

Who's Your Boss?

Comedian Jeff Blanchard goes on the job with six young entrepreneurs from northeast Ohio to find out who's shaping the future of American enterprise, how they're doing it and if he can do it, too.

Sole funding for this project is provided by

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Teacher Guide

<http://www.WesternReservePBS.org/whosyourboss>

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Jeff Blanchard, host of *Who's Your Boss?*, spent time working for young entrepreneurs from northeast Ohio.

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Overview

Entrepreneurship is a key driver for our economy. Wealth and a high majority of jobs are created by small businesses started by entrepreneurially minded individuals.

Entrepreneurship education is a lifelong learning process, starting as early as elementary school and progressing through all levels of education, including adult education.

Who's Your Boss? takes a look at young people who have become successful entrepreneurs. This multimedia kit has three parts: the video, the teacher guide and a Web site.

The Video

Right here in northeast Ohio, young entrepreneurs are having remarkable success in creating and marketing new products. **Who's Your Boss?** – a new Western Reserve PBS production funded by The Burton D. Morgan Foundation – celebrates National Entrepreneurship Week (Feb. 21 to Feb. 28, 2009) by profiling the achievements of six northeast Ohio youths and the organizations that support them. Comedian Jeff Blanchard interviews each of these young business owners and joins them on the job for a day to get a real-life feel for the work that they do:

- **Adrian Lindsey**, a 17-year-old senior at Cuyahoga Valley Christian Academy and resident of Akron, created All-Net Sak, a nylon basketball carrier that is for sale at Quicken Loans Arena, Wal-Mart in Severance City Mall and online.
- **Blaine Mickens**, an 18-year-old recent graduate of Whitney Young School in Cleveland, is owner of a landscaping business called Estate Groomers and a residential painting company called Young Picasso Painting. He has five employees and ambitious future plans.
- **Jake Penwell**, 19, a Shelby, Ohio, native who is now a freshman at Xavier University, helped start Albert Entertainment when he was in the 7th grade. The company offers disc jockey services.
- **Naomi and Noemi Romero**, 16-year-old twins from Cleveland and seniors at John Hay High School, own and operate their own fur-suit business, Cosfurs. In 2008, they won \$1,000 and first place in the E City business-plan contest for Cleveland students.
- **Jaizhou Yang**, a 17-year-old student at University School in Cleveland and resident of Beachwood, wants to capitalize on video game trends by holding and promoting video game tournaments for teenage and college-age students. He raises philanthropic awareness by donating a portion of his proceeds to charity.



The Teacher Guide

The teacher guide is divided into two sections. The first section is about **entrepreneurship**. It helps students discover information about themselves. First they find out how they learn best; then they discover what their passion is. Finally, they look at their school or their community and try to find opportunities for goods or services. Standards for this section are taken from *The National Content Standards for Entrepreneurship Education*. These standards can be found at <http://entre-ed.org>.

Next, the teacher guide looks at financial literacy, which is defined as the ability to read, analyze, manage and communicate about the personal financial conditions that affect material well-being. It includes the ability to make personal and financial choices, discuss money and financial issues confidently, plan for the future and respond competently to life events that affect everyday financial decisions, including events in the general economy. (*Report of the NASBE Commission on Financial and Investor Literacy*)

Topics covered include the use of income for saving, spending, investing and donating.

The Web Site

The *Who's Your Boss?* Web site, <http://www.WesternReservePBS.org/whosyourboss>, includes the teacher guide, the streaming video and activities including WebQuest: LifeQuest.

Economics Vocabulary

Advertising: The act of calling public attention to one's products or services through paid announcements in newspapers, on the Web, in magazines, etc.

Asset: A useful or desirable thing or quality; an item of ownership that can be converting into cash.

Barter: The trade of goods and services for other goods and services without the use of money.

Benefit: That which is received as an improvement or advantage as the result of a decision.

Business plan: The roadmap you create when starting a business, including anticipated expenses and earnings.

Capital good: A productive resource consisting of human-made materials needed to produce goods and services; capital goods include buildings, machinery, equipment and tools.

Check: A written order for a bank to pay money as directed.

Circular flow model: A diagram that shows the flow of economic activity among sectors of the economy.

Command economy: An economic system in which all decisions on production and consumption are made by a central government.

Comparative advantage: The ability to produce goods or services at a lower opportunity cost than other individuals or countries.

Compound interest: Determined by adding the interest earned in the current period to the principal and computing the next period's interest on this "compounded" total amount.

Consumer: A person whose wants are satisfied by using goods and services.

Consumption: The purchase and/or use of goods and services.

Cost: An alternative given up as the result of a decision.

Credit: A loan of money that is given to a borrower for a specific amount and for a specified period of time.

Credit Card: A plastic card with an assigned account number that enables the holder to purchase goods or services and receive cash on credit.

Currency: Money (paper or coin) used as a medium of exchange.

Debit card: Cards that allow customers to electronically and immediately withdraw funds from their financial accounts.

Demand: The quantities of a good or service that consumers are willing and able to buy at various prices during a given time period.

Demographics: The identifying characteristics of a population.

Division of labor: The separation of the total work required to produce a good or service into individual interrelated tasks.

Donate: To give as a gift or contribution.

Earnings: Wages over a given period of time for work done.

Economic growth: An increase in an economy's ability to produce goods and services over time.

Entrepreneur: A person who starts his or her own business to earn a profit.

Entrepreneurship: The organization of productive resources by a person willing to take risks to start a business.

Expenses: The amount of money paid for supplies and other needed items.

Goal: A statement of something a person wants or needs to do.

Goods: Objects that are capable of satisfying people's wants.

Gross domestic product: The value of all final goods and services produced within a country's borders in a given year.

Gross profit: The total amount of income earned prior to paying for expenses.

Human resource: A productive resource consisting of the talents and skills of human beings that contribute to the production of goods and services.

Income: Money that is earned from the sale of goods or services.

Invest: To use for the purpose of gaining a financial return.

Interest: A charge for a loan or for savings, usually a percentage of what is borrowed or saved.

Liquid capital: An asset that can be converted into cash quickly at little or no cost.

Long-term goal: A goal that takes more than a year to achieve.

Market: The interaction of buyers and sellers exchanging goods or services.

Market clearing price: The one price at which quantity supplied equals quantity demanded (also referred to as equilibrium price).

Market economy: An economic system in which decisions on production and consumption are made by individuals acting as buyers and sellers.

Mixed economy: An economic system that combines features of more than one of the traditional, command and market systems.

Money: Any medium that is accepted as payment for goods and services.

Net profit: The amount of income earned after expenses are paid.

Natural resource: A productive resource supplied by nature (e.g., ores, trees, arable land).

Opportunity cost: The value of the next-best alternative given up when a choice is made.

Phishing: A criminal act involving an individual posing as a representative of a legitimate organization and sending misleading e-mails to gain personal and financial information.

Price: The amount of money for which something is bought, sold or offered for sale.

Principal (amount): The amount borrowed, or the part of the amount borrowed, that remains unpaid (excluding interest). Also considered as the original amount invested or deposited.

Private sector: The part of the economy that involves transactions of individuals and businesses.

Producer: A person who makes goods and services.

Product: Something produced by human or mechanical effort or by a natural process.

Production: The act of combining natural resources, human resources, capital goods and entrepreneurship to make goods and services.

Productive capacity: The maximum output that an economy can produce without big increases in inflation.

Productive resources: The resources used to make goods and services (i.e., natural resources, human resources, capital goods).

Profit: The positive gain from an investment or business operation after subtracting all expenses.

Public sector: The part of the economy that involves the transactions of the government.

Risk: The probability that a loss will occur.

Save: To set aside for future use.

Services: Actions that are capable of satisfying people's wants.

Short-term goal: A goal that can be achieved within a short period of time (usually less than three months).

Specialization: The concentration of production on fewer kinds of goods and services than are consumed.

Spend: To pay out in exchange for a good or service.

Supply: The quantities of a good or service that producers are willing and able to provide at various prices during a given time period.

Want: A psychological or physical desire that can be fulfilled through the consumption of goods and services.

Twelve Personal Finance Principles for Young People

From the Jump Start Coalition

1. Pay yourself first.
2. Start saving young.
3. Budget your money.
4. Don't borrow what you can't repay.
5. Map your financial future.
6. Don't expect something for nothing.
7. Money doubles by the "Rule of 72." (Divide the interest rate into 72. The result is the number of years it takes your money to double.)
8. Your credit past is your credit future.
9. Stay insured.
10. High returns equal high risks.
11. Know your take-home pay.
12. Compare interest rates.

From The Consortium for Entrepreneurship Education, Columbus, Ohio, <http://entre-ed.org>



What Is a FICO Score?

A FICO score or credit rating is a scoring method of determining the likelihood that credit users will pay their bills. Fair, Isaac and Co. (FICO) developed this in the late 1950s. Since then, the FICO score has been used widely as a reliable means for lenders and creditors to evaluate credit risks.

How are FICO scores determined and used?

Credit scores are calculated by using scoring models and mathematical tables that assign points to different data that best predict future credit performance. Credit scores analyze a borrower's credit history including these factors:

- Late payments
- How long credit has existed
- Percentage of credit used vs. amount of available credit
- Negative credit history (e.g. bankruptcies, foreclosures, etc.)

How can you improve your FICO score?

- Pay your bills on time. Avoid any late payments.
- Limit credit applications. Too many credit inquiries are bad.
- Reduce existing balances on credit cards.
- Having limited credit could negatively impact your score.

