	0.25	1.6	11.18	45,629	15.71	0
38.05	6.94	Souper Supper (SSP)	-	-	25.41	3,402	21.72	0.76
50.37	25.02	Tasty Foods (TFD)	0.75	2.5	10.65	4,983	30.08	0.38
5.73	0.30	Dorm Computer (DCP)	-	-	1.24	286	0.48	-0.02
68.03	55.74	Pop's Pizza (PZZ)	0.21	0.3	13.65	6,382	68.01	1.58

Roll your cursor over the highlighted areas.

(Note to teachers: The most common errors on this game come from questions that ask, for example, about the name of a stock with a particular characteristic, such as P/E ratio. Students must click the **name** of the stock rather than the high ratio to get credit.)

### Battle questions and answers

- 8.1.1 Put these events in the correct order to show the corporate stock process.
- 1) A corporation decides to raise money by issuing shares of stock
  - 2) The corporation hires an investment banker
  - 3) The investment banker sells the stock to investors in an Initial Public Offering (IPO)
  - 4) Investors who buy the stock either keep it or eventually sell it in the secondary market to other investors who want to buy it.
- 8.2.1 What can people do to reduce their chance of loss in the stock market?
- \*Diversify their investment portfolio
  - Invest in only one stock
  - Buy only "hot stocks"
  - Trade their stocks every few months



- 8.3.1 Which information on the stock table would help you determine a company's growth rate?  
\*P/E  
SYM  
VOL  
52-WK HI
- 8.3.2 What does it mean if a P/E ratio is not reported on the stock table?  
\*The corporation lost money during the last four quarters  
The corporation made money during the last four quarters  
The corporation has filed for bankruptcy  
The corporation asked to have that information withheld
- 8.3.3 If you are interested in buying stocks that pay a dividend, which information in the stock table would be of particular interest, in addition to the dividend amount?  
\*YLD  
VOL  
CLOSE  
SYM

**Solve the mission questions and answers**

Part 1 If Uncle Louie wants a stock with a high dividend, which stock would be the best pick?

- \*Big Burger Hut (full credit)
- ElectroLarge (3/4 credit)
- Toytronics
- Intellimorph

Part 2 If Uncle Louie wants a stock with a high dividend yield, which stock should he pick?

- \*National Appliance Warehouse (full credit)
- ElectroLarge (half credit)
- Big Burger Hut (1/4 credit)
- Toytronics

Part 3 Which stock's price was the same as on the previous trading day?

- \*VetPharm
- Big Burger Hut
- Toytronics
- Biotechnotics

Part 4 If Uncle Louie is looking for a stock with the lowest p/e ratio, which one should he pick?"

- \*Intellimorph
- ElectroLarge
- VetPharm
- National Appliance Warehouse



Part 5 Which stock should Uncle Louie pick if he's interested in a high growth stock?

Toytronics\*

National Appliance Warehouse

Intellimorph

Big Burger Hut

**Insider's note**

If your students would like to study real companies' stocks, <http://finance.yahoo.com> has excellent profiles and search tools.



## Mission 9: Teach Tyrone and Felicia how to invest in bonds

### Mission brief

Teach Tyrone and Felicia how to invest in bonds.

### Mission objectives

To be successful in this mission you must:

1. Help Tyrone and Felicia understand the basics of investing in bonds
2. Teach Tyrone and Felicia about the advantages and disadvantages of owning bonds
3. Help them understand the relationship between bond ratings, default risk, and rate of return
4. Show Tyrone and Felicia how to read a bond table

### Cross-references to print materials

LEI Lessons 5 and 6 on bonds:

- ◆ LEI Lesson 5 Activity 3 on how to read a bond table
- ◆ LEI Lesson 6, Visual 3 and Activity 3 to demonstrate the difference between coupon and zero coupon bonds
- ◆ LEI Lesson 6, Activity 5, to demonstrate how bonds are rated

(To order the LEI materials, visit <http://store.councilforeconed.org/lei.html>)

### Best Operatives

John, Deacon, Terrell

### In the Backpack for this mission

#### Tools

- ◆ Calculator
- ◆ Glossary
- ◆ How to Read a Bond Table

#### The 4-1-1

- ◆ Bonds

### Mission Points Possible

Total excluding Bonus points	Credibility	Knowledge	Battle	Solution	Bonus
4,700	1,700	1,600	900	500	4,500

### Learning objectives

1. Explain what a bond is and how bonds are used by corporations and governments.
2. Define face value, coupon rate, and maturity date.
3. Understand the difference between coupon bonds and zero coupon bonds.
4. Identify advantages and disadvantages of owning bonds.
5. Identify the relationship between a bond's rating, default risk, and rate of return.



6. Read bond tables presented in a newspaper or online.

**Profile match questions (repeated from Mission 1)**

(There are no wrong answers and no points at stake. The preferred answers are indicated with asterisks.\*)

1. When you have money to invest for the long term, what do you plan to do with it?
  - A. Buy and sell stocks and bonds frequently
  - \*B. Buy and then hold onto stocks and bonds
  - C. Hold the money in a bank account
  
2. Which do you think is a better savings strategy?
  - \*A. Put all of your savings in different types of investment instruments.
  - B. Choose one type of investment and stick to it.
  - C. Keep it in my piggy bank.
  
3. What's a good time to begin retirement planning?
  - A. When you are fifty years old, or about 15 years before you retire
  - B. When you're about 30 and have your career established
  - \*C. When you're in your early twenties, at your first opportunity

**Credibility questions and answers**

- 9.1.1 What is a bond?
  - \*A certificate representing a loan from an investor to a corporation or government entity
  - A certificate representing ownership in a corporation
  - A payment from an investor to a corporation for the rights to future profits
  - A group of stocks sold together for a fixed price
  
- 9.1.2 What is the face value of a bond?
  - \*The original loan amount
  - The interest amount
  - The original loan amount plus interest
  
- 9.1.3 The date when payment of the original bond amount is due to the investor is called what?
  - \*The maturity date
  - The issue date
  - The payment date
  
- 9.1.4 When does a coupon bond pay interest? (check all that apply)
  - \*Periodically
  - \*At the maturity date
  - At the time of purchase
  - Never



- 9.1.5 When does a zero-coupon bond pay interest?  
\*At the maturity date  
At the time of purchase  
Periodically  
Never
- 9.1.6 Which of the following are types of government bonds? (Check all that apply)  
\*Treasury bonds  
\*Municipal bonds  
\*U.S. Savings bonds  
Corporate bonds
- 9.1.7 Why do corporations issue bonds?  
\*To raise money for capital improvements and operating expenses  
To give investors the opportunity to own part of the corporation  
To avoid having to pay interest on borrowed money
- 9.2.1 Which of the following is an advantage of owning bonds?  
\*Bonds can provide a tax advantage  
Bonds have outperformed the stock market over the last 100 years  
Bonds give investors ownership in the corporation issuing the bond
- 9.2.2 Which of the following is a disadvantage of owning bonds?  
\*The potential for return is less than for some other types of investments  
Bonds never pay interest until their maturity date  
Bonds must be held until their maturity date
- 9.2.3 What are the advantages of owning U.S. government bonds versus corporate bonds?  
(check all that apply)  
\*U.S. government bonds are less risky than corporate bonds  
\*The interest paid on U. S. government bonds cannot be taxed by state and local governments  
U.S. government bonds typically have a higher interest rate than corporate bonds
- 9.2.4 What is default risk?  
\*The bond issuer cannot make further interest and principal payments to the bond holders  
The bond issuer has extended the maturity date of the bond  
The bondholder sells the bond but gets less than par value because interest rates went up
- 9.2.5 What are bond ratings?  
\*Codes that describe the creditworthiness of bond issuers  
Numbers that indicate the volume of bonds issued by a government or corporation  
The system an investor uses to rank bonds by maturity date



- 9.2.6 Which of the following ratings indicates a bond that is "somewhat speculative"?
- \*Ba
  - Baa
  - B
- 9.3.1 In a bond table, the BOND column includes the name of the bond issuer, the maturity date of the bond, and what other information?
- \*Coupon (interest) rate
  - Current yield
  - Volume
  - Closing price
- 9.3.2 In a bond table, CUR YLD stands for current yield, which is what?
- \*The annual interest payment as a percentage of the current bond price
  - The current bond as a percentage of the annual interest payment
  - The periodic coupon rate
  - The ratio of the bond's price to the coupon rate
- 9.3.3 In a bond table, a closing price of 109.50 really means what dollar amount?
- \*\$1,095.00
  - \$109.50
  - \$10,950.00
- 9.3.4 In a bond table, a NET CHANGE of .35 means what?
- \*The closing price of the bond was 35 cents higher than at the close of the previous trading day
  - The bond's current yield increased 0.35% from the previous day's trading
  - The closing price of the bond was \$3.50 cents higher than at the close of the previous trading day
  - The coupon rate increased by 35 cents

#### 4-1-1 questions and answers

##### Bonds

###### *Slide 7*

If you buy a bond with a face value of \$2,000 paying a coupon rate of 4%, how much interest will you receive every six months? *\$40*

Solution:  $\$2,000 \times 4\% = \$2,000 \times .04 = \$80$  annually.  
 Every six months you receive  $\$80/2 = \$40$ .

Slide 8

(Using the same bond as before): If this is a three-year bond, how much will you receive on the maturity date? \$2,040

Solution: Original principal plus final coupon payment:  $\$2,000 + 40 = \$2,040$ .

Slide 9

Now using a zero coupon bond with a face value of \$500: If you purchase this bond at half the face value, how much will you pay for the bond? \$250

Solution:  $\$500/2 = \$250$ .

Slide 17

## Bonds

Slide 17 of 26



Monique's Hint

Drag the description to the correct bond.

Issued by companies	Interest is not tax exempt	 <p>Corporate bonds</p>
Safest type of bond	A U.S. savings bond is an example	 <p>Treasury Bonds</p>
Issued by cities and towns	Interest is exempt from federal taxes	 <p>Municipal bonds</p>

Points Possible: 700

Score: 650

## Slide 25

- What is the name of the bond that had the greatest net change? *Hightop Fashions*
- Based on its coupon rate, what is the name of the bond that had the lowest Moody's rating at the time of issuance? *Slick Technology*
- What is the name of the bond that had a net change of zero? *Monster Steel*
- What is the coupon rate for the Monster Steel bond 6.8
- What is the name of the bond that has the most difference between the coupon rate and the current yield? *Slick Technology*
- What is the maturity date for the Slick Technology bond? *2011*



**Bonds** Slide 25 of 26

Where It's At

Manique's Hint

Today's Financial News

BOND NAMES	CUR YLD	VOL	CLOSE	NET CHG		
Monster Steel	6.8	29	6.1	-	110.6	-
American Insurance	6.75	28	7.3	126	92	0.25
Furniture World	7.1	15	9.7	165	73.5	0.40
Regional Cinema	7.50	12	8.7	267	86.25	0.45
Hightop Fashions	9.6	22	9.2	12	104.5	-0.50
Slick Technology	11.75	11	17.3	7	68	-0.10

Points Possible: 600

Score: 550

Roll your cursor over the highlighted areas.

(Note to teachers: The most common errors on this game come from questions that ask, for example, about the name of a bond with a particular characteristic. Students must click the **name** of the bond rather than the characteristic to get credit.)

### Battle questions and answers

9.1.1 If Tyrone purchases a 3-year coupon bond with a coupon rate of 5% and a face (par) value of \$1,000, what is the amount of each semi-annual coupon?