How can you check your credit score?

Call any of the three major credit bureaus for a free credit report:

- Equifax 1-800-685-1111
- Trans Union 1-800-916-8800
- Experian 1-888-397-3742

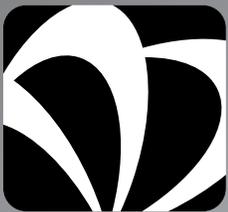
If you suspect that there is an error on your report, contact the above credit bureaus to inquire about the nature of the problem and to seek resolution. Should your identity be stolen, notify the credit bureaus and your creditors immediately and ask them to place a fraud alert on all your accounts.

From The Consortium for Entrepreneurship Education, Columbus, Ohio, <http://entre-ed.org>

Who's Your Boss?

Blaine Mickens, an 18-year-old recent graduate of Whitney Young School in Cleveland, is owner of Estate Groomers, a landscaping business, and Young Picasso Painting, a residential painting company. He has five employees and ambitious future plans.

Peggy Turbett/The Plain Dealer



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Entrepreneurship

All About Me!

Overview

These activities are designed to allow students to become familiar with their own thoughts, beliefs, strengths and characteristics. Students complete a series of activities that allow them to find out information about themselves. The culminating activity is to write a few paragraphs that explain what they have learned.

Standards Addressed

From National Content Standards for Entrepreneurship Education

Personal Assessment

- B.15 Evaluate personal capabilities
- B.16 Conduct self-assessment to determine entrepreneurial potential

Personal Management

- B.26 Use feedback for personal growth

Materials

- Crayons
- Markers or colored pencils

Procedure

Activity 1: Glyphs (for elementary students)

- Student handout: Make Your Own Glyph (p. 15)
1. Introduce the concept of glyphs. Native Americans decorated their garments with glyphs that told others about themselves. (Go to <http://www.WesternReservePBS.org/onestate/glyphs.htm> to see glyphs used by Native Americans.)
 2. Tell students that they are going to create a glyph that will tell others about themselves.
 3. Distribute the Make Your Own Glyph handout, crayons, markers or colored pencils and directions.
 4. After the glyphs are created, display them around the room and allow the students a few minutes to "read" them.

Activity 2: Learning Style

- Student handout: Learning Styles (p. 16)
1. Introduce the concept of how important it is to understand oneself.
 2. Pass out the Learning Styles handout and review it with your class. Ask them to predict the type of learner they think they are.

3. Have the students use computers to go to <http://www.berghuis.co.nz/abiator/lsi/lsiframe.html> and take the learning style tests.
4. Instruct the students to write a paragraph about what they have learned about themselves from these exercises.
5. Review with the students the characteristics of an entrepreneur and ask them to compare what they found with these characteristics.

Writing Evaluation Scale

Criteria	Points
Writing is clear; conclusions are logical and developed	3
Writing is clear but brief and lacks clarity; some logic errors	2
Writing draws at least one conclusion but is somewhat confusing	1
Writing shows no conclusions or is unrelated to the task	0

Activity 3: Career Interest

1. Now that students are aware of their learning style, they may have an interest in what types of careers are available to them. This might be the first step in deciding if they want to start their own business.
2. Have the students go to <http://driveofyourlife.org/launch.html>. This site has a game for middle school students. There are teaching materials that accompany the game. As the students complete sections of the game, they are building a car. The last part of the game has the students driving the car to each of the careers that match their learning style and their interests.
3. When the students have completed the game, have them write a paragraph stating what they learned about themselves.

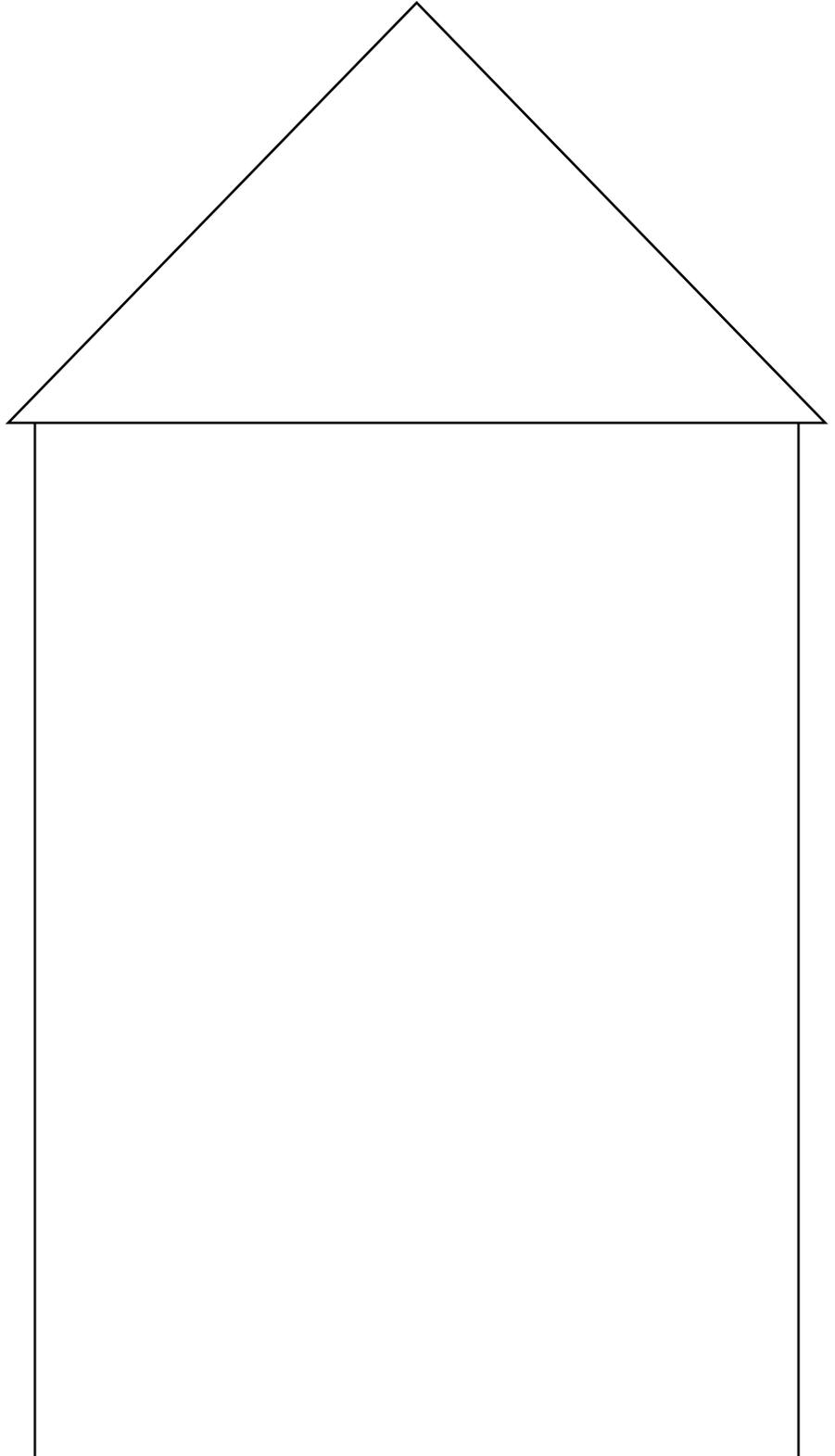
Writing Evaluation Scale

Criteria	Points
Writing is clear; conclusions are logical and developed	3
Writing is clear but brief and lacks clarity; some logic errors	2
Writing draws at least one conclusion but is somewhat confusing	1
Writing shows no conclusions or is unrelated to the task	0

Make Your Own Glyph

Directions

1. If you like to spend money, color the roof orange. If you like to save money, color the roof green.
2. If you are creative, make an orange door on your house. If you like things orderly, make a yellow door on your house. If you are a little of both, make your door green.
3. If you have your own savings account in a bank, make a chimney on the roof.
4. If you prefer to spend money, make two windows on your house. If you prefer to save money, make one window.
5. If you have ever thought of a new invention, put some grass in front of your house.
6. If you like puzzles and games, put some flowers in front of your house.
7. If you are currently saving to buy something, put a picture of it next to the door (or write the word).
8. If you're a boy, make your house blue. If you're a girl, make it red.



Learning Styles

Name _____

Every person has his or her own unique way of learning. Think about yourself. Do you learn best in a group or by yourself? Do you need quiet? Do you remember better if you see something or if you hear it?

How you answer these questions can help to determine your learning style. Although you may learn in a lot of ways, you probably have one style that is more dominant than the others.

Learning Styles

Visual learners remember best what they see. They learn best through images — pictures, diagrams, timelines, demonstrations and charts. They usually like mazes and puzzles, machines, inventions and map reading. Sometimes they are accused of daydreaming in class.

Auditory learners think in words. They remember best when they hear and listen. They might be good readers but prefer the spoken word more. They are often musical. They are generally good storytellers and solve problems by discussing them.

Kinesthetic learners (or active learners) prefer to learn through their bodies or their feelings. They are highly active and communicate with body language and lots of gestures. These learners often talk about how they feel about things. They learn best when there are hands-on activities.

Thinking Styles

Analytical thinkers are generally reserved. They tend to make decisions based on facts and research. They like to get to the bottom of things; curiosity is one of their strongest motives. Many mathematicians, philosophers and scientists belong to this type. Analytical thinkers quickly grasp patterns, principles and structures. They tend to like linear structures or things that progress in order or in a step-by-step fashion. They generally make decisions based on facts, not emotions. They tend to do one thing at a time. They like an ordered environment. They are said to be “left-brained.”

Global thinkers tend to make decisions based on emotion or intuition. They like doing more than one thing at a time. They like group activities. They tend to be spontaneous and learn best when information is presented with humor or emotion. They can work well while the radio or television is on.

Make Some Predictions

My learning style is visual auditory kinesthetic
 My thinking style is global analytical

Now that you know about these different learning styles, it is time to find out what kind of learner you are. Go to Abiator’s Online Learning Style Inventory at <http://www.berghuis.co.nz/abiator/lisi/lisiframe.html> and take one of the tests. After you take the tests, fill in the chart below.

Test	Your Learning Style	Agree or Disagree?
Learning Styles Test 1		
Learning Styles Test 2		
Analytical/Global Test		

Write at least three sentences that tell about you. Then write whether you think that you have the characteristics of an entrepreneur.

Thinking Like an Entrepreneur

Overview

After completing the first lesson, students should have some ideas about how they learn and what their career interests might be. In this lesson, students delve into what it takes to become an entrepreneur, what their own passions are and where this knowledge might lead them.

Standards Addressed

From National Content Standards for Entrepreneurship Education

Personal Assessment

- B.14 Determine interests
- B.15 Evaluate personal capabilities
- B.16 Conduct self-assessment to determine entrepreneurial potential

Personal Management

- B.19 Make decisions
- B.26 Use feedback for personal growth

Career Planning

- H.06 Explain employment opportunities in entrepreneurship

Procedure

Activity 1: Entrepreneurship

- Student handout: What Is Your Passion? (p. 20)
 - Student handout: My School or Community: Under the Microscope (p. 21-22)
1. Ask the students what they think an entrepreneur is. Write answers on the board. Try to get to the place where students define an entrepreneur as a person who sees a need for a service or a product in the community and starts his or her own business to earn a profit. (Profit is defined as the total amount of income after paying expenses.)
 2. Ask the students to name entrepreneurs in their community. Small businesses are good examples: pizza shops, car dealerships, doctors, etc.
 3. Ask the students what is needed for a person to be an entrepreneur. List these so they are visible to the student. They might include intelligence, organization, creativity, ability to take a risk, work ethic, capital, skills, profit seeking, etc.
 4. Explain to the students that there are two main qualities to being a successful entrepreneur: to love what you are doing and to choose a product or service that is needed.
 5. Our first activity is to discover what we really love. Distribute the student handout What Is Your Passion? Follow the directions on the handout so that each student will end up with one interest that he or she really loves in the center white square.

6. Divide the students into groups of three to five. Distribute the student handout My School or Community: Under the Microscope. Explain to the students that they are going to create a new business using the information about the demographics of their community and about their personal passions.
7. Talk about the concepts of advertising and corporate identity. Students' advertisements in the radio and newspaper should "sell" their company to the public. Students can go online to at <http://www.sloganizer.net/en> to create a slogan for their business.
8. Have the students share their businesses with the class. Have them read their radio announcements and display the newspaper advertisements around the room.

f. **Profit:** The positive gain from an investment or business operation after subtracting all expenses.

3. Distribute the student handout What's My Profit? Students can work with a partner to complete the assignment or this can be given as homework.

Answers to What's My Profit?

- | | | |
|--------------------------------|------------------------|---------------------------|
| 1. Gross profit <u>\$21</u> | Expenses <u>\$2.15</u> | Net profit <u>\$18.85</u> |
| 2. Gross profit <u>\$100</u> | Expenses <u>\$20</u> | Net profit <u>\$80</u> |
| 3. Gross profit <u>\$41.50</u> | Expenses <u>\$0</u> | Net profit <u>\$41.50</u> |
| 4. Gross profit <u>\$120</u> | Expenses <u>\$16</u> | Net profit <u>\$104</u> |
| 5. Gross profit <u>\$47</u> | Expenses <u>\$6</u> | Net profit <u>\$41</u> |
| 6. Gross profit <u>\$90</u> | Expenses <u>\$27</u> | Net profit <u>\$63</u> |

Activity 2: Business Choices

- Student handout: What's My Profit? (p. 23)

1. Explain to the students that there are some key concepts that business people need to know. Give the following examples:
 - a. You mow your neighbor's lawn and charge him \$15. What expenses did you have? How much profit did you make?
 - b. You babysit for your neighbor. You charge \$5 per hour and work for four hours. What expenses did you have? How much money did you make?
 - c. There was a neighborhood bake sale. You made cookies and sold them for \$4 per dozen. What expenses did you have? How much profit did you make?
2. After these questions have been discussed, list the key words on the board and have the students use them when describing the scenarios above.
 - a. **Expenses:** The amount of money paid for supplies and other needed items.
 - b. **Goods:** Objects that are capable of satisfying people's wants.
 - c. **Gross profit:** The total amount of money earned.
 - d. **Income:** Money earned from the sale of good or services.
 - e. **Net profit:** The amount of income after expenses are paid.

Evaluation

This could be evaluated on a percentage basis. There are 18 possible correct answers. Divide the number correct by 18 to get a percent correct.

Activity 3: Opportunity Cost (Online Activity)

1. If the students do not understand opportunity cost, go to <http://www.WesternReservePBS.org/economics/cost.htm> and proceed through this lesson.

Activity 4: Thinking About Being an Entrepreneur?

- Student handout: Thinking About Being an Entrepreneur? (p. 24)
1. Students have completed a variety of activities about themselves. Now they need to look a little closer at being an entrepreneur.
 2. Distribute the student handout Thinking About Being an Entrepreneur?
 3. Give the students some time to write their thoughts about working for themselves or working for others. Ask them to think about the things their parents have said about their jobs.
 4. Have a class discussion about each of the conditions of employment and have the students fill in the chart.
 5. An answer sheet is included.

Evaluation

There are 10 blanks that the students will fill out. Evaluation could be based on a percentage of items correct. This activity could also be used as a forum for discussion.

Thinking About Being an Entrepreneur? Possible Answers

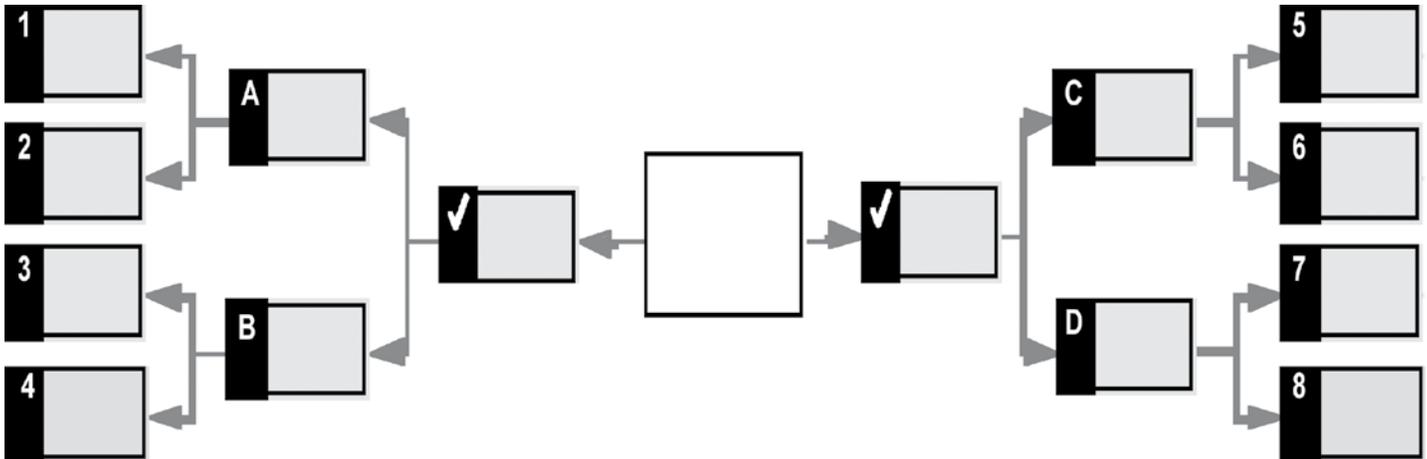
Conditions of Employment	Working for Someone Else	Working for Yourself
Job Stability	Depends on success of company or on the whim of your superiors. There is some recourse in the law.	Depends entirely on the success of the business.
Work Hours	Determined by the company. Generally have set hours of work.	Usually unpredictable and often involves working long hours.
Salary	Usually set by the company. Generally raises are given at a set amount of time (e.g., yearly). Raise is determined by the company.	Generally starts with a low salary until the business gets started. Then the amount of money made is determined by how successful the business is.
Benefits	Generally a package of benefits set by company. (e.g., health insurance, days off, retirement programs, vacations etc.)	Benefits provided by the business. You determine what is given in terms of benefits. Vacations sometimes suffer because of workload.
Responsibilities	Company tells you what your responsibilities are. Generally given in writing.	Responsible for everything. Hire and pay others to do duties.
Feelings of Success	Depends on the company you work for and your supervisors.	Depends on the success of the business.

What Is Your Passion?