\*\$25, filled in blank

Solution:  $\$1,000 \times 5\% = \$1,000 \times 0.05 = \$50$  annually.

Each semi-annual coupon is  $\$50/2$ , or \$25.



- 9.1.2 If Felicia invests in a \$500 U.S. savings bond, how much money will she pay to purchase the bond?  
\*\$250, filled in blank

Solution: U.S. Savings Bonds are zero coupon bonds that sell for half the face value.  
 $\$500/2 = *250$

- 9.2.1 What is the bond rating of a sample group of bonds with an average coupon rate of 4.5 percent?  
\*Aaa  
Baa  
Caa

- 9.2.2 What is the bond rating of a sample group of bonds with an average coupon rate of 12 percent?  
\*C  
B  
A

- 9.2.3 What is the relationship between a bond's rating and its coupon rate at the time the bond is issued?  
\*The lower the bond rating, the higher the coupon rate and vice versa  
The lower the bond rating, the lower the coupon rate  
The bond rating has no effect on the coupon rate

- 9.3.1 A bond that has "6.5 28" next to the name of the bond issuer would mean what?  
\*The bond has a coupon rate of 6.5% and a maturity date of 2028  
The bond has a maturity date of 6.5 years from the current date and a coupon rate of 28%  
The bond has an initial price of \$65.00 and a maturity date that is 28 years from the current date

- 9.3.2 Which of the following causes current yield to increase?  
\*An increase in market interest rates, which causes the price of the bond to decline  
A decrease in market interest rates, which causes the price of the bond to decline  
An increase in market interest rates, which causes the price of the bond to rise  
A decrease in market interest rates, which causes the price of the bond to rise

- 9.3.3 If a bond had a NET CHG (net change) of 0.50, what does this mean?  
\*The bond's closing price was 50 cents more than the closing price on the previous trading day  
The bond's closing price was 50% higher than the closing price on the previous trading day  
The bond's closing price was 5% higher than the closing price on the previous trading day



**Solve the mission questions and answers**

Part 1 What is the National Construction bond's ACTUAL closing price?  
\$890.00\*, filled in blank

Solution: Remember that the closing price is given in \$100 units. To find the actual bond price, move the decimal one place to the right and add a zero, so the amount becomes \$890.00

Part 2 Which bonds have a current yield that is higher than the coupon rate (check all that apply)?

- \*National Construction
- \*Big Play
- \*Super Shack
- \*New Age Motors
- Major Oil & Gas
- Rick's Rent-to-Own

Part 3 Which bond had the greatest net change?

- \*Rick's Rent-to-Own
- Super Snack
- Major Oil & Gas

Part 4 If the current year is 2010, which of these bonds could Tyrone and Felicia purchase that will mature before they need the money for college? (check all that apply)

- \*New Age Motors
- \*Super Snack
- \*Big Play
- Major Oil & Gas

Part 5 Of the three bonds that have maturity dates within the range that the twins need for their college fund, which should they reject on the basis of the bond's rating? (check all that apply)

- \*New Age Motors
- Super Snack
- Big Play

**Insider's note**

Understanding bonds is a vital first step in understanding mortgage-backed securities, which were at the heart of the financial meltdown of 2008.



**Mission 10: Teach a group of students how to invest in mutual funds**

**Mission brief**

Teach the investment club students how to invest in mutual funds.

**Mission objectives**

To be successful in this mission you must:

1. Teach them the basics of investing in mutual funds
2. Help them understand the advantages and disadvantages of investing in mutual funds
3. Show the club members how to read a mutual fund table from a newspaper or online

**Cross-references to print materials**

LEI lessons 5 and 7

- ◆ LEI Lesson 5, Activity 2 on how to read a mutual fund table
- ◆ LEI, Lesson 7, Visual 1 and Activity 1 (investment club)

(To order the LEI materials, visit <http://store.councilforeconed.org/lei.html>)

**Best Operatives**

John, Deacon, Terrell

**In the Backpack for this mission**

Tools

- ◆ Calculator
- ◆ Glossary
- ◆ How to Read a Mutual Fund Table

The 4-1-1

- ◆ Mutual Funds

**Learning objectives**

1. Explain how mutual funds work.
2. Identify advantages and disadvantages of investing in mutual funds.
3. Define terms associated with mutual funds.
4. Read a mutual fund table presented in a newspaper or online.

**Mission Points Possible**

Total excluding Bonus points	Credibility	Knowledge	Battle	Solution	Bonus
4,440	1,600	1,440	900	500	4,500



**Profile match questions (repeated from Mission 2)**

(There are no wrong answers and no points at stake. The preferred answers are indicated with asterisks.\*)

1. When considering career choices, which approach appeals most to you?
  - A. Follow traditions in my family
  - \*B. Research careers that match my skills and interests
  - C. Allow fate to determine my career
  
2. People with more education are likely to earn more income than people with less education.
  - \*A. Strongly agree
  - B. Agree
  - C. Undecided
  - D. Disagree
  - E. Strongly disagree
  
3. When deciding whether or not to attend college full time, an important cost to consider is the four years of full-time salary you won't receive.
  - \*A. Strongly agree
  - B. Agree
  - C. Undecided
  - D. Disagree
  - E. Strongly disagree

**Credibility questions and answers**

10.1.1 What is a mutual fund?

- \*A pool of money used by an investment company to buy a variety of stocks and bonds
- A group of stocks sold together for a fixed price
- A loan from an investor to a company or government

10.1.2 In a mutual fund, the investments are selected by which of the following? (check all that apply)

- \*Fund manager
- The investors
- The fund's board of directors

10.1.3 When you invest in a mutual fund, which of the following is true?

- \*You purchase shares in the fund
- You loan the investment company money
- You purchase ownership in the investment company



- 10.1.4 The value of a mutual fund depends upon which of the following?  
\*Performance of the individual assets in the fund  
The market interest rate  
The number of shares traded in the last 30 days
- 10.1.5 The price per share that you can buy a fund for is called what?  
\*Net asset value  
Management fee  
Load  
12b-1 charge
- 10.1.6 A mutual fund without a sales commission is called what?  
\*A no-load fund  
A load fund  
A 12b-1 fund  
An aggressive growth fund
- 10.1.7 A 12b-1 fee is which of the following?  
\*An advertising fee  
A sales commission  
A management fee  
A customer service fee
- 10.2.1 Which of the following statements about mutual funds is true?  
\*Mutual funds allow investors to spread risk among a variety of assets  
Most mutual funds are managed by the Securities and Exchange Commission  
No-load funds are always a better investment than load funds  
Many mutual funds do not charge management fees
- 10.2.2 An advantage of mutual funds is liquidity, which means what?  
\*Ability to turn your investment into cash easily  
Ability to buy shares of specific stocks or bonds within a fund  
Ability to vote on which stocks or bonds the fund manager buys  
Ease of doing business with the fund manager
- 10.2.3 What should you consider when deciding which mutual fund to buy? (check all that apply)  
\*Performance  
\*Cost  
\*Convenience  
Location



- 10.2.4 Which type of fund is associated with larger company stocks and long-term capital gains?  
\*Growth funds  
Aggressive growth funds  
Income funds  
Money-market funds
- 10.2.5 A fund that tries to achieve approximately the same return as the Dow Jones Industrial Average is what kind of fund?  
\*Index fund  
Growth fund  
Money-market fund  
Income fund
- 10.3.1 Which column in a mutual fund table contains the price you would pay to purchase a share of the fund?  
\*NAV  
MUTUAL FUND  
NET CHG  
YTD % RET
- 10.3.2 Which column contains the change in the net asset value from the previous trading day?  
\*NET CHG  
YTD % RET  
3-YR % RET  
MUTUAL FUND
- 10.3.3 Which column in a mutual fund table gives you the best guide to the historical performance of the fund?  
3-YR % RET\*  
YTD % RET  
NET CHG  
NAV
- 10.3.4 Which column tells you how well a mutual fund is performing during the current year?  
\*YTD % RET  
3-YR % RET  
NET CHG  
NAV

4-1-1 questions and answers  
**Mutual funds**

Slide 4

## Mutual Funds

Slide 4 of 25



Monique's  
Hint

Calculate the gain or loss.

Company	Price/Share	No. of Shares Owned	Amt. Invested	Investment Value
American Cellular	\$6	40	\$200	\$240
Big Box Stores	\$18	15	\$300	\$270
Biotech Industries	\$6	100	\$1,000	\$600
General Grocery	\$22	30	\$300	\$660
Giant Auto	\$11	40	\$400	\$440
Gold Mining Group	\$4	160	\$800	\$640

\$3,000 Initial Investment

Current Investment Value: \$

Gain

Loss  \$

Check Answer

Points Possible: 100

Score: 0

Solution: Total Investment Value = \$240 + \$270 + \$600 + \$660 + \$440 + \$640 = \$2,850.

Net Loss = Original Value – Current Value = \$3,000 - \$2,850 = \$150.

Slide 17

## Mutual Funds

Slide 17 of 25



Monique's  
Hint

Drag each folder to the correct briefcase.

Investment objectives	Diversification	Professional money manager	Liquidity	 <b>Advantages</b>
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center; padding: 5px;">Lower potential return than some investments</div> <div style="text-align: center; padding: 5px;">Higher risk than some investments</div> </div>				 <b>Disadvantages</b>

Points Possible: 600

Score: 600

Slide 21

- Net asset value     A fund's purchase price
- Diversification     Spreads the risk across many stocks/bonds in the fund
- Load                 Sales commission charged by some mutual funds
- 12b-1                Advertising fee charged by some mutual funds
- Liquidity            Ability to turn the investment into cash quickly
- Index fund          A fund that tries to match the performance of the market as a whole
- Prospectus          Contains a list of stocks or bonds in the fund

Slide 24

- What is the year-to-date percent return for Real Diversified Sm Cap Fund? 3.1
- What is the name of the Mutual Fund that had the greatest net change? *American First Select Bond Fund*
- What is the name of the Mutual Fund that had the largest positive annualized 3-year percent return? *Greenhouse Fund*
- What is the name of the Mutual Fund that has a net asset value of \$82.55? *American First Select Bond Fund*
- What is the name of the Mutual Fund that had a net change of zero? *AB Capital Money-Market Fund*
- What is the net asset value of AB Capital Money-Market Fund? 9.55

**Mutual Funds** Slide 24 of 25

Where It's At

Monique's Hint

Today's Financial News

MUTUAL FUND	NAV	NET CHG	YTD % RET	3-YR % RET
Major Growth Funds Lg Cap	16.09	-0.011	2.7	-3.9
Real Return Diversified Sm Cap	21.9	-0.06	3.1	2.3
Greenhouse Fund	9.75	0.04	2.7	8.2
American First Select Bond Fund	82.55	-0.84	4.5	-13.1
AB Capital Money-Market Fund	9.55		4.63	3.9

Points Possible: 600

Score: 600

Roll your cursor over the highlighted areas.

(Note to teachers: The most common errors on this game come from questions that ask, for example, about the name of a mutual fund with a particular characteristic. Students must click



*the name of the mutual fund rather than the characteristic to get credit.)*

**Battle questions and answers**

10.1.1 Suppose a mutual fund's total investment value is \$1,000,000 and its liabilities are \$100,000. If there are 50,000 shares available, what is the net asset value of the fund?  
\*\$18, filled in blank

Solution: Net assets of the fund = investment value – liabilities = \$1,000,000 - \$100,000 = \$900,000.

With 50,000 shares available, net asset value per share is \$900,000/50,000 = \$18.

10.1.2 If you buy 10 shares of this mutual fund, how much money will you spend to purchase those shares?  
\*\$180, filled in blank

Solution: \$18 net asset value x 10 shares = \$180.

10.2.1 Put these types of mutual funds in order, with #1 being the highest risk and greatest potential return and #5 being the lowest risk and smallest potential return.

- 1) Aggressive Growth Funds
- 2) Growth Funds
- 3) Income Funds
- 4) Bond Funds
- 5) Money-Market Funds

Solution: from fund pyramid in Backpack

10.3.1 If a mutual fund has a NET CHG of 0.04, what does this mean?  
\*The price per share is 4 cents higher than the previous trading day  
The return on the mutual fund is 4 percent higher than the previous trading day  
The price per share is \$4.00 higher than the initial share price

10.3.2 A mutual fund with a NAV of 9.75 means which of the following?  
\*The price per share is \$9.75  
The price per share is \$97.50  
The total investment value of the fund is \$9.75 million

10.3.3 A mutual fund with an annualized 3 YR % RET of -13.1 means which of the following?  
\*The mutual fund has decreased in value by an annualized percentage of 13.1 over the last 3 years  
The price per share has decreased in value by 13.1 cents over the last 3 years  
3 years ago today, the price per share was 13.1 percent less than it is now.

**Solve the mission questions and answers**



- Part 1 Which mutual fund has the greatest NET CHG?  
\*American First Select Bond Fund  
Greenhouse Fund  
Real Return Diversified Small Cap  
Major Growth Funds Lg Cap
- Part 2 If the investment club is most concerned about a fund's current performance, which would be the best one for them to consider?  
\*AB Capital Money-Market Fund  
American First Select Bond Fund  
Greenhouse Fund  
Real Return Diversified Sm Cap
- Part 3 Suppose the investment club has a high risk tolerance and wants to invest in a fund that has the potential to provide above-average returns in a short period of time. Which would be the best fund for them to consider?  
\*Real Return Diversified Sm Cap  
Major Growth Funds Lg Cap  
American First Select Bond Fund  
AB Capital Money Market Fund
- Part 4 If the club is most concerned about a fund's performance over the long term, which fund should they avoid?  
\*American First Select Bond Fund  
Greenhouse Fund  
Real Return Diversified Sm Cap  
AB Capital Money-Market Fund
- Part 5 One of the club's investment objectives is to buy stock in "green" companies. Which mutual fund would help to support this objective?  
\*Greenhouse Fund  
AB Capital Money Market Fund  
Major Index Funds Lg Cap  
Real Return Diversified Sm Cap

**Insider's note: Gen i Revolution and simulations such as the Stock Market Game**

*Gen i Revolution* is designed to complement, rather than compete with, real-time simulations such as the Stock Market Game. Some, however, have noted that simulations reward short-term speculative behavior. Students have to take large risks if they hope to win, and all their decisions must be made in a relatively short time period.

One result of real-time simulations is that they penalize diversification. How? If a Stock Market Game team holds 30 varied stocks, it is likely to get a return close to the average for the market. Even as diversification reduces the risk of underperformance, it also reduces the chance for above-average gains. For a real-world investor that's fine, but getting average returns won't win



the Stock Market Game if the competition is making highly speculative plays on a small number of stocks. In other words, diversification is an excellent real-world strategy that will keep you from winning the Stock Market Game.

This *Gen i* mission emphasizes the benefits of diversification through mutual funds. To investors seeking above-average returns and willing to take the risks of underperformance, however, there is such a thing as “too much diversification.” That’s because a fully diversified fund – in the limit, an index fund – matches the market rather than beating the market.

Finally, keep in mind that beating the market is a very difficult long-term goal. Plenty of actively managed mutual funds can achieve high returns for a year or a quarter, but keeping it up for a period of years is extremely difficult. Investors seeking a hot mutual fund will often be disappointed when hot results don’t last.

For more on how to win the Stock Market Game, see “How to Win the Stock Market Game,” 2009. Harrisonburg, Va.: James Madison University Center for Economic Education, online at <http://cob.jmu.edu/econed/stock.htm> ; and the larger article from which the material was drawn, “The Stock Market Game: Classroom Use and Strategy,” by William C. Wood, Sharon L. O’Hare and Robert L. Andrews in *The Journal of Economic Education*, 1992 23(3), summer: pp. 236-246.



**Mission 11: Advise a Gen i donor on her \$10 million investment**

**Mission brief**

Advise the donor on how to invest \$10 million, currently in gold, so as to maximize the return over 20 years.

**Mission objectives**

To be successful in this mission you must advise the donor on:

1. Why investment necessarily takes place under conditions of incomplete information
2. Why above-average returns are unlikely over the long run
3. How fundamental analysts try to select promising stocks using share price, P/E ratio, annual revenue, and earnings per share
4. Features of the various types of assets
5. A portfolio of assets, with a 20-year time horizon and moderate risk

**Cross-references to print materials**

*LEI* Lesson 13 on “researching companies.”

(To order the LEI materials, visit <http://store.councilforeconed.org/lei.html>)

**Best Operatives**

Deacon, Terrell

**In the Backpack for this mission**

Tools

- ◆ Calculator
- ◆ Glossary
- ◆ Stock Analyst Report
- ◆ Strategies for Researching Stocks

The 4-1-1

- ◆ Researching Companies

**Mission Points Possible**

Total excluding Bonus points	Credibility	Knowledge	Battle	Solution	Bonus
3,180	1,400	580	1,000	200	4,500

**Learning objectives**

1. Explain why investment takes place under conditions of incomplete information.
2. Explain why it is difficult to choose investments that have extremely high returns.
3. Show the influence of stock price, price/earnings ratio, annual revenue and earnings per share on stock selection.
4. Choose an appropriate portfolio for someone with a specified time horizon and risk tolerance.

**Profile match questions (repeated from Mission 3)**

(There are no wrong answers and no points at stake. The preferred answers are indicated with asterisks.\*)

1. For people to accomplish anything financially, good advice is to
  - \*A. Spend less than you receive
  - B. Receive less than you spend
  - C. Quit high school and get a job
  - D. Hope you get a bonus payment at work
2. When it comes to saving money, which plan do you think is easiest for most families?
  - A. Put aside a large amount every now and then
  - \*B. Put aside a small amount every month
  - C. Pay bills automatically from your checking account
3. Using credit to make a purchase is always a bad idea.
  - A. Strongly agree
  - B. Agree
  - C. Undecided
  - D. Disagree
  - \*E. Strongly disagree

**Credibility questions and answers**

- 11.1.1 Approximately how many stocks are listed on stock exchanges worldwide?
  - \*10,000
  - 1,000
  - 100
- 11.1.2 There are thousands of stocks, but investors have limited time and resources to use in researching stocks. The economic concept that refers to this problem is called what?
  - \*Scarcity
  - Inflation
  - Density
  - Opportunity cost



- 11.1.3 An investor chooses to do further research on a company rather than buying the company's stock at its 52-week low. Not buying the stock is called the investor's what?
- \*Opportunity cost
  - Cost factor
  - Return
  - Risk tolerance
- 11.1.4 Which of the following statements is true?
- \*It's difficult to earn above-average gains in the stock market because surprises are rare.
  - It's easy to earn above-average gains in the stock market if you do enough research before you buy stock.
  - Buying stock in good companies is most likely to result in above-average returns.
- 11.2.1 Random selection of stocks is the easiest and least costly method of selecting stocks for investment. Why don't people use this method more often?
- \*Investors think the benefits of researching stocks outweigh the costs of the research
  - Some companies do not allow their stocks to be chosen in this manner
  - Government regulations do not permit investors to select stocks in this manner
- 11.2.2 What is fundamental analysis?
- \*A method of researching stocks based on company financial information
  - A method of selecting stocks based on intuition
  - A method of selecting stocks based on personal preference
  - A method for assessing the opportunity cost of an investment
- 11.2.3 Which of the following is used by fundamental analysts to research a stock?
- \*P/E ratio
  - S/E ratio
  - Resistance level
  - Support level
- 11.2.4 Which information in particular would indicate whether a company is producing goods or services that are popular with its customers?
- \*Annual revenue
  - Earnings per share
  - Share price
  - P/E ratio
- 11.2.5 Which information would tell a fundamental analyst that a company is well managed?
- \*Rising earnings per share
  - Declining annual revenue
  - Rising operating expenses
  - Declining P/E ratio



- 11.2.6 Which information could indicate a young, fast-growing company within an industry?  
\*A high P/E ratio relative to the industry average  
A low P/E ratio relative to the industry average  
A high P/E ratio relative to the average across diverse industries  
A low P/E ratio relative to the average across diverse industries
- 11.3.1 Which of these asset types would be the WORST choice for the donor's portfolio?  
\*Checking account  
Certificate of deposit  
Bond index mutual fund  
Individual stocks
- 11.3.2 Which of the following is an advantage of an index stock mutual fund?  
\*Greater diversification than an actively managed fund  
No management fees  
The dividends are tax-free
- 11.3.3 Which of these asset types would you recommend to provide a steady stream of income to Gen i?  
\*Bond index mutual fund  
Gold  
Certificate of deposit  
Real estate
- 11.3.4 Which of the following assets would you consider if high returns are more important than liquidity?  
\*Real estate  
Certificate of deposit  
Bond index mutual fund  
Stock index mutual fund

#### **4-1-1 questions and answers**

##### **Researching Companies**

###### *Slide 3*

- It is difficult to earn unusual gains in the stock market because
- \*Most information about most companies is already known
  - Government regulators prohibit unusual gains
  - Stocks compete with each other for investors
  - The risks outweigh the returns



*Slide 7*

- Expert advice I have a favorite stock analyst that I trust to give me good advice. When she said I should sell my stock in Bell Computer, that's exactly what I did.
- Research Analyzing National Bank's basic financial information led me to purchase the company's stock last week at the 52-week low share price.
- Random selection I closed my eyes and pointed to half a dozen stocks in a financial news web site. Then I bought 50 shares of each one of them.
- Personal preference Several of my friends and I drive cars manufactured by Greenway Motors. The cars get good gas mileage and have an excellent repair record. The company seems to be very popular, so I decided to buy 100 shares of the company's stock.

*Slide 10*

This stock has a share price of \$26.15, up from a low of \$14.93 about three months ago

- \*Big State Insurance Co.
- Bell Computer
- CarZone, Inc.
- ExtraMega Oil Co.

*Slide 11*

This stock currently has the highest earnings per share (EPS) of any stock in the report

- Home Improvement
- American Hawk Outfitters
- \*CarZone, Inc.
- Crabapple Computer

*Slide 12*

Of the stocks listed below, this stock had the largest negative sales growth over the past year

- \*Greenway Motor Co.
- Simeb
- Traditional Soup Co.
- CoolPhones Corp.

*Slide 13*

A P/E ratio of 13.96 compared to the industry average of 14.48 could indicate this company is more stable and less risky than other companies in its industry.

- \*CoolPhones Corp.
- Bell Computer
- Burger Biggie Corp.
- Mega-Cola Corp.



**Battle questions and answers**

11.1.1 Which of the following is a good strategy for researching stocks? (check all that apply)

- \*Recognize that you cannot know it all
  - \*Select a few companies to research, then follow their progress closely
  - \*Find a few good places to get stock information
- Keep looking for more information, because the benefits will always outweigh the research costs

11.2.1 Cool Tech Corp's cumulative sales growth rate indicates which of the following conditions?

- \*The company is experiencing declining growth in sales
- The company is experiencing increasing growth in sales
- The company is experiencing a negative growth in sales.