Name _____

- In boxes 1 through 8, write eight different things that interest you.
- Decide which you like better – number 1 or 2 – and write it in box A. Do the same for 3 and 4, 5 and 6 and 7 and 8.
- Decide which one you like better between A and B and write it in the box with the checkmark next to it. Do the same with boxes C and D.
- Now pick the one you liked better from the two checked boxes and write it in the center box.

Adapted from allterrainbrain.org



My School or Community: Under the Microscope

Name _____

You are thinking about creating a business in your school or your community. Let's discuss what type of business will be successful and earn a profit. Answer the following questions.

1. List each person in the group's main passion or interest from the What Do You Love? What Is Your Passion? activity.
2. List some businesses that already exist in your school, town or community.
3. Discuss what businesses or services are missing in your school, town or community that would make it a better place.
4. Try to match the items in #1 with what businesses or services are needed. As a group, decide on one business that you would like to start and list it below. Tell why your group selected that business. Name your business.

-
5. What service will your business provide or what product will it make? What type of people will use your service or product?

 6. What problems do you anticipate? What risks are you taking?

 7. What will you do to overcome those risks?

 8. You want to put an ad on the radio. Write an advertisement for your product or service.

 9. You also are taking an ad out in the newspaper. Show us how the ad will look.

What's My Profit?

Name _____

1. Lou has a daily dog-walking job. He charges his neighbor \$3 per day and walks the dog every day. He buys treats for the dog and gives it one each day. The treats cost \$2.15/week. What is his profit?

Gross profit _____ Expenses _____ Net profit _____

2. Gabby designs Web sites for local businesses. She charges \$50 per month for each site. She built two this month. She has to pay \$10/month for each site for the Internet access. What is her profit each month?

Gross profit _____ Expenses _____ Net profit _____

3. At a yard sale, Mario sold his old bike for \$25, two old games for \$6 each, and nine T-shirts for \$.50 each. What is his profit?

Gross profit _____ Expenses _____ Net profit _____

4. Dejohn details cars. He charges \$30 per car and worked on four cars this month. He pays about \$4 per car for cleaning materials. What is his profit?

Gross profit _____ Expenses _____ Net profit _____

5. D.J. has a dog-washing business. He charges \$10 for big dogs and \$7 for small dogs. He washed four big dogs and one small dog this week. He spent \$3 for shampoo and \$3 for flea spray. This is used for all of the dogs. What is his profit?

Gross profit _____ Expenses _____ Net profit _____

6. Miko made beaded bracelets and sold them to her friends at school for \$15. The beads cost \$.50 each and she uses an average of seven beads on each one. The clasp is \$1 each. She sold six bracelets. What is her profit?

Gross profit _____ Expenses _____ Net profit _____

Thinking About Being an Entrepreneur?

Name _____

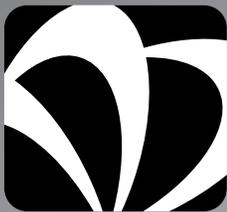
Most people work for somebody else. Entrepreneurs, on the other hand, have a business or offer a service that allows them to work for themselves.

Fill in the chart below with your thoughts about the conditions of employment when working for others and when working for yourself.

Conditions of Employment	Working for Someone Else	Working for Yourself
Job Stability		
Work Hours		
Salary		
Benefits		
Responsibilities		
Feelings of Success		

Who's Your Boss?

Naomi and Noemi Romero, 16-year-old twins from Cleveland and seniors at John Hay High School, own and operate their own fur-suit business, Cosfurs. In 2008, they won \$1,000 and first place in the E City business-plan contest for Cleveland students.



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**Financial Literacy:
Income and Spending**



All About Money

Overview

Students look at what money is, how it was invented and how it can be used. They investigate how they can get money, how to budget money (or allocate their income based upon their needs and wants) and what happens to money because of supply and demand. An optional third activity gives students the opportunity to create a resume, fill out a job application and learn about the interviewing process.

Standards Addressed

From National Content Standards for Financial Literacy

Financial Literacy: *Understands personal money-management concepts, procedures and strategies*

- G.02 Describe functions of money (medium of exchange, unit of measure, store of value)
- G.04 Recognize types of currency (paper money, coins, banknotes, government bonds, treasury notes, etc.)
- G.16 Develop savings plan
- G.17 Develop spending plan
- G.20 Maintain financial records
- H.07 Utilize job-search strategies
- H.08 Complete a job application
- H.12 Prepare a résumé

Procedure

Activity 1: What Is Money? (Elementary or Middle School Lesson)

- Student handout: Money, Money, Money! (p. 30)
1. Ask the students what money is. Record the answers. Ask them if they were ever able to legally get something they wanted even though they didn't have money to pay for it. Examples might be by trading or using a barter system.
 2. Either distribute the student handout Money, Money, Money! and review it with the class or ask the students to do research and find out about the history of money. Some good sites include the following:
 - a. History of Money
<http://www.pbs.org/newshour/on2/money/history.html>
 - b. History of Money: An Interactive Timeline
<http://www.history.com/minisites/money/viewPage?pagelId=52496>
 - c. The History of Money
<http://inventors.about.com/od/mstartinventions/a/money.htm>
 3. If the students are doing research, divide the class into groups of two or three and ask each group to write three to five facts they find out about money. Invite each group to tell about something they found in their research. If the handout was distributed, have the students read the information and paraphrase it.

Activity 2: What Do You Do With Money?

- Student handout: Mario (p. 31)

Materials

- Compasses (optional)
- Markers, colored pencils or crayons
- Ruler

1. Discuss with the class the four basic ways that one can manage money and the merits of each:
 - a. Spend – pay bills or get a good or service you want.
 - b. Save – put money away for a particular goal or for use in an emergency situation.
 - c. Invest – make more money from the money you have; however, there may be risk involved.
 - d. Donate – help your fellow man.
2. Present the following scenario: It is Christmas and you just opened your gifts. You received a total of \$100 from your relatives. What will you do with this money?
3. Have the students draw a large circle on a piece of paper and make a pie chart that shows how they would allocate the \$100.
4. Divide the students into groups of three. Pass out the Mario student handout and read the introductory paragraph with them.
5. Have the students use the circle on the handout to decide as a group how to allocate the money by making a pie chart. Have them think about long-term and short-term goals and how they would describe Mario's goals.
6. Share the graphs with the class.

Activity 3: Thinking About Budgets

- Student handout: How Much to Spend: Budgeting (p. 32-33)
1. Ask the students to define what a budget is (an estimate, often itemized, of expected income and expense for a given period in the future).
 2. Ask if they keep a budget or if they think their parents keep a budget.

3. If they did the preceding activity, they looked at how a person sets goals about how one might use money. Explain that a budget is an actual plan to help one stay financially smart.
4. Distribute student handout How Much to Spend: Budgeting.
5. Students can work with a partner or alone. Go over the introductory material and discuss the concepts of fixed and variable expenses.
6. Have the student decide how they will distribute the income among these expenses.
7. They need to answer the questions about budgeting.
8. After the assignment has been completed, students can share their budgets and discuss why they made the selections that they did.

Vocabulary

fixed expense, variable expense, disposable income

Evaluation

Ask the students to number a paper to four and to define the following concepts. Go over the terms with the students and allow them to correct their own papers:

1. Budget
2. Fixed expense
3. Variable expense
4. Disposable income

Activity 4: How Can I Get Money?

- Student handout: Getting a Job (p. 34)
1. Ask the students how they would get money if they needed it. Among the answers you will get is the idea of getting a job. When a student is younger than 16, he or she must have parental permission to get a job. Regardless of this difference, the process of getting a job is essentially the same. The steps include the following:
 - a. Decide on the type of job you would want.

- b. Look for a job (use a newspaper, network with friends, go to job fairs, check with your neighbor, etc.).
 - c. Create a résumé, and a cover letter specific to that job.
 - d. Submit your application.
 - e. Interview for the job.
2. Doing this activity requires a large time commitment. If the commitment exceeds your timeline, stop after the first step, making sure that the students understand the process. If you want the students to proceed and go through the process of finding a job, follow the steps on the student handout. Have the students write down several types of jobs they would like to have. Remind them to think about their skill levels and areas of interest.
 3. Distribute the Getting a Job student handout. Have students follow the procedure listed on the handout.

Evaluation

Resume

Complete	5
Format: neat, style, form	5

Application

Neat	5
Complete	5

Interview

Appearance	5
Composure, conversation	5

Total Points **30**

Activity 4: What Happens to the Money?

Materials

- Game tokens in various colors
- 21 “free homework” certificates

1. The students have learned how money originated, what they can do with it and how to make it. Now they will be learning what happens to the cost of an item when what they want is either plentiful or scarce (supply vs. demand).
2. Have a box of colored game tokens available (poker chips or tokens work well). Pass the box around the room and let students take as many tokens as they want from the box.
3. After the tokens have been selected, give each of the colors a different value.
4. After homework has been assigned, hold up a “free homework” paper and tell the students that you are going to have an auction for this one-of-a-kind item. The person who bids the highest will have no homework tonight. Students will use their tokens to make the purchase.
5. After this has been done, open your desk drawer and declare that you just found 20 more certificates. Tell the class that you are willing to sell these as well and will start the bidding at one. Wait for the students to react.
6. After all the certificates have been sold, get the reaction from the first successful bidder. How did he or she feel? Ask what the students think this might demonstrate. Talk about the concept of supply and demand.
7. Ask the students about some examples they know about the concept of supply and demand. Answers might include gas prices, concert or sports tickets, etc.

Money, Money, Money!

Money! What is it? Who invented it? Why do we want it?