11.2.2 Which of the following stock's share price has been trending downward over the last month?

- \*CarZone
- Mega-Cola
- Johnny & Johnny
- Burger Biggie

11.2.3 What do the Johnny & Johnny's cumulative EPS percentage growth rates over the last five years indicate?

- \*The company is well managed
- The company's sales are decreasing
- The company's stock has had above-average trading volume

11.2.4 Which company might be fast-growing compared to other companies in its industry?

- \*Cool Tech Corp.
- Big State Insurance Co.
- Traditional Soup Co.
- Bell Computer

11.3.1 Which of the following are reasons not to keep the \$10 million in gold bars? (check all that apply)

- \*Costly to store
  - \*No dividends
  - \*Risk is high
- It's a tangible asset

**Solve the mission questions and answers**

Part 1 How should the donor invest the \$10 million for Gen i's long-term future?

\*Put it into mutual funds (**full credit** answer)

Put it into individual stocks that I will select for her (**90% credit** answer)

Put it all into real estate (**40% credit** answer)

Put it all into a short-term bond fund (**30% credit** answer)

Part 2.1 (only for students who answer "individual stocks" in Part 1) Students choose stocks

Scoring students' stock choices:

No more than 10% is allocated to any one stock and no more than 50% is allocated in any one sector (**90% credit** answer)

**Subtract 20% for each rule violated.** Example: If a student puts 20% in Crabapple Computer and all the rest into technology stocks, the score would be 50% because both rules were violated.

Part 2.2 (only for students who answer "mutual funds" in Part 1) Select the percentage of the \$10 million that you would like to invest into mutual funds. You may divide the money between stock index mutual funds and bond index mutual funds, or put it all in one type.

When you are finished, the total percentage must equal 100%.

Scoring students' mutual fund choices:

\*50% or more is allocated to stock index mutual funds (**full credit** answer)

**Or, for partial credit:** Less than 50% is allocated to stock index mutual funds (**-10% for each 10% above 50% allocated to the bond fund**)

Part 3 (Click on Monique's goggles for a free glimpse into the future.)

Monique's response to students who chose stocks or mutual funds: "Congratulations on the performance of your portfolio! The donor is very pleased with the results. You made the right choice not to keep the money in gold. It had a 20-year return of -4.6%."

Monique's response on other assets, not including gold: "The returns on your portfolio are positive, but the results would have been much better had you chosen stocks or mutual funds. These asset types increased by an average of more than 100% over 20 years. You made the right choice not to keep the money in gold. It had a 20-year return of -4.6%."

Monique's response to those who chose gold: "Gold may be appropriate in a diversified portfolio of assets. But as a single investment, the risk is very high, as these results show. The donor is not pleased with your investment decision and has withdrawn her support of the Gen i Revolution."



### Insider's note

The company names in this mission are made-up, but each company has a real counterpart whose financial statistics were used to generate the company profiles and returns. As an activity, you could have students try to guess the real names corresponding to the made-up names in this mission. Here's the list of real and made-up names:

<b>Real Company Name</b>	<b>Made-up Name</b>
Allstate Insurance Co.	Big State Insurance Co.
American Eagle Outfitters	American Hawk Outfitters
Apple Computer Inc.	Crabapple Computer Co.
AutoZone Inc.	CarZone Inc.
Bank of America	U.S. Bank
Bemis Co.	Simeb Co.
Campbell Soup Co.	Traditional Soup Co.
Cisco Systems Inc.	Cisco Kid, Inc.
Coca-Cola Co.	Mega-Cola Co.
Dell Computer	Bell Computer
Disney Company	Magic Mouse Entertainment
ExxonMobil Corp.	ExtraMega Corp.
Ford Motor Co.	Detroit Motor Co.
Home Depot Inc.	Home Improvement Inc.
Johnson & Johnson	Johnny & Johnny
McDonald's Corp	Burger Biggie Corp.
Nokia Corp	CoolPhones Corp.
Starbucks Corp.	CoffeeFix Corp.
Toyota Motor Corp.	International Car Corp.
Yahoo Inc.	CoolTech Corp.



## Mission 12: Show Jasmine what determines stock prices

### Mission brief

Show Jasmine how the interaction of supply and demand for stocks determines a stock's price per share.

### Mission objectives

To be successful in this mission you must help Jasmine:

1. Understand the laws of supply and demand regarding stocks
2. Consider the types of events that influence the supply and demand for stocks
3. Examine the stocks in her client's portfolio and make decisions about which ones to buy and sell based on information she receives.

### Cross-references to print materials

LEI lesson 18 (Activity 3 was the inspiration for the interactive supply and demand diagrams in the game)

(To order the LEI materials, visit <http://store.councilforeconed.org/lei.html>)

### Best Operatives

Deacon, Terrell, Erica

### In the Backpack for this mission

#### Tools

- ◆ Calculator
- ◆ Glossary
- ◆ Factors That Can Affect Stock Prices
- ◆ The XYZ Company Supply & Demand Table

#### The 4-1-1

- ◆ How Stock Prices are Determined

### Learning objectives

1. Explain that the price of a stock is determined in a market.
2. Understand that the interaction of supply and demand for a stock determines its price.
3. List some factors that affect the supply and demand for a stock.

### Mission Points Possible

Total excluding Bonus points	Credibility	Knowledge	Battle	Solution	Bonus
3,800	1,100	1,200	1,000	500	4,500



**Profile match questions (repeated from Mission 4)**

(There are no wrong answers and no points at stake. The preferred answers are indicated with asterisks.\*)

1. Would you be willing to put your own savings into the stock market?
  - A. No, there's too much chance of losing it.
  - B. No, I don't know enough about it.
  - \*C. Yes, if I could expect my money to grow.
  
2. It's important to have a checking or savings account at a bank or credit union
  - \*A. Strongly agree
  - B. Agree
  - C. Undecided
  - D. Disagree
  - E. Strongly disagree
  
3. You would pay about the same for a TV whether you purchase it through a rent-to-own plan or pay cash for it.
  - A. Strongly agree
  - B. Agree
  - C. Undecided
  - D. Disagree
  - \*E. Strongly disagree
  
4. If a company makes a huge profit from selling its products to consumers, the government should require the company to lower the price of its products.
  - A. Strongly agree
  - B. Agree
  - C. Undecided
  - D. Disagree
  - \*E. Strongly disagree

**Credibility questions and answers**

12.1.1 What is the law of demand in relation to stocks?

\*Buyers choose to purchase fewer shares at higher prices and more shares at lower prices, everything else being equal

Sellers are willing to offer more stocks for sale at higher prices than at lower prices, everything else being equal

The price at which buyers want to buy the same amount of stock that sellers want to sell



- 12.1.2 What is the law of supply in relation to stocks?  
\*Sellers choose to sell more shares at higher prices and fewer shares at lower prices, everything else being equal  
Buyers want to buy more stocks at higher prices than at lower prices, everything else being equal  
The price at which buyers want to buy the same amount of stock that sellers want to sell
- 12.1.3 What is the equilibrium price of a stock?  
\*The price at which buyers want to buy the same amount of stock that sellers want to sell.  
The mid-point between a stock's 52-week high and low share prices  
The median share price of all stocks in the stock market
- 12.1.4 Which of the following controls the price of stock in the secondary market?  
\*Buyers and sellers  
Sellers  
Buyers  
The Securities and Exchange Commission
- 12.2.1 When the demand for a stock goes up, what happens to the share price?  
\*The share price goes up  
The share prices goes down  
The price could go either way  
The price remains the same
- 12.2.2 When the demand for a stock goes down, what happens to the share price?  
\*The share price goes down  
The share price goes up  
The price could go either way  
The price remains the same
- 12.2.3 Which of the following factors can influence supply and demand of a company's stock? (check all that apply)  
\*News events  
\*Weather  
\*Industry changes  
\*Company news  
The New York Stock Exchange
- 12.3.1 What will likely happen to the price of Athlete Soles stock in response to the sports news about its celebrity endorser?  
\*The share price will rise  
The share price will fall  
The share price will remain the same



12.3.2 What will likely happen to the price of Global Oil Co. stock in response to the weather event?

- \*The share price will fall
- The share price will rise
- The share price will remain the same

12.3.3 What will likely happen to the price of Lumber Depot stock in response to the weather event?

- \*The share price will rise
- The share price will fall
- The share price will remain the same

12.3.4 What will likely happen to the price of ElectroLarge stock in response to the announcement about the company's stock?

- \*The share price will fall
- The share price will rise
- The share price will remain the same

#### **4-1-1 questions and answers**

##### **How Stock Prices are Determined**

###### *Slide 2*

What does the Law of Demand state?

- \*Holding everything constant, buyers choose to purchase fewer shares at higher prices than at lower prices
- Holding everything constant, buyers choose to purchase more shares at higher prices than at lower prices
- Holding everything constant, sellers choose to sell more shares at higher prices than at lower prices
- Holding everything constant, sellers choose to sell more shares at higher prices than at lower prices

###### *Slide 3*

What does the Law of Supply state?

- \*Holding everything constant, sellers choose to sell more shares at higher prices than at lower prices
- Holding everything constant, sellers choose to sell more shares at higher prices than at lower prices
- Holding everything constant, buyers choose to purchase fewer shares at higher prices than at lower prices.
- Holding everything constant, buyers choose to purchase more shares at higher prices than at lower prices



Slide 4

What is an equilibrium price?

- \*The price at which the quantity supplied equals the quantity demanded
- The price at which the quantity supplied exceeds the quantity demanded
- The price at which there is no demand and no supply
- The price at which the quantity demanded exceeds the quantity supplied

Slides 5-9

**How Stock Prices Are Determined** Slide 10 of 21

**Supply and Demand**

Price per Share	Quantity Supplied	Quantity Demanded	Surplus	Shortage	Effect on Price
\$35	60	0	60	-	Falls
\$30	50	10	40	-	Falls
\$25	40	20	20	-	Falls
\$20	30	30	Equilibrium		Remains the same
\$15	20	40	-	20	Rises
\$10	10	50	-	40	Rises
\$5	0	60	-	60	Rises

Slide 16

News:

A cold front brought freezing temperatures to the state of Florida today. The state's agricultural commissioner confirmed that Harvest Fruit, the state's largest citrus grower could expect its worst harvest in decades due to record-low temperatures.

Response: Stock falls (negative expectations)

Slide 17

National Motors today announced a breakthrough in battery technology that will greatly improve their planned electric car's range. The company says that the technology will allow the car to get up to 500 miles on a single charge, a significant increase compared to current technology.

Response: Stock rises (positive expectations)



*Slide 18*

Cool Phones today bought back 1,000,000 shares of its stock. A company spokesperson said that the company's rising profits and elimination of substantial debt prompted the move to recapture a portion of the company's equity.

Response: Stock rises (fewer shares available)

*Slide 19*

An outbreak of food poisoning at several Salads 'N More restaurants has led the company to pull items with lettuce and other raw vegetables from its menu. The source of the outbreak is not known. A spokesperson for the company said it may be weeks before they are able to offer salads again.

Response: Stock falls (negative expectations)

**Battle questions and answers**

12.1.1 What is the equilibrium price of Global Oil's stock?

\*\$9(filled in blank)

Solution: This equilibrium price occurs when the quantity of shares demanded equals the quantity supplied (20 shares for sale and orders for 20 shares).

12.1.2 What does it mean when sellers have more shares available for purchase at a given price than buyers want to purchase?

\*There is a surplus of shares at that price

The share price is probably too low

The equilibrium price has been reached.

12.1.3 What does it mean when buyers want to purchase more shares than sellers want to sell at a given price?

\*There's a shortage of shares at that price

The share price is probably too high

The equilibrium price has been reached.

12.1.4 How often does the equilibrium price of a stock change?

\*Constantly throughout the day

When trading opens for the day

At the close of the trading day

12.2.1 Share prices will probably rise for a particular company's stock under which of the following conditions?

\*When buyers expect the company's profits to increase

When the government allows stock prices in general to rise

When sellers expect the company's profits to decrease



12.2.2 Stockholders will be most willing to sell their shares under what condition?

\*They expect the company's profits to decrease

When their brokerage firm increases their trading fees

When the government requires the company to lower its stock price

12.3.1 Based on news events Jasmine has received, which one of the following stocks will likely go down?

\*Global Oil Co.

VetPharm

Mighty Wings

12.3.2 Based on news events Jasmine has received, which one of the following stocks will likely go up?

\*Lumber Depot

ElectroLarge

Global Oil Co.

### Solve the mission questions and answers

Part 1 According to the Mighty Wings Supply & Demand Graph, what was the equilibrium price of Mighty Wings stock BEFORE the company announced a new product?

\*\$25, filled in blank

Solution: The quantity of shares supplied equaled the quantity demanded when the price was \$25 (intersection of blue line and yellow line)

Part 2 When the equilibrium price of Mighty Wings is \$25, what is the surplus at \$30?

\*10 shares, filled in blank

Solution: Shares demanded (in yellow) are 15; shares supplied (in blue) are 25;  $25 - 15 = 10$ .

Part 3 When the equilibrium price of Mighty Wings is \$25, what is the shortage at \$10?

\*30 shares, filled in blank

Solution: Shares demanded (in yellow) are 35; shares supplied (in blue) are 5;  $35 - 5 = 30$ .

Part 4 Based on the Mighty Wings news item, what investment decision should make about her client's Mighty Wings stock?

\*She should buy more shares

She should sell her client's shares

She should do nothing



Part 5 What is the equilibrium price of Mighty Wings stock AFTER the new product was announced?

\*\$30, filled in blank

Solution: The quantity of shares supplied equals the quantity demanded when the price is \$30 (intersection of green line and purple line)

**Insider's note**

This mission relies on the fundamental similarity between goods markets and the stock market, in that prices are determined by supply and demand. The stock game in *LEI*, lesson 18, Activity 3 is played in person by a group of interacting students and therefore may have a higher degree of excitement than this mission's interactive graphs. We recommend using both as complementary activities; your students may find it interesting to answer a summary debriefing question: What are the differences between playing the stock trading game in person and clicking through the same graphs in an interactive game?



**Mission 13: Advise Markos on how to weather a crash in the scholarship fund**

**Mission brief**

Advise Markos on how to weather a crash in the scholarship fund.

**Mission objectives**

To be successful in this mission you must help Markos:

1. Understand how monetary policy affects stock prices
2. Identify the role that monetary policy played before and after the 1929, 1987 and 2008 crashes
3. Recognize the risks that occur when investors ignore advice to diversify their portfolio
4. Review the scholarship fund portfolio to identify the asset category that crashed, and then take appropriate action to weather the crash

**Cross-references to print materials**

LEI Lesson 21 on “lessons from history” (stock market crashes).

(To order the LEI materials, visit <http://store.councilforeconed.org/lei.html>)

**Best Operatives**

Deacon, Terrell, Erica

**In the Backpack for this mission**

Tools

- ◆ Calculator
- ◆ Glossary
- ◆ 1929 Stock Market Crash
- ◆ 1987 Stock Market Crash
- ◆ 2008 Stock Market Crash

The 4-1-1

- ◆ Stock Market Crashes

**Mission Points Possible**

Total excluding Bonus points	Credibility	Knowledge	Battle	Solution	Bonus
6,000	2,200	2,200	1,500	100	5,500

**Learning objectives**

1. Explain how monetary policy affects stock prices.
2. Explain the stock market crash of 1929 and why it was followed by a depression.
3. Explain the stock market crash of 1987 and why it was followed by a recovery of asset prices.



4. Explain the real estate bubble of 2005-2007 and how it led to the 2008 crash of stock market prices.
5. Explain the risks that occur when an investor ignores the advice to "diversify" and instead concentrates assets in a "hot sector."
6. React appropriately to a marked reduction in the value of one sector in a portfolio.

**Profile match questions (repeated from Mission 5)**

(There are no wrong answers and no points at stake. The preferred answers are indicated with asterisks. \*)

1. What do you think is the primary disadvantage of using a check-cashing store?
  - A. Lack of convenience
  - \*B. High fees
  - C. Slow service
  
2. I think it is riskier to buy stock than it is to gamble at a Las Vegas casino.
  - A. Strongly agree
  - B. Agree
  - C. Undecided
  - D. Disagree
  - \*E. Strongly disagree
  
3. The average American would be better off if companies didn't try to make a profit.
  - A. Strongly agree
  - B. Agree
  - C. Undecided
  - D. Disagree
  - \*E. Strongly disagree
  
4. Before you start investing, you should have enough money in a savings account for emergencies.
  - \*A. Strongly agree
  - B. Agree
  - C. Undecided
  - D. Disagree
  - E. Strongly disagree\*

**Credibility questions and answers**

13.1.1 What is monetary policy?

\*Changes in the supply of money and the availability of credit initiated by a nation's central bank

Changes in the supply of and demand for stock

Changes in the federal budget deficit



- 13.1.2 The Fed makes changes in the monetary policy in order to promote which of the following? (check all that apply)
- \*Price stability
  - \*Full employment
  - \*Economic growth
  - Reduction in taxes
- 13.1.3 During inflationary times, which type of monetary policy is likely to be most effective in stabilizing the economy?
- \*Restrictive
  - Expansionary
  - Loose
- 13.1.4 During a depression or recession, which type of monetary policy is likely to be most effective in stabilizing the economy?
- \*Expansionary
  - Restrictive
  - Status quo
- 13.2.1 What is a stock market crash?
- \*A sudden, steep decline in stock prices across the market
  - A gradual, steep decline in stock prices within an industry
  - When stock prices fall more than 5 days in a row
- 13.2.2 Which of the following was NOT a cause of the stock market crash of 1929?
- \*Over production of goods and services
  - Restrictive monetary policy
  - Panic selling
  - Overvalued stocks
- 13.2.3 What economic condition followed the stock market crash of 1929?
- \*Depression
  - Recession
  - Inflation
  - Prosperity
- 13.2.4 How long did it take the stock market to recover to its peak level before the 1929 crash?
- \*25 years
  - 1 year
  - 5 years
  - 10 years
- 13.2.5 What reform was enacted in 1934 to protect the public from misconduct in the securities and financial markets?
- \*Securities and Exchange (SEC) Act



Smoot Hawley Tariff Act  
Gramm-Leach-Bliley Act

13.2.6 What reform enacted in 1933 prohibited Federal Reserve member banks from owning companies that sell stock?

\*Glass-Steagall Act  
Securities and Exchange Act  
Smoot Hawley Tariff Act

13.3.1 Which of these was NOT a major cause of the 1987 stock market crash?

\*Risky mortgage lending practices  
Debt-ridden economy  
Inflationary fears  
Programmed and computer trading

13.3.2 What economic condition followed the crash of 1987?

\*Normal growth  
Recession  
Depression  
Inflation

13.3.3 How long did it take the stock market to recover to its peak level before the 1987 crash?

\*2 years  
1 year  
5 years  
10 years

13.3.4 Which of these was enacted in 1988 by major stock exchanges to discourage panic selling?

\*Circuit breakers  
Additional phone lines  
Upgraded computer systems

13.4.1 Which of these was NOT a cause of the 2008 stock market crash?

\*Tight monetary policy after 9/11  
Debt-ridden economy  
Risky mortgage lending practices  
Psychological reasons

13.4.2 What economic condition followed the crash of 2008?

\*Continued recession  
Prosperity  
Depression  
Inflation



- 13.4.3 What happened in the early 2000s that set the stage for the 2008 crash?  
\*Mortgage lenders gave people with poor credit access to mortgages they really couldn't afford  
The Fed raised interest rates on home mortgages  
The economy was in recession
- 13.4.4 What triggered the 2008 crash?  
\*Housing prices started to fall in 2007  
The Fed raised interest rates  
The merger of two large financial institutions
- 13.5.1 What does diversification mean?  
\*Spreading investment funds over various types of assets, such as stocks, bonds, and mutual funds  
Investing in one type of asset only, such as stocks  
Trading assets every few months
- 13.5.2 What is a sector in relation to the stock market?  
\*Classification of companies by industry  
Classification of companies by value  
Classification of companies by financial performance
- 13.5.3 Which of the following portfolios is the most diversified?  
\*Stock mutual funds, bond mutual funds, and money market funds  
Individual stocks from strategic sectors  
Individual stocks, individual bonds, and certificates of deposit
- 13.5.4 In addition to diversification, which of the following investment strategies is best for building long-term wealth?  
\*Buy and hold  
Trade assets frequently to get in on "hot" buys  
Acquire stocks with high P/E ratios



**4-1-1 questions and answers**  
**Stock Market Crashes**

*Slide 11*

- Late 1920s: Interest rates increased to curb speculation, but led to a decrease in demand for stocks and falling prices
- September 3, 1929: Dow Jones Industrial Average peaked at 381.2
- October 24, 1929: Black Thursday--a record-breaking 13 million shares were traded, sending prices plummeting
- October 29, 1929: Black Tuesday--nearly 16.5 million shares were traded, prices continued to fall
- 1933: Glass-Steagall Act--Prohibited banks from owning companies that sell stocks
- 1934: Securities and Exchange Commission -- Established to protect the public against misconduct in the stock markets

*Slide 19*

- August 25, 1987: Dow Jones Industrial Average peaked at 2,722.44
- September 4, 1987: The Fed announced an increase in a key interest rate. This may have caused investors to fear that further interest rates hikes were coming.
- October 19, 1987: Black Monday--a record-breaking 604 million shares were traded on the NYSE. Market lost 22.6 percent of its value.
- October 20, 1987: The Fed lowered a key interest rate and increased the money supply to banks.
- 1988: Circuit breakers were implemented to halt trading if stock prices fell below certain prices
- 1989: Stock prices recover to their former 1987 peak.

## Slide 30

## Stock Market Crashes

Slide 30 of 31

**Drag 'n Drop**



Monique's Hint

Points Possible: 1000

Score: 950

Drag the description to the correct container.

<p>The Fed failed to increase the money supply before and after the crash.</p> <p>Margin buying was a probable cause.</p> <p>A depression followed the crash.</p>	<p>Actions by the Fed helped prevent a recession after the crash.</p> <p>Inflationary fears were a probable cause.</p> <p>The stock market recovered in two years.</p>	<p>Risky mortgage lending practices were a probable cause.</p> <p>The Fed announced the TARP program, preventing a collapse of the financial system.</p>	<p>The crash occurred in October.</p> <p>Panic selling was a probable cause.</p>
<b>1929</b>	<b>1987</b>	<b>2008</b>	<b>ALL</b>

**Battle questions and answers**

13.1.1 What effect does reducing the money supply have on stock prices?

- \*Stock prices fall
- Stock prices rise
- Stock prices remain the same

13.1.2 What effect does increasing the money supply have on stock prices?

- \*Stock prices rise
- Stock prices fall
- Stock prices remain the same

13.2.1 What did the Fed do in the late 1920s that likely contributed to the stock market crash in 1929?

- \*Tightened the money supply
- Increased the money supply
- Raised taxes

13.2.2 What should the Fed have done after the crash of 1929 to prevent further decline in the economy?

- \*Increase the money supply
- Decrease the money supply
- Decrease the availability of credit



13.3.1 What did the Fed do on September 4, 1987 that likely contributed to the stock market crash in October of that year?