The History of Money

Think back to when you were younger. Maybe your friend had a baseball card you really wanted and your mom just baked some delicious cookies that your friend wanted. So you traded. This is called bartering. To barter is to trade goods and services for other goods and services without the use of money. In China, from 9,000 to 6,000 B.C., cattle were traded for sheep, camels, grains, etc. This trading is the first and oldest form of money. Goods were often traded for shells.

Outside of China, at about 500 B.C., the first coins were developed out of lumps of silver. They soon took the familiar round form of today and were stamped with various gods and emperors to mark their authenticity. In China in A.D. 806, the first paper banknotes appeared in China.

The earliest known use of wampum, strings of beads made from clam shells, was by North American Indians in 1535. Wampum probably existed well before this date. The Indian word "wampum" means white, which was the color of the beads.

The people in the United States first decided to make their own currency when they needed money to pay for the Revolutionary War. Before the mid-1800s, each dollar was worth a certain amount of gold or silver. This was called the "gold standard." In the United States, the Gold Standard Act was officially enacted in 1900, which helped lead to the establishment of a central bank. The massive Depression of the 1930s marked the beginning of the end of the gold standard.

Today, currency continues to change and develop, as evidenced by the new U.S. \$100 Ben Franklin bill. Digital cash in the form of bits and bytes is becoming an important form of monetary trading today.

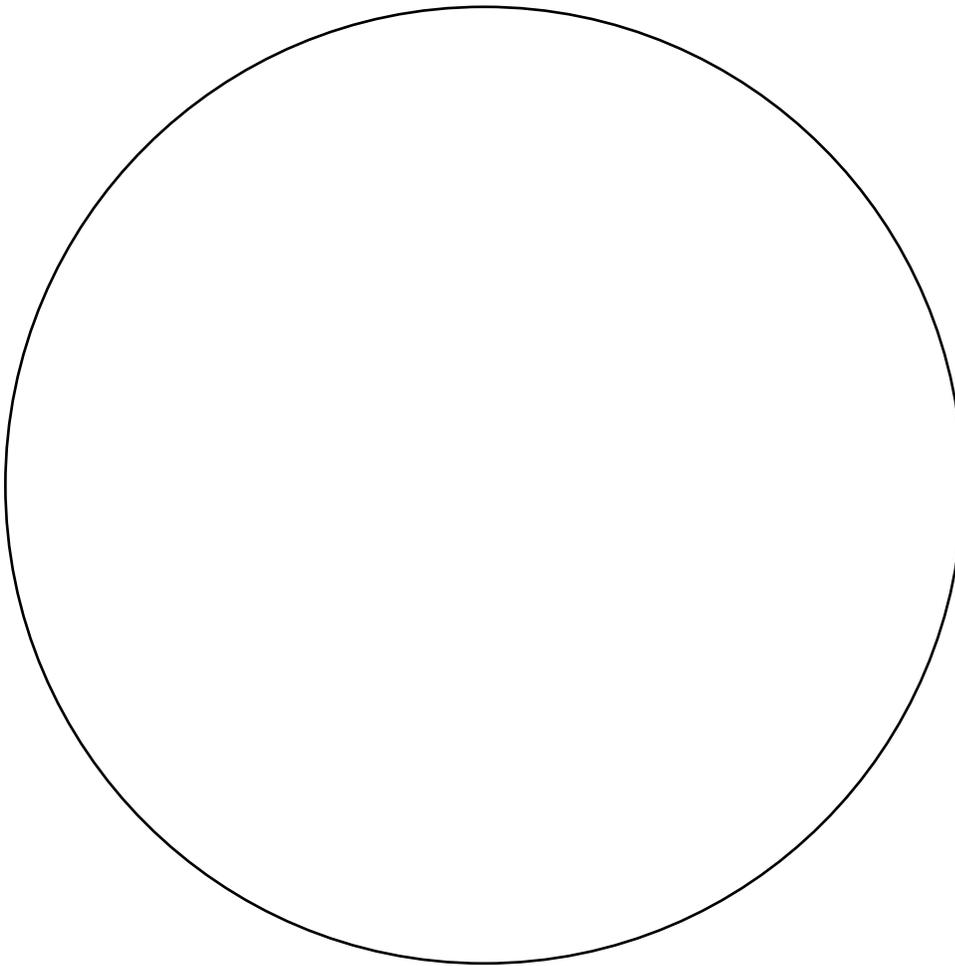
Some Interesting Money Facts

- The largest paper bill that was ever in circulation was \$10,000. The largest bill that is in circulation today is the \$100 bill.
- All the paper money in the United States is made in Washington, D.C., and Fort Worth, Texas, by the Bureau of Engraving and Printing.
- Our coins are minted in four places: Philadelphia, Pa.; Denver, Colo.; San Francisco, Calif.; and West Point, N.Y.
- You can do four things with money: spend it, save it, donate it or invest it.

Mario

Name _____

Mario has a job after school. He makes \$100 per week. He wants to help his parents pay for his college in five years. Mario pays for the gas that his dad uses when he drives Mario to work and to visit his friends. Mario also wants to help his church with a fund-raiser to help the homeless people in his community.



Key

Long-term goals: _____

Short-term goals: _____

How Much to Spend: Budgeting

Name _____

You have just gotten your first job. With your first paychecks, you went a little wild and bought a big-screen TV and some new clothes. You decided that it was time to settle down and plan a budget. Here is the reality. You bring home \$2,500 per month. (Your health insurance, federal and state taxes, Social Security and pension fund have already been deducted from your paycheck.) You want to save to buy a house and for your retirement. Let's look at your budget.

Your **fixed expenses** are costs that do not change from period to period or that change only slightly. Fixed expenses are usually paid on a regular basis. Your fixed expenses include the following:

Rent	\$600
Insurance (life, renters' and car)	\$100
Student loan	\$100
Car payment	\$190
Savings	\$200
Total	\$1,190

Notice that you already decided to "pay yourself first." This means you know the importance of saving early and often so you have decided to make this a fixed expense.

Now you have some decisions to make. How will you spend the rest of your income? Let's look at your **variable expenses**, or expenses that may change each month. Try to make a budget that you will stick to each month.

Variable Expenses

Meals (home)	
Meals (eating out)	
Utilities (usually at least \$180)	
Car gas and maintenance	
Clothes	
Gifts and donations	
Phone	
Gym membership	
Personal care	
Entertainment	
Vacation	
Credit card	
Miscellaneous/personal	
Other	
Total	\$1,310

1. Give a brief explanation of how you made your decisions about what you would spend in each category.
2. Why is it important to “pay yourself first?”
3. What do you think “disposable income” is?
4. This month, you had to have dental work done that cost \$400. What can you do to your budget to accommodate this cost?
5. Your friend has just told you about an investment that will make you a lot of money in a very short time. He says it is the chance of a lifetime. You need to invest \$500. Very little other information is available. What do you think of this offer?
6. Do you currently have a budget for your spending? Do you think you’ll consider this now or in the future?

Getting a Job

The first step in getting a job is to create a **résumé**. A winning résumé grabs the reader's interest. It should show why you should be hired by focusing on your accomplishments. In this activity you will examine a variety of résumé styles. Use the information from these Web sites to help you prepare a résumé for yourself.

- Teen Résumé Writing Worksheet
http://www.quintcareers.com/teen_resume-writing_worksheet.html
- Teens4Hire Sample Teen Résumé
http://www.teens4hire.org/resource_resume.asp
- My First Resume Template (Elementary Grades)
<http://www.careerkids.com/resume.html>

Once you have your résumé completed, you can practice filling out an **application**. Go to the following Web sites to learn how. You can print this information out for future reference.

- How to Fill Out Job Applications
<http://little.nhlink.net/nhlink/employme/new.htm>
- Filling Out a Job Application (slide show)
<http://www.tv411.org/lessons/cfm/writing.cfm?str=writing&num=3&act=1>

When completed, print out two applications and then complete these applications:

- Sample Job Application Form
http://www.quintcareers.com/employment_application.pdf
- Jobs Online
http://www.jobsonline.net/browse/homepage_what.html?KEYWORD=Applications&tp_campaign_id=408&traffic_id=65730044

Along with the application, you need to send a **cover letter**. Visit these Web sites for more information:

- Career Services at Virginia Tech
<http://www.career.vt.edu/JOBSEARC/coversamples.htm>
- Cover Letter Examples
<http://www.csuchico.edu/plc/coverltr-ex.html>

The last part of the process is the **job interview**. This is the big event. What separates the winners from the losers in an interview? Basically, the winners show that they are capable of doing the job or learning it quickly. They will show that they are willing to learn and are motivated to work. They also will show that they have a friendly personality and that they will work well with others. A little preparation will help you to ace the interview. Visit the following Web site to find out how you can prepare for the interview:

- How to Dress for an Interview
<http://jobsearch.about.com/od/interviewattire/a/interviewdress.htm>

When you have read the information on interviewing, work with a partner and practice interviewing. When you are confident of your interviewing skills, make an appointment with your teacher for an interview.

Handout adapted from work by Becky Hamilton of Wooster High School.

Education's Impact on Income

Overview

In this lesson, students look at what income is and how education affects their earning power over the years. They make a graph showing education vs. income.

Standards Addressed

Social Studies, Economics

Grade 11

11-12 Benchmark E. Explain the use of a budget in making personal economic decisions and planning for the future.