- \*Increased a key interest rate
- Decreased a key interest rate
- Announced the failure of several large banks

13.3.2 What did the Fed do after the 1987 stock market crash?

- \*Provided additional funds to the banking system and kept interest rates low
- Implemented a restrictive money policy
- Nothing

13.4.1 What did the U.S. Treasury do before the 2008 stock market crash?

- \*Supplied funds to Fannie Mae and Freddie Mac
- Decreased mortgage interest rates
- Nothing

13.4.2 What did the U.S. Treasury do after the 2008 stock market crash?

- \*Increased the availability of capital to banks
- Increased a key interest rate
- Nothing

13.5.1 What percent of the value of the Scholarship Fund portfolio was lost in the crash?

- \*53%, filled in blank

Solution: From the Scholarship Fund Portfolio found on the desk of the CEO's Office:  
The portfolio lost (\$10,084,516.25 - \$4,757,384.63), or \$5,327,131.62.  
As a proportion of the original value, this is  $\$5,327,131.62 / \$10,084,516.25 = 0.53$  or 53 percent

13.5.2 Which asset type in the scholarship fund's portfolio lost the most value in the crash?

- \*Stocks
- Bonds
- Real estate

Solution: Note that the bond fund and the real estate fund each lost only 10% of their value (last two lines of the Scholarship Fund Portfolio). Stocks lost 67% of their value.



13.5.3 Which sector in the scholarship fund's stock holdings suffered the greatest loss in the crash?

- \*Financial
- Technology
- Manufacturing/Industrial
- Consumer

Solution: Notice in the Scholarship Portfolio that all of the Financial stocks fell to only 10 percent of their previous value.

**Solve the mission questions and answers**

Part 1 What investment decision should Markos make about the scholarship fund portfolio to provide the best potential return over the long run?

- \*Hold all assets and wait for the market to recover
- Sell the financial stocks and hold the other assets
- Sell all stocks and hold the other assets
- Sell all assets and put the money in a bank account until the market recovers

Part 2 It's time to see if you gave Markos good advice. Click on Monique's goggles for a free glimpse into the future.

Here are the payoffs, as of two years later, from the return generator underlying the game:

1. "Hold all assets and wait for the market to recover"

Value before crash: \$10,084,516.25

Value after recovery: \$10,858,472.06. Gain = 7%.

2. "Sell the financial stocks and hold the other assets"

Value before crash: \$10,084,516.25

Value after recovery: \$5,463,872.06. Loss = 50%

3. "Sell all stocks and hold the other assets"

Value before crash: \$10,084,516.25

Value after recovery: \$5,135,384.63. Loss = 53%

4. "Sell all assets and put the money in a bank account until the market recovers."

Value before crash: \$10,084,516.25

Value after recovery: \$4,760,384.63. Loss = 56%



### **Insider's note**

The main character's name in this mission is Markos Scott. The name is derived from those of two Wisconsin-based developers of game content, Mark Schug and Scott Niederjohn. Mark Schug is directly involved with the operation of an inner-city school in Milwaukee and the mission originally was going to be cast in terms of the scholarship fund of Mark's school. The mission was broadened out to a general scholarship fund to increase applicability.

The mission was written in its original form before the asset crash of 2008 and early 2009; it held up quite well, in that it predicted a rebound from post-crash values. The actual rebound had added more than 50 percent to stock values, measured from the March 2009 low.



**Mission 14: Advise political leaders on their economic forecasts**

**Mission brief**

Advise political leaders from Brazil, Japan and the United States on their economic forecasts.

**Mission objectives**

To be successful in this mission you must advise the political leaders on:

1. The phases of a business cycle
2. The links between the stock market and the economy
3. How leading indicators may show the future direction of the economy
4. Their economic forecast, given underlying current conditions in their country's economy

**Cross-references to print and online materials**

LEI lesson 20 on “the stock market and the economy” (forecasting).

National Bureau of Economic Research business cycles website: [www.nber.org/cycles.html](http://www.nber.org/cycles.html)

The government's Survey of Current Business: <http://www.bea.gov/scb/index.htm>

Conference Board leading indicators: <http://www.conference-board.org/economics/bci/>

(To order the LEI materials, visit <http://store.councilforeconed.org/lei.html>)

**Best Operatives**

Deacon, Terrell, Erica

**In the Backpack for this mission**

Tools

- ◆ Calculator
- ◆ Glossary
- ◆ Leading Economic Indicators

The 4-1-1

- ◆ Forecasting the Future

**Mission Points Possible**

Total excluding Bonus points	Credibility	Knowledge	Battle	Solution	Bonus
3,700	1,600	900	900	300	4,500

**Learning objectives**

1. Describe the phases of a typical business cycle.
2. Explain how changes in the stock market may affect the overall economy.
3. Explain how the Federal Reserve's regulation of the money supply and banking may affect the overall economy.
4. Use stock prices and other leading economic indicators to forecast real GDP, inflation, and unemployment.



**Profile match questions (repeated from Mission 6)**

(There are no wrong answers and no points at stake. The preferred answers are indicated with asterisks.\*)

1. Investing in corporate bonds carries less risk than investing in a company's stock
  - \*A. Strongly agree
  - B. Agree
  - C. Undecided
  - D. Disagree
  - E. Strongly disagree
  
2. You will always get your money back when you buy a bond.
  - A. Strongly agree
  - B. Agree
  - C. Undecided
  - D. Disagree
  - \*E. Strongly disagree
  
3. Investing in mutual funds carries the same risk as investing in an individual stock or bond
  - A. Strongly agree
  - B. Agree
  - C. Undecided
  - D. Disagree
  - \*E. Strongly disagree
  
4. Young people should invest most of their money in stocks.
  - \*A. Strongly agree
  - B. Agree
  - C. Undecided
  - D. Disagree
  - E. Strongly disagree

**Credibility questions and answers**

14.1.1 The up-and-down activity of the economy is known as what?

- \*A business cycle
- An economic forecast
- An economic rollercoaster

14.1.2 The period in a business cycle when the economy is growing is called what?

- \*Expansion
- Contraction
- Recession
- Inflation



- 14.1.3 The period in a business cycle when the economy is declining is called what?  
\*Contraction  
Expansion  
Stagflation  
Inflation
- 14.1.4 A period of significant economic decline usually lasting from six months to a year is called what?  
\*Recession  
Inflation  
Depression  
Sustainability
- 14.1.5 GDP is an acronym for what?  
\*Gross Domestic Product  
Great Depression Policy  
Grand Domestic Peak
- 14.2.1 How do decreases in stock prices affect consumption expenditures?  
\*Consumption expenditures decrease  
Consumption expenditures increase  
Stock price has no effect on consumption expenditures
- 14.2.2 How do increases in stock prices affect investment?  
\*Investment increases  
Investment decreases  
Stock price has no effect on investment
- 14.2.3 How do increases in stock prices affect expectations?  
\*People feel optimistic about the future of the economy  
People feel pessimistic about the future of the economy  
Stock price has no effect on people's expectations
- 14.3.1 What are leading economic indicators?  
\*Measures of economic performance that tend to move in advance of changes in the overall economy  
Economic principles that control the laws of supply and demand  
The initial phases of a business cycle
- 14.3.2 Which of the following is NOT among the leading economic indicators?  
\*Unemployment rate  
Money supply, M2  
Index of consumer expectations  
Average weekly hours, manufacturing



- 14.3.3 Which one of the following organizations provides monthly information on the leading economic indicators?  
\*The Conference Board  
Congressional Budget Office  
American Economic Association
- 14.3.4 Which of the following is a true statement?  
\*Stock prices tend to rise before overall GDP rises  
Stock prices rise at the same time GDP rises  
Stock prices rise after GDP rises  
Stock prices remain steady over time, neither rising nor falling
- 14.3.5 What does a drop in jobless claims tend to signal?  
\*Fewer layoffs in the future  
More layoffs in the future  
Production of goods and services will decline
- 14.3.6 What does a rapidly growing money supply tend to signal?  
\*The economy will expand in the future  
The economy will contract in the future  
Inflation will fall in the future
- 14.3.7 What does the decline of the index of consumer expectations tend to signal?  
\*Consumers will purchase fewer goods and services in the future  
Interest rates will rise in the future  
Banks will lend more money in the future
- 14.3.8 Which statement is true about the leading economic indicators?  
\*Some may go up while others are going down  
They always all go in the same direction, either up or down  
They always correctly predict what will happen in the economy

#### **4-1-1 questions and answers**

##### Forecasting the Future

*Slide 7*

*(See graphic below for placement of each term)*

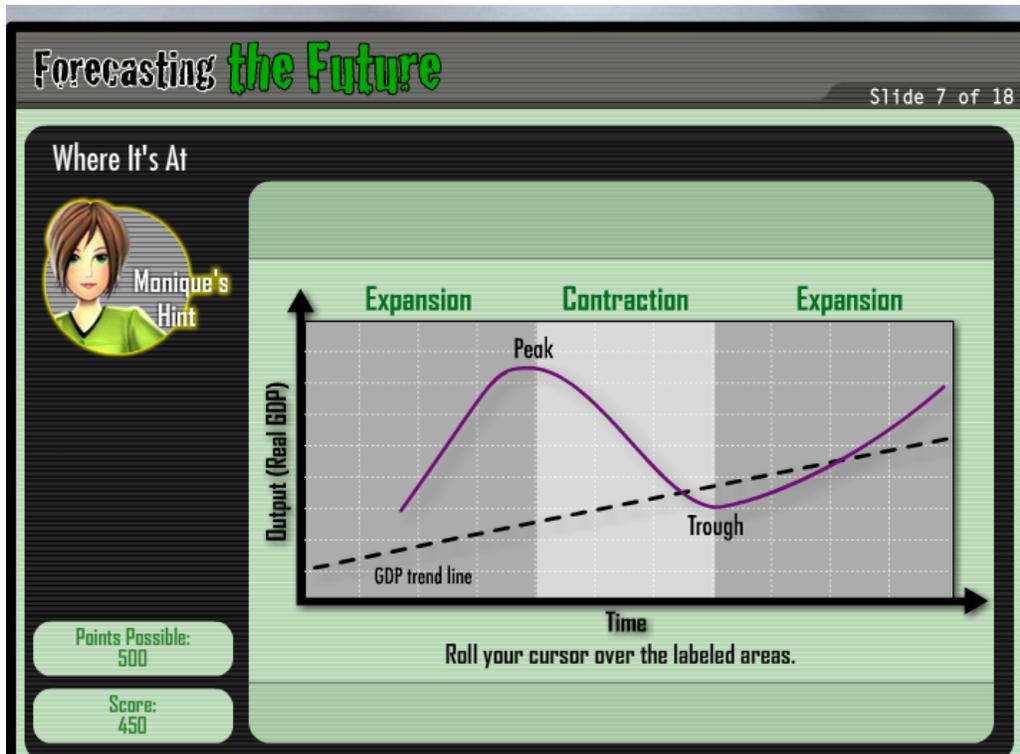
The economy is recovering from a contraction: *Expansion*

The economy is contracting: *Contraction*

After this turning point, the economy begins to decline: *Peak*

After this turning point, the economy begins to expand: *Trough*

The long-term trend of Real Gross Domestic Product (Real GDP) is up, even as business cycle fluctuations come and go: *GDP trend line*

*Slide 14*

This predicts an economic expansion due to banks lending more money.