Personal Finance / Y2003.CSS.S04.G11-12.BE.L11.I11

11. Explain why incomes will differ in the labor market depending on supply and demand for skills, abilities and education levels.

Personal Finance / Y2003.CSS.S04.G11-12.BE.L11.I13

13. Explain the consequences of the economic choices made by individuals and the tools which they use to manage their financial resources including:
- Budgets
 - Savings
 - Investments
 - Credit
 - Philanthropy

Mathematics, Data Analysis

11-12 Benchmark D. Connect statistical techniques to applications in workplace and consumer situations.

Data Collection / Y2003.CMA.S05.G11-12.BD.L11.I01

01. Design a statistical experiment, survey or study for a problem; collect data for the problem; and interpret the data with appropriate graphical displays, descriptive statistics, concepts of variability, causation, correlation and standard deviation.

11-12 Benchmark A. Create and analyze tabular and graphical displays of data using appropriate tools, including spreadsheets and graphing calculators.

Statistical Methods / Y2003.CMA.S05.G11-12.BA.L11.I04

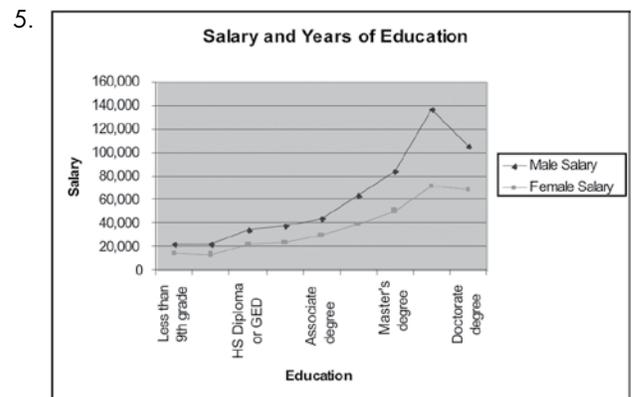
04. Create a scatterplot of bivariate data, identify trends, and find a function to model the data.

Procedure

- Student handout: Income and Education (p. 37-38)
1. Ask the students what income is and how to get it. Elicit answers and write the definition on the board.
 2. Ask if they think all people make similar amounts of money and if not, why this is so. Go over the main reasons why people make different amounts of money. (Education and a market for the service are the main reasons. Other factors include how hard someone works, how much natural ability someone has and how well a person gets along with others.)
 3. Have students work in pairs or groups of three.
 4. Distribute the Income and Education student handout and explain that it shows statistics from the Census Bureau that compare years of education with income earned.
 5. Ask the students to work through the questions on the handout. Remind them that they need to have a title for their graph and they need to label the axes. Both axes should have consistent intervals.

Answers

1. The greater the number of years of education, the higher the income.
2. Women generally make less than men.
3. \$1,912,590 Income for 30 years with a bachelor's degree
\$1,021,500 Income for 30 years with a high school diploma
\$891,090 Additional money made by man with a bachelor's degree
4. Plumbers, electricians, skilled construction workers



6. Ask students to display their graphs. Then ask what they observe when comparing the graphs of the different groups. (They should see that not every group used the same scale. All axes should be labeled and all should have a title.)

Evaluation of Graph

Category	4	3	2	1
Construction	Student constructed the scatter plot correctly and paid attention to scale, labels, etc.	Student constructed the scatter plot correctly but missed attention to details.	Scatter plot had mistakes or unclear scale; there is minimal attention to detail.	Student does not understand scatter plot construction or how to form the scale.
Concepts	Student has a clear understanding of scatter plots and line of best fit and has communicated that effectively.	Student has satisfactory understanding of the major concepts, but has small misunderstandings.	Student has major misunderstandings of the concepts and cannot complete work on his own.	Student does not display understanding of the major concepts or did not complete the assignment.

Income and Education

Income is the money that is earned from the sale of goods or services. As you well know, income varies widely and is very important when you consider your standard of living. Some factors that cause the differences in income include the following:

- The market for the occupation. For example, athletes have a high income because they have skills that are important in a market that has many consumers. When there is a change in the demand, the earnings will either raise or lower.
- Education and training. Workers with more human capital (education) tend to earn more than those with less.
- How hard someone works, how much natural ability a person has, how well a person can get along with others.

Let's take a look at one of these factors. The statistics below are from the U.S. Census (2004).

Education vs. Income

Years of Education	Male Salary	Female Salary
Less than 9th grade	22,070	14,008
9th to 12th grade (no diploma)	22,795	13,519
HS diploma or GED	34,050	21,923
Some college (no degree)	37,561	22,896
Associate degree (2 years)	44,130	29,208
Bachelor's degree	63,753	38,766
Master's degree	84,017	50,547
Professional degree	137,050	70,812
Doctorate degree	104,848	68,191

Source: U.S. Bureau of the Census, http://encarta.msn.com/media_461544498/income_and_educational_levels.html

1. Describe the relationship between education and income.
2. What else stands out about this chart?
3. Consider that you have a work life of 30 years. How much more would a man with a bachelor's degree earn than someone with a high school diploma only?
4. Can you think of some occupations that have high incomes without a college education?
5. Make a graph below that has years of education (independent variable) on the x-axis and income level on the y-axis (dependent variable). You can make it by hand or use a spreadsheet to do this.

Who's Your Boss?

Jake Penwell,
19, a Shelby,
Ohio, native who
is now a freshman
at Xavier University,
helped start Albert
Entertainment when
he was in the 7th
grade. The company
offers disc jockey
services.



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**Financial Literacy:
Saving**

Saving and Using Credit Cards

Overview

The first activity in this set of lessons discusses saving one's income. The next two activities deal with the pros and cons of using credit cards and the the making of a credit history.

Standards Addressed

Social Studies, Economics

Grade 11

11-12 Benchmark E. *Explain the use of a budget in making personal economic decisions and planning for the future.*

Personal Finance / Y2003.CSS.S04.G11-12.BE.L11.I13

13. Explain the consequences of the economic choices made by individuals and the tools which they use to manage their financial resources including:

- Budgets
- Savings
- Investments
- Credit
- Philanthropy

Personal Finance / Y2003.CSS.S04.G11-12.BE.L11.I14

14. Describe how interest rates affect savers and borrowers.

Procedure

Activity 1: Saving

- Student handout: Saving Your Income (p. 44-45)
- Student handout: Saving Your Income: Scenario 1 (p. 46)
- Student handout: Saving Your Income: Scenario 2 (p. 47)

1. Distribute the student handout Saving Your Income.
2. Read (or have a student read) the scenario at the top. Review what opportunity cost is and have the students answer what the opportunity cost would be for either choice made.
3. Ask students if they have a bank account and why they might have it. Ask them if they understand the concept of interest.
4. Either read or have the students read the paragraphs that explain both simple and compound interest.

5. Have the students read the scenarios about Anika and Luther. Then distribute the Saving Your Income scenario spreadsheets.
6. Have the students answer the questions related to the scenarios.

7. Talk about what are considered the two main rules for saving:
 - a. Save early and often.
 - b. Live below your means.
8. Ask students to write a paragraph about their reaction to seeing the data on Anika and Luther.

Evaluation

CATEGORY	4	3	2	1
Focus on Topic (Content)	There is one clear, well-focused topic. Main idea stands out and is supported by detailed information.	Main idea is clear but the supporting information is general.	Main idea is somewhat clear, but there is a need for more supporting information.	The main idea is not clear. There is a seemingly random collection of information.
Support for Topic (Content)	Relevant, telling, quality details give the reader important information that goes beyond the obvious or predictable.	Supporting details and information are relevant, but one key issue or portion of the storyline is unsupported.	Supporting details and information are relevant, but several key issues or portions of the storyline are unsupported.	Supporting details and information are typically unclear or not related to the topic.

Activity 2: Credit Cards

- Student handout: Credit Cards (p. 48)

1. Ask the students if any of them own a credit card. Divide the students into groups of two or three and ask them to list the reasons why a credit card would be useful.
2. List the reasons on the board. Possible answers include the following:
 - a. You can buy items online.
 - b. You don't have to carry a lot of cash.
 - c. You can buy something if you don't have the cash at hand.
 - d. It is convenient to use to purchase gasoline.
 - e. It allows you to pay your bills on time.
3. Ask the students if there are any problems caused by having a credit card. Possible answers include the following:
 - a. It encourages impulse shopping.
 - b. It makes going into debt easy.
 - c. You can get a bad credit history.

4. Ask the students to number a paper from one to four. Then read the scenarios below and have the students write either yes, no or depends. Invite them to raise their hands and share what they wrote for each item; discuss the issues.
 - a. You just got the list of books you need to buy for class. Should you use your credit card to pay for them?
 - b. You saw a great new outfit at the mall. Should you use your credit card to pay for it?
 - c. You need a car to get back and forth to work. Should you use your credit card to pay for it?
 - d. You need groceries. Should you use your credit card to pay for them?

This should engender some discussion. All of the items are debatable.

5. Distribute the Credit Cards student handout.
6. Have the students work with their partner(s) and go online to <http://www.creditcards.com/specials.php> and select two cards to evaluate.

- Have a discussion of what the students found in their research.
- Have them write one paragraph that tells which of the two cards they believe would be the best choice and why.

Vocabulary

credit, credit card, credit risk, interest rate, APR, credit limit, capital

Evaluation

CATEGORY	4	3	2	1
Focus on Topic (Content)	There is one clear, well-focused topic. Main idea stands out and is supported by detailed information.	Main idea is clear but the supporting information is general.	Main idea is somewhat clear but there is a need for more supporting information.	The main idea is not clear. There is a seemingly random collection of information.
Support for Topic (Content)	Relevant, telling, quality details give the reader important information that goes beyond the obvious or predictable.	Supporting details and information are relevant, but one key issue or portion of the storyline is unsupported.	Supporting details and information are relevant, but several key issues or portions of the storyline are unsupported.	Supporting details and information are typically unclear or not related to the topic.

Activity 3: Credit Reports

- Ask the students if they have ever seen the True Credit Reports commercial on TV. The lead actor in the commercial is doing a variety of jobs that he really doesn't like because someone stole his identity and ruined his credit rating.
- Ask the students if they know what a credit rating is. Discuss what the results of a poor credit rating would mean.
- Explain that their credit score can go from 300 to 850 points. The higher the number, the better the score. Creditors see the number as an indicator that an individual will repay a loan. Typically, scores are determined by reviewing the following data:
 - History of late payments
 - Nonpayments
 - Current level of debt
 - Types of credit accounts
 - Length of credit history
 - Number of credit inquiries
 - History of applying for credit
 - Bad credit behavior, such as writing bad checks

Most of these are going to lower a person's FICA score.

- Go online and print out Credit History Student Organizer at http://www.thirteen.org/finance/educators/p-lesson3_org6.html. This worksheet gives some scenarios and asks the students to tell what will happen to their credit history with each incident. The answers are at http://www.thirteen.org/finance/educators/p-lesson3_org2.html.

Evaluation

There are 10 possible answers the students could give in the third column and one final answer about Angela's credit score. Students should state if this helped or hurt her credit score and why. A percentage of the number correct can be used.

Saving Your Income

There are four things that you can do with your income: save it, spend it, invest it or donate it. Here we examine differences in saving income.

You need to make decisions about what you are going to do with your money. Recall that opportunity cost is what you give up to have something. Let's look at this scenario:

All of your bills are paid this month and surprisingly, you have \$200 left from your earnings. You now have to decide what to do with it. You want to save it because you know that it's not what you make but what you save that determines your wealth, but you want those tickets to see a great concert. What will you do? If you decide to save the \$200, what is the opportunity cost? If you decide to buy the tickets, what is the opportunity cost?

You have decided to save your money. Now you have a second decision to make. Will you put it in a bank savings account? Will you buy a certificate of deposit (CD) or will you hide it under your mattress? Let's look at the options.

- Saving accounts offer **simple interest**. This is when the bank offers to pay you a percent of the money you deposit. For example, if you deposit your \$200 at an interest rate of 4 percent, you would earn $\$200 \times .04$ or \$8, for a total of \$208. You can take your money out any time you wish.
- If you buy a CD, you will probably get a higher interest rate and therefore make more money, but CDs are bought for a period of time, such as 12 months or 24 months. If you decide to take your money out before that time, you will have to pay a penalty.
- If you hide your money, you can take it out at any time, but you will not make any interest on it.

One other thing you should know is that interest compounds. In other words, you earn interest on your interest. This is called **compound interest**. The second year of your saving you will earn 4 percent of \$208, not of the original \$200 you put into your account.

Saving in a bank or with a CD is a safe investment. You will not lose the money you put there. Interest rates do go up and down. What will you decide?

Banks also charge interest if you want to borrow money from them. If you want to buy a car that costs \$4,000 but you have only saved \$2,000, you will need to go to a bank to borrow the money. The rate you pay to borrow money is generally higher than the rate the bank pays you when you deposit money. If you get a rate of 6 percent, you would pay back $\$2,000 \times .06$ or \$120 interest plus the amount you borrowed (the principle), or \$2,120.

The general rule is "save early and save often." Why is this true? Let's look at the case of Anika and Luther.

Anika and Luther were the same age. They graduated from high school and college together. Both were 22 when they started working. Anika was very conscious of the need to save money, so she didn't buy a fancy car or live in a fabulous apartment. She decided she could save \$200 per month or \$2,400 per year. She believed she'd earn an average of 6 percent interest each year. Remember interest is when you earn a percentage of the amount saved. She did this for 10 years and decided she was really ready to start treating herself better. She decided to freeze this account and not spend it until she was ready to retire at age 65.

Luther, on the other hand, wanted a nice car and a fancy place to live. He didn't start saving until he was 35. He also saved for 10 years and decided not to spend this money until he was ready to retire at 65.

Both Anika and Luther will receive compound interest.

Use Scenario 1 to help answer the following questions.

1. Both Anika and Luther saved \$2,400 for 10 years. Both deposited \$24,000. How much savings (total wealth) does each have at age 65?
2. What do you think was the opportunity cost for Anika when she saved money?
3. What do you think was the opportunity cost for Luther when he saved money?
4. What are the incentives for saving early?
5. What conclusions do you draw from this activity?

Now look at Scenario 2. In this scenario, Luther continued to save \$2,400 every year until he retired.

1. How much did Anika put into the account of her own money?
2. How much did Luther put into the account of his own money?
3. How is this different from the first scenario?
4. What conclusions do you draw after seeing Scenario 2?

Saving Your Income: Scenario I

Age	Percent	Anika			Luther		
		Deposit	Interest	Total	Deposit	Interest	Total
22	6%	2,400		2,400	0	0	0
23	6%	2,400	144	4,944	0	0	0
24	6%	2,400	297	7,641	0	0	0
25	6%	2,400	458	10,499	0	0	0
26	6%	2,400	630	13,529	0	0	0
27	6%	2,400	812	16,741	0	0	0
28	6%	2,400	1,004	20,145	0	0	0
29	6%	2,400	1,209	23,754	0	0	0
30	6%	2,400	1,425	27,579	0	0	0
31	6%	2,400	1,655	31,634	0	0	0
32	6%	2,400	1,898	35,932	0	0	0
33	6%	0	2,156	40,488	0	0	0
34	6%	0	2,429	45,317	0	0	0
35	6%	0	2,719	50,436	2,400	0	2,400
36	6%	0	3,026	55,862	2,400	144	4,944
37	6%	0	3,352	61,614	2,400	297	7,641
38	6%	0	3,697	67,711	2,400	458	10,499
39	6%	0	4,063	74,174	2,400	630	13,529
40	6%	0	4,450	81,024	2,400	812	16,741
41	6%	0	4,861	88,285	2,400	1,004	20,145
42	6%	0	5,297	95,983	2,400	1,209	23,754
43	6%	0	5,759	104,142	2,400	1,425	27,579
44	6%	0	6,249	112,790	2,400	1,655	31,634
45	6%	0	6,767	121,957	0	1,898	33,532
46	6%	0	7,317	131,675	0	2,012	35,544
47	6%	0	7,901	141,975	0	2,133	37,677
48	6%	0	8,519	152,894	0	2,261	39,937
49	6%	0	9,174	164,468	0	2,396	42,333
50	6%	0	9,868	176,736	0	2,540	44,873
51	6%	0	10,604	189,740	0	2,692	47,566
52	6%	0	11,384	203,524	0	2,854	50,420
53	6%	0	12,211	218,136	0	3,025	53,445
54	6%	0	13,088	233,624	0	3,207	56,652
55	6%	0	14,017	250,041	0	3,399	60,051
56	6%	0	15,003	267,444	0	3,603	63,654
57	6%	0	16,047	285,890	0	3,819	67,473
58	6%	0	17,153	305,444	0	4,048	71,521
59	6%	0	18,327	326,170	0	4,291	75,813
60	6%	0	19,570	348,140	0	4,549	80,361
61	6%	0	20,888	371,429	0	4,822	85,183
62	6%	0	22,286	396,114	0	5,111	90,294
63	6%	0	23,767	422,281	0	5,418	95,712
64	6%	0	25,337	450,018	0	5,743	101,454
65	6%	0	27,001	479,419	0	6,087	107,542

Saving Your Income: Scenario 2

Age	Percent	Anika			Luther		
		Deposit	Interest	Total	Deposit	Interest	Total
22	6%	2,400		2,400	0	0	0
23	6%	2,400	144	4,944	0	0	0
24	6%	2,400	297	7,641	0	0	0
25	6%	2,400	458	10,499	0	0	0
26	6%	2,400	630	13,529	0	0	0
27	6%	2,400	812	16,741	0	0	0
28	6%	2,400	1,004	20,145	0	0	0
29	6%	2,400	1,209	23,754	0	0	0
30	6%	2,400	1,425	27,579	0	0	0
31	6%	2,400	1,655	31,634	0	0	0
32	6%	2,400	1,898	35,932	0	0	0
33	6%	0	2,156	40,488	0	0	0
34	6%	0	2,429	45,317	0	0	0
35	6%	0	2,719	50,436	2,400	0	2,400
36	6%	0	3,026	55,862	2,400	144	4,944
37	6%	0	3,352	61,614	2,400	297	7,641
38	6%	0	3,697	67,711	2,400	458	10,499
39	6%	0	4,063	74,174	2,400	630	13,529
40	6%	0	4,450	81,024	2,400	812	16,741
41	6%	0	4,861	88,285	2,400	1,004	20,145
42	6%	0	5,297	95,983	2,400	1,209	23,754
43	6%	0	5,759	104,142	2,400	1,425	27,579
44	6%	0	6,249	112,790	2,400	1,655	31,634
45	6%	0	6,767	121,957	2,400	1,898	35,932
46	6%	0	7,317	131,675	2,400	2,156	40,488
47	6%	0	7,901	141,975	2,400	2,429	45,317
48	6%	0	8,519	152,894	2,400	2,719	50,436
49	6%	0	9,174	164,468	2,400	3,026	55,862
50	6%	0	9,868	176,736	2,400	3,352	61,614
51	6%	0	10,604	189,740	2,400	3,697	67,711
52	6%	0	11,384	203,524	2,400	4,063	74,174
53	6%	0	12,211	218,136	2,400	4,450	81,024
54	6%	0	13,088	233,624	2,400	4,861	88,285
55	6%	0	14,017	250,041	2,400	5,297	95,983
56	6%	0	15,003	267,444	2,400	5,759	104,142
57	6%	0	16,047	285,890	2,400	6,249	112,790
58	6%	0	17,153	305,444	2,400	6,767	121,957
59	6%	0	18,327	326,170	2,400	7,317	131,675
60	6%	0	19,570	348,140	2,400	7,901	141,975
61	6%	0	20,888	371,429	2,400	8,519	152,894
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63	6%	0	23,767	422,281	2,400	9,868	176,736
64	6%	0	25,337	450,018	2,400	10,604	189,740
65	6%	0	27,001	479,419	2,400	11,384	203,524