- \*Money supply, M2
- Index of consumer expectations
- Stock prices, 500 common stocks
- Average weekly hours, manufacturing

*Slide 15*

This predicts more layoffs in the future.

- \*Average weekly hours, manufacturing
- Index of consumer expectations
- Stock prices, 500 common stocks
- Money supply, M2

*Slide 16*

When this indicator is rising, consumers are optimistic about the future.

- \*Index of consumer expectations
- Jobless claims
- Money supply, M2
- Average weekly hours, manufacturing



*Slide 17*

When this indicator is falling, investment and consumption expenditures decrease.

- \*Stock prices, 500 common stocks
- Index of consumer expectations
- Money supply, M2
- Average weekly hours, manufacturing

**Battle questions and answers**

14.1.1 Which of the following occurs during an economic expansion? (check all that apply)

- \*Real GDP increases
- \*Employment rises
- \*Incomes expand
- Business sales decline

14.1.2 Which of the following occurs during an economic contraction? (check all that apply)

- \*Unemployment increases
- \*Production declines
- \*Business sales decline
- Incomes rise

14.1.3 The peak and trough of the business cycle are similar in what way?

- \*They are both turning points
- They are both periods of high inflation
- They are both periods of high unemployment
- They are both low points for the economy

14.2.1 Rising stock prices usually result in which of the following?

- \*Increased consumption expenditures and increased investment in the economy
- Increased consumption expenditures and decreased investment in the economy
- Decreased consumption expenditures and increased investment in the economy
- Decreased consumption expenditures and decreased investment in the economy

14.2.2 Persistent decreases in stock prices often precede which of the following?

- \*A recession
- An expansion
- Inflation

14.3.1 What is the relationship between the rate of inflation and the money supply in the United States?

- \*Over time, changes in the inflation rate are closely correlated with changes in the growth of the money supply
- Inflation and money growth are negatively related
- There is no relationship between money growth and inflation



14.3.2 In Japan's data, what do the leading indicators for average weekly hours in manufacturing and unemployment claims seem to suggest?

- \*Layoffs will rise in the future
- Layoffs will decline in the future
- GDP will hold steady at 3 percent

14.3.3 In Brazil's data, what do the stock prices seem to suggest?

- \*Consumer spending will rise in the future
- Consumer spending will decline in the future
- Inflation will continue to increase

### **Solve the mission questions and answers**

Part 1 After analyzing the country's leading economic indicators and other financial data, which forecast would you recommend to the political leader of the United States?

- \*Doldrums: The economy will be sluggish, without significant growth, but without a recession.
- Boom: The economy will experience significant growth.
- Bust: The economy will take a turn for the worse, and a recession is coming.

Part 2 After analyzing the country's leading economic indicators and other financial data, which forecast would you recommend to the political leader of Japan?

- \*Bust: The economy will take a turn for the worse, and a recession is coming.
- Boom: The economy will experience significant growth.
- Doldrums: The economy will be sluggish, without significant growth, but without a recession.

Part 3 After analyzing the country's leading economic indicators and other financial data, which forecast would you recommend to the political leader of Brazil?

- \*Boom: The economy will experience significant growth.
- Bust: The economy will take a turn for the worse, and a recession is coming.
- Doldrums: The economy will be sluggish, without significant growth, but without a recession.

### **Insider's note**

This mission was originally planned as a top-secret briefing at the White House but was changed to include three different economic forecasting scenarios, necessitating the use of three different economies.



**Mission 15: Conduct the Red Roosters Club annual financial planning workshop**

**Mission brief**

Conduct a financial planning workshop with several members of the Red Roosters community service club.

**Mission objectives**

To be successful in this mission you must:

1. Explain to the participants the four types of risk involved in saving and investing
2. Explain the approach to financial planning you will use
3. Ask each participant eight questions to help you understand their financial goals and current situation
4. Develop a financial plan for each participant

**Cross-references to print materials**

LEI, Lesson 23

(To order the LEI materials, visit <http://store.councilforeconed.org/lei.html>)

**Best Operatives**

John, Deacon

**In the Backpack for this mission**

Tools

- ◆ Calculator
- ◆ Glossary
- ◆ Four Types of Risk
- ◆ Five-step Decision-making Process for Investing
- ◆ Jen's Financial Planning Answers
- ◆ Ryan's Financial Planning Answers

The 4-1-1

- ◆ Financial Planning

**Mission Points Possible**

Total excluding Bonus points	Credibility	Knowledge	Battle	Solution	Bonus
3,280	1,200	780	1,000	300	4,500



### Learning objectives

1. Describe the four types of risk involved in saving and investing.
2. Use a five-step decision making process to evaluate investment choices.
3. Identify eight questions individuals should consider when seeking investment advice.
4. Examine the investment needs of people in different financial situations and make appropriate recommendations.

### Profile match questions

(There are no wrong answers and no points at stake. The preferred answers are indicated with asterisks.\*)

1. To get the highest long-term gains, investors should:
  - A. Buy the stock of companies they know and like
  - B. Buy the stock of companies if they are the subject of favorable rumors on the internet
  - \*C. Buy and hold a diversified set of stocks
2. A market system based on supply and demand is an efficient way to allocate goods and services.
  - \*A. Strongly agree
  - B. Agree
  - C. Undecided
  - D. Disagree
  - E. Strongly disagree
3. I plan to avoid investing in stocks because stock markets can crash
  - A. Strongly agree
  - B. Agree
  - C. Undecided
  - D. Disagree
  - \*E. Strongly disagree

### Credibility questions and answers

- 15.1.1 The risk that some or all of the original deposit or investment may be lost is called what?
  - \*Risk of principal
  - Market risk
  - Inflation risk
- 15.1.2 The risk that the forces of supply and demand or unforeseen events may affect the value of an investment adversely is called what?
  - \*Market risk
  - Inflation risk
  - Interest-rate risk



15.1.3 An investor needs to sell a bond before its maturity, when market interest rates are higher than the rate the bond is earning is an example of which kind of risk?

- \*Interest-rate risk
- Inflation risk
- Maturity risk

15.1.4 The risk associated with the fall of purchasing power is called what?

- \*Inflation risk
- Purchasing risk
- Savings risk

15.2.1 What is the first step in five-step decision making process?

- \*State the problem
- List the alternatives
- Define the criteria

15.2.2 In which step do you list the alternatives?

- \*Second step
- Third step
- Fourth step
- Fifth step

15.2.3 The third step is to define which of the following?

- \*Criteria
- Conditions
- Actions

15.2.4 In which step do you enter the pluses and minuses?

- \*Evaluate the alternatives against the criteria
- Make a decision
- Define the criteria
- Implement the plan

15.2.5 In which step do you count the pluses and minuses?

- \*Make a decision
- Implement the plan
- Evaluate the outcome

15.3.1 Which of the following would you ask to determine if the participant can afford to invest? (check all that apply)

- \*Are you able to save each month without borrowing?
- \*How much do you have in savings?
- How close are you to retirement?



15.3.2 Which of the following would you ask to determine the participant's risk tolerance? (check all that apply)

- \*Are you responsible for people who are financially dependent?
- \*How close are you to retirement?
- \*How much risk are you willing to take to pursue a higher rate of return?
- Would you benefit from tax-deferred or tax-exempt investments?

15.3.3 Which of the following would you ask to determine if the participant is looking for investments that pay dividends or interest? (check all that apply)

- \*Do you expect your investments to generate income?
- \*How close are you to retirement?
- How much risk are you willing to take to pursue a higher rate of return?
- Are you able to save each month without borrowing?

#### 4-1-1 questions and answers

##### Financial Planning

*Slide 2*

Risk is inherent in all investments.

- \*True
- False

*Slide 5*

Increases the higher you go in the risk pyramid: *risk of principal*

Supply and demand or unforeseen events may adversely affect the value of an investment: *market risk*

Increases the longer an investor holds a bond or other fixed-interest asset: *interest-rate risk*

Greatest for investments that have a very low rate of return: *inflation risk*

*Slide 9*

What is Jen's financial goal?

- \*Build long-term wealth
- Save for college

*Slide 10*

Which is the better alternative for Jen based on her risk tolerance?

- \*Growth stock
- Corporate bonds



*Slide 11*

Which is the better alternative for Jen based on her answer to the question about investment income?

- \*Aggressive-growth mutual funds
- Income mutual funds

*Slide 12*

What is Ryan's financial goal?

- \*Mortgage down payment
- Retirement income

*Slide 13*

Based on Ryan's financial goal and his risk tolerance, which is the better alternative for him?

- \*Corporate bonds
- Aggressive-growth mutual funds

*Slide 14*

Which is the better alternative for Ryan based on his response to the question about investment income?

- \*Government bonds
- Income mutual funds

**Battle questions and answers**

15.1.1 An investor should be most concerned about inflation risk with which of the following ?

- \*Savings account
- Income stocks
- Aggressive-growth mutual funds

15.1.2 Which of the following best assures the safety of the principal invested?

- \*FDIC-insured savings account
- Treasury notes
- Corporate bonds

15.1.3 An investor should be most concerned about Interest-rate risk with which of the following?

- \*Corporate bonds
- Growth stocks
- Income mutual funds



- 15.2.1 Put the steps of the decision-making process in the correct order.
1. State the problem
  2. List the alternatives
  3. List criteria
  4. Evaluate the alternatives against the criteria
  5. Make a decision
- 15.2.2 In financial planning, which of the following would you do in step one of the decision-making process?
- \*State the financial goal
  - List the types of assets
  - Define criteria for each asset type
- 15.2.3 In financial planning, which of the following would you do in step two of the decision-making process?
- \*List the types of assets
  - Define criteria for each asset type
  - Evaluate each asset type to see how well it meets the criteria
- 15.2.4 "Liquid, principal is safe," and, " investment generates income" are examples of which of the following?
- \*Criteria
  - Alternatives
  - Goals
- 15.3.1 What is Rita and Jimmy's primary financial goal at this time?
- \*College fund
  - Retirement income
  - Emergency fund
  - Vacation home
- 15.3.2 What is Antonio and Maria's primary financial goal at this time?
- \*Retirement income
  - College fund
  - Emergency fund
  - Vacation home
- 15.3.3 What is Gail's primary financial goal at this time?
- \*Emergency fund
  - Retirement income
  - College fund
  - Vacation home

**Solve the mission questions and answers**

Part 1 Review Gail's financial planning worksheet. How should she invest the \$100 she intends to save each month? Choose three asset types that are the most appropriate to get the maximum points. Enter the percentage she should invest in each asset.

\*money market account, savings, and CDs (**full credit answer**)

(If two of the three choices are correct, **half credit**)

(If only one choice is correct, **25% credit**)

(If no choices are correct, **zero credit**)

Part 2 Review Antonio and Maria's financial planning worksheet. How should Antonio and Maria invest the \$500,000 they have saved? Choose three asset types that are the most appropriate to get maximum points. Enter the percentage they should invest in each asset.

\*Government bonds, corporate bonds, and income mutual funds (**full credit answer if more than 60% is in bonds; otherwise 60% credit**)

(If two of the three choices are correct, and the third choice is either savings, CD, or money market fund, **40% credit**)

(If two of the three choices are correct and the third choice is either aggressive-growth mutual funds, income stock, or growth stock, **30% credit**)

(If only one choice is correct, **25% credit**)

(If no choices are correct, **zero credit**)

Part 3 Review Jimmy and Rita's financial planning worksheet. How should they invest their \$50 a month for a college savings fund? Choose three asset types that are the most appropriate to get maximum points. Enter the percentage they should invest in each asset.

\*Aggressive-growth mutual funds, income mutual funds, growth stock, and income stock (**full credit answer if more than 50% is in aggressive-growth mutual funds and growth stock, otherwise, 80% credit**)

(If two of the three choices are correct and the third choice is bonds, **half credit**)

(If two of the three choices are correct, and the third choice is either savings, CD or money market fund, **30% credit**)

(If only one choice is correct, **25% credit**)

(If no choices are correct, **zero credit**)

**Insider's note**

Jimmy and Rita are modeled after Jimmy and Rheta Grimsley Johnson, old college friends of one of the authors. Jimmy is the nationally syndicated cartoonist who draws "Arlo and Janis;" Rheta is the columnist who wrote a highly regarded biography of "Peanuts" cartoonist Charles Schultz. Her name's nonstandard spelling was changed for the game.



## Profile Match Questions

***Reminder to teachers: There are no right or wrong answers for the profile match questions, but the preferred answers are starred\* below.***

***Each Profile Match question is asked twice: once in Missions 1-8 and then once again in Missions 9-15. There are notes in red italics for questions that will be asked again and green italics for those that have already been asked.***

### Mission 1

1. When you have money to invest for the long term, what do you plan to do with it?  
Buy and sell stocks and bonds frequently.  
\*Buy and then hold onto stocks and bonds.  
Hold the money in a bank account.  
*Asked again in Mission 9*
2. Which do you think is a better savings strategy?  
\*Put all of your savings in different types of investment instruments.  
Choose one type of investment and stick to it.  
Keep it in my piggy bank.  
*Asked again in Mission 9*
3. What's a good time to begin retirement planning?  
When you are fifty years old, or about 15 years before you retire  
When you're about 30 and have your career established  
\*When you're in your early twenties, at your first opportunity.  
*Asked again in Mission 9*

### Mission 2

1. When considering career choices, which approach appeals most to you?  
Follow traditions in my family.  
\*Research careers that match my skills and interests.  
Allow fate to determine my career.  
*Asked again in Mission 10*
2. People with more education are likely to earn more income than people with less education.  
\*Strongly agree  
Agree  
Undecided  
Disagree  
Strongly Disagree  
*Asked again in Mission 10*



3. When deciding whether or not to attend college full time, an important cost to consider is the four years of full time salary that you won't receive.

\*Strongly agree

Agree

Undecided

Disagree

Strongly Disagree

*Asked again in Mission 10*

### **Mission 3**

1. For people to accomplish anything financially, good advice is to:

\*Spend less than you receive.

Receive less than you spend.

Quit high school and get a job.

Hope you get a bonus payment at work.

*Asked again in Mission 11*

2. When it comes to saving money, which plan do you think is easiest for most families?

Put aside a large amount every now and then

\*Put aside a small amount every month

Pay bills automatically from your checking account

*Asked again in Mission 11*

3. Using credit to make purchases is always a bad idea.

Strongly agree

Agree

Undecided

Disagree

\*Strongly Disagree

*Asked again in Mission 11*

### **Mission 4**

1. Would you be willing to put your own savings into the stock market?

No, there's too much chance of losing it.

No, I don't know enough about it.

\*Yes, if I could expect to make my money grow.

*Asked again in Mission 12*



2. It's important to have a checking or savings account at a bank or credit union.  
\*Strongly agree  
Agree  
Undecided  
Disagree  
Strongly Disagree  
*Asked again in Mission 12*
  
3. You would pay about the same for a TV whether you purchase it through a rent-to-own plan or pay cash for it.  
Strongly agree  
Agree  
Undecided  
Disagree  
\*Strongly Disagree  
*Asked again in Mission 12*

### **Mission 5**

1. What do you think is the primary disadvantage of using a check-cashing store?  
Lack of convenience  
\*High fees  
Slow service  
*Asked again in Mission 13*
  
2. I think it is riskier to buy shares of stock than it is to gamble at a Las Vegas casino.  
Strongly agree  
Agree  
Undecided  
Disagree  
\*Strongly Disagree  
*Asked again in Mission 13*
  
3. The average American would be better off if companies didn't try to make a profit.  
Strongly agree  
Agree  
Undecided  
Disagree  
\*Strongly Disagree  
*Asked again in Mission 13*



### Mission 6

1. Investing in corporate bonds carries less risk than investing in a company's stock.  
\*Strongly agree  
Agree  
Undecided  
Disagree  
Strongly Disagree  
*Asked again in Mission 14*
2. You will always get your money back when you buy a bond.  
Strongly agree  
Agree  
Undecided  
Disagree  
\*Strongly Disagree  
*Asked again in Mission 14*
3. Investing in mutual funds carries more risk than investing in an individual stock or bond.  
Strongly agree  
Agree  
Undecided  
Disagree  
\*Strongly Disagree  
*Asked again in Mission 14*

### Mission 7

1. To get the highest long-term gains, investors should:  
Purchase the stock of companies they know and like.  
Purchase the stock of companies that are the subject of favorable rumors on the internet.  
\*Buy and hold a diversified set of stocks.  
*Asked again in Mission 15*
2. A market system based on supply and demand is an efficient way to allocate goods and services.  
\*Strongly agree  
Agree  
Undecided  
Disagree  
Strongly Disagree  
*Asked again in Mission 15*



3. I plan to avoid investing in stocks because stock markets can crash.

Strongly agree

Agree

Undecided

Disagree

\*Strongly Disagree

*Asked again in Mission 15*

### **Mission 8**

1. If a company makes a huge profit from selling its products to consumers, the government should require the company to lower the price of the product.

Strongly agree

Agree

Undecided

Disagree

\*Strongly Disagree

*Asked again in Mission 12*

2. Before you start investing, you should have enough money in a savings account for emergencies.

\*Strongly agree

Agree

Undecided

Disagree

Strongly Disagree

*Asked again in Mission 13*

3. Young people should invest most of their money in stocks.

\*Strongly agree

Agree

Undecided

Disagree

Strongly Disagree

*Asked again in Mission 14*

### **Mission 9**

1. When you have money to invest for the long term, what do you plan to do with it?

Buy and sell stocks and bonds frequently.

\*Buy and then hold onto stocks and bonds.

Hold the money in a bank account.

*Asked previously in Mission 1*

2. Which do you think is a better savings strategy?



\*Put all of your savings in different types of investment instruments.  
Choose one type of investment and stick to it.  
Keep it in my piggy bank.

*Asked previously in Mission 1*

3. What's a good time to begin retirement planning?  
When you are fifty years old, or about 15 years before you retire  
When you're about 30 and have your career established  
\*When you're in your early twenties, at your first opportunity.

*Asked previously in Mission 1*

### **Mission 10**

1. When considering career choices, which approach appeals most to you?  
Follow traditions in my family.  
\*Research careers that match my skills and interests.  
Allow fate to determine my career.

*Asked previously in Mission 2*

2. People with more education are likely to earn more income than people with less education.  
\*Strongly agree  
Agree  
Undecided  
Disagree  
Strongly Disagree

*Asked previously in Mission 2*

3. When deciding whether or not to attend college full time, an important cost to consider is the four years of full time salary that you won't receive.  
\*Strongly agree  
Agree  
Undecided  
Disagree  
Strongly Disagree

*Asked previously in Mission 2*



### Mission 11

1. For people to accomplish anything financially, good advice is to:
  - \*Spend less than you receive.
  - Receive less than you spend.
  - Quit high school and get a job.
  - Hope you get a bonus payment at work.

*Asked previously in Mission 3*
2. When it comes to saving money, which plan do you think is easiest for most families?
  - Put aside a large amount every now and then
  - \*Put aside a small amount every month
  - Pay bills automatically from your checking account

*Asked previously in Mission 3*
3. Using credit to make purchases is always a bad idea.
  - Strongly agree
  - Agree
  - Undecided
  - Disagree
  - \*Strongly Disagree

*Asked previously in Mission 3*

### Mission 12

1. Would you be willing to put your own savings into the stock market?
  - No, there's too much chance of losing it.
  - No, I don't know enough about it.
  - \*Yes, if I could expect to make my money grow.

*Asked previously in Mission 4*
2. It's important to have a checking or savings account at a bank or credit union.
  - \*Strongly agree
  - Agree
  - Undecided
  - Disagree
  - Strongly Disagree

*Asked previously in Mission 4*



3. You would pay about the same for a TV whether you purchase it through a rent-to-own plan or pay cash for it.  
Strongly agree  
Agree  
Undecided  
Disagree  
\*Strongly Disagree  
*Asked previously in Mission 4*
  
4. If a company makes a huge profit from selling its products to consumers, the government should require the company to lower the price of the product.  
Strongly agree  
Agree  
Undecided  
Disagree  
\*Strongly Disagree  
*Asked previously in Mission 8*

**Mission 13**

1. What do you think is the primary disadvantage of using a check-cashing store?  
Lack of convenience  
\*High fees  
Slow service  
*Asked previously in Mission 5*
  
2. I think it is riskier to buy shares of stock than it is to gamble at a Las Vegas casino.  
Strongly agree  
Agree  
Undecided  
Disagree  
\*Strongly Disagree  
*Asked previously in Mission 5*
  
3. The average American would be better off if companies didn't try to make a profit.  
Strongly agree  
Agree  
Undecided  
Disagree  
\*Strongly Disagree  
*Asked previously in Mission 5*



4. Before you start investing, you should have enough money in a savings account for emergencies.  
\*Strongly agree  
Agree  
Undecided  
Disagree  
Strongly Disagree  
*Asked previously in Mission 8*

### **Mission 14**

1. Investing in corporate bonds carries less risk than investing in a company's stock.  
\*Strongly agree  
Agree  
Undecided  
Disagree  
Strongly Disagree  
*Asked previously in Mission 6*
2. You will always get your money back when you buy a bond.  
Strongly agree  
Agree  
Undecided  
Disagree  
\*Strongly Disagree  
*Asked previously in Mission 6*
3. Investing in mutual funds carries the same risk as investing in an individual stock or bond.  
Strongly agree  
Agree  
Undecided  
Disagree  
\*Strongly Disagree  
*Asked previously in Mission 6*
4. Young people should invest most of their money in stocks.  
\*Strongly agree  
Agree  
Undecided  
Disagree  
Strongly Disagree  
*Asked previously in Mission 8*



### Mission 15

1. To get the highest long-term gains, investors should:  
Purchase the stock of companies they know and like.  
Purchase the stock of companies that are the subject of favorable rumors on the internet.  
\*Buy and hold a diversified set of stocks.  
*Asked previously in Mission 7*
  
2. A market system based on supply and demand is an efficient way to allocate goods and services.  
\*Strongly agree  
Agree  
Undecided  
Disagree  
Strongly Disagree  
*Asked previously in Mission 7*
  
3. I plan to avoid investing in stocks because stock markets can crash.  
Strongly agree  
Agree  
Undecided  
Disagree  
\*Strongly Disagree  
*Asked previously in Mission 7*