Credit Cards

Credit cards are plastic cards issued by a bank or other business that allow the holder of the card to purchase goods and services without using cash, also called buying on credit. They allow you to purchase items for which you may not currently have the money to buy.

When you use a credit card, the credit company that issued the card pays the store. Later, you will get a bill in the mail or online from your credit card company for the amount you purchased. At that time, you can either pay the bill in full or only pay a minimum amount and wait until later to finish paying. If you wait until later, you will owe the credit card company interest on the amount that you did not pay.

Let's compare two credit cards. Go to <http://www.creditcards.com/specials.php>, select two cards and fill in the chart below. We'll then discuss what you discover.

	Card 1	Card 2
Company Name, Address, Phone		
Web Address		
Annual fee		
Annual Percentage Rate		
Credit Limit		
Other Fees		
Other Features		

Credit and Saving Vocabulary

APR (Annual Percentage Rate): How much you must pay to get a loan on a yearly basis, expressed as a percent.

Credit: A loan of money that is given to a borrower for a specific amount and for a specified period of time.

Credit card: A plastic card with an assigned account number that enables the holder to purchase goods or services and receive cash on credit.

Credit limit: The maximum amount of money a credit card holder is allowed to borrow using the credit card.

Credit risk: The risk that a borrower may not repay a loan on time, or at all.

FICA score: Your credit score calculated based on the information in your credit file that shows how likely you are to pay a loan back on time – the higher your credit score, the less risk you represent. Scores go from 300 to 850.

Interest: A charge for a loan or for savings, usually a percentage of what is borrowed or saved.

Interest rate: The cost of the money provided by the loan or for savings usually expressed as a percent.

Savings: Money set aside for future use.

Who's Your Boss?



Noemi Romero
with a finished
costume that she
and her sister,
Naomi, made
for one of their
Cosfurs customers.



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**Financial Literacy:
Investing**

The Stock Market

Overview

There are five parts to this lesson that looks at the history of the stock market, how it works, what stocks are and how people use or buy them. The plan includes a lesson on selecting a company and doing research on it.

Note: Each activity can be used as a separate entity or all of the activities can be used to make a complete program.

Standards Addressed

Social Studies, Economics

Grade 11

- 11-12 Benchmark E. *Explain the use of a budget in making personal economic decisions and planning for the future.*

Personal Finance / Y2003.CSS.S04.G11-12.BE.L11.I11

11. Explain why incomes will differ in the labor market depending on supply and demand for skills, abilities and education levels.

Personal Finance / Y2003.CSS.S04.G11-12.BE.L11.I13

13. Explain the consequences of the economic choices made by individuals and the tools which they use to manage their financial resources including:
- Budgets
 - Savings
 - Investments
 - Credit
 - Philanthropy

Procedure

Activity 1: About the Stock Market

- Student handout: The Stock Market KWL (p. 57)
 - Student handout: About the Stock Market (p. 58-59)
1. Remind the students that there are four things that can be done with their income: save it, spend it, invest it or donate it. Tell them that one of the ways to invest money is through the use of the stock market.
 2. Divide the students into groups of two or three. Distribute the Stock Market KWL chart and ask them to fill in the first two columns.
 3. Ask the students to share what they know and what they want to know about the stock market.
 4. Tell them that they are going to find out a little more about the market by reading some information and answering the questions in the About the Stock Market student handout.

5. Have the groups go to <http://library.thinkquest.org/3088> and select the heading "The Stock Market."
6. They will then answer the questions by reading the sections.
7. After this has been completed, go over the answers with the students.
8. They can fill in the third part of the KWL chart.

Evaluation

There are 23 questions on the worksheet. A percentage of the number correct can be used to evaluate the lesson.

Activity 2: Stock Information

- Student handout: Stock Information (p. 61)
1. Review with the students that when a person buys a stock, he or she is buying a piece of a company or a business. The risk of success or failure of the company goes along with the purchase.
 2. Either have each group of students work at computers or pass out a handout showing information about a company. If they go online, they would go to <http://finance.yahoo.com>. In the box at the top of the page, they will input the name of a company. Once the company information comes up, go over the important concepts with the students and show where they are on the page. Concepts to look at include the following:
 - a. Symbol or ticker
 - b. 52-week high and low
 - c. Dividend
 - d. P/E
 - e. Volume
 - f. Daily high and low
 - g. Close
 - h. Net change
 - i. Last trade price
 3. Option: The teacher could assign each group of students one of these topics and let them find what they are and report back to the class. (Sometimes the definitions are difficult and the students have a hard time explaining them.)

4. Distribute the Stock Information student handout. Have the students look up the information on the handout.

Answers

1. NKE-Nike; 2. DIS-Disney; 3. GPS-Gap, Inc.; 4. WMT-WalMart; 5. HMC-Honda Motor Corp.; 6. DELL-Dell, Inc.; 7. IBM-IBM; 8. RBK-Reebok; 9. PEP-Pepsico, Inc.; 10. DAL-Delta Air Lines.

Column 3 will vary depending on the day.

Evaluation

There are 20 possible answers. A percentage of the number correct can be used to evaluate the lesson.

Activity 3: Percent of Increase or Decrease (Profit or Loss)

- Student handout: Profit or Loss (p. 62)
1. Tell the students that one thing they need to know is if they buy stock is if they are making a profit or a loss.
 2. Remind them how to calculate percent of increase or decrease.
 - a. Subtract the smaller number from the larger number.
 - b. Divide this number by the original amount. You get a decimal answer.
 - c. Convert decimal into a percent (multiply by 100).
 - d. If the original number is larger than the current number, you have a loss. If the original number is smaller than the current number, you have a gain.
 3. Do one example with the students and then assign the four problems.
 4. Explain that they need to select two companies and keep track of their stock prices for a week. At the end of the week, they need to calculate whether they made a profit or a loss by calculating the percent of increase or decrease.

Evaluation

At the end of a week, correct the paper. There are 6 problems. Once again, the percentage of the number correct can be used to evaluate the lesson.

Activity 4: Corporate Research

- Student handout: Corporate Research (p. 64)
- Student handout: Company Record Sheet (p. 65)

3. They will keep track of this company for a week using student handout, Company Record Sheet.

1. Ask the students to pick a company (or assign companies).
2. Each student is to answer the questions on the Corporate Research student handout. To get answers, they can go to <http://www.kplay.cc/finance.html>.

Evaluation of Student Handout

CATEGORY	4	3	2	1
Identifies facts	Student accurately explains information about the company.	Student gives a reasonable explanation about the company.	Information about the company is weak.	Student has difficulty locating facts in an article.
Summarization	Student describes clearly the information about the company.	Student uses several sentences to accurately describe the information about the company.	Student summarizes most of the information accurately, but has some slight misunderstanding.	Student has great difficulty summarizing the information.

Activity 5: Stock Simulation

- Student handout: Company Record Sheet (p. 65)

1. Students should have some understanding of the stock market by this point. This can be done individually or with a partner.
2. Each group or individual gets \$10,000 with which to buy three to six stocks. (This amount can be varied as you desire; many of the stock games online give \$100,000.)
3. A 3 percent commission is charged for each stock.
4. Each group needs to keep a transaction history of the stocks selected by checking them weekly. (This can either be an in-class or an out-of-class activity.)
5. Students can either do this tracking on the Company Record Sheet, use a spreadsheet or use one of the many sites online such as Yahoo Finance, AOL and Google.
6. Designate how long the tracking will continue, i.e., for nine weeks.

7. Recommend that the students pick stocks with which they are familiar. Also talk about the concept of diversification. Use the Diversification student handout to explain the sectors in the market.
8. At the end of the time period, have the students determine what their stocks are now worth versus what they originally paid. Then have them calculate the percent of increase or decrease.
9. Collect the tracking tool that the student used.
10. Determine who made the best decisions – in other words who had the greatest percentage of increase. Who has the most money at the end?

Evaluation

Buys or sells	5 points each	Total
Number of Weeks Tracked	10 points/week	Total
Accuracy of Information	5-25 points	Total
Bonus: Percentage of Increase	10 points	Total
		Grand Total

Enrichment

If your district approves, you could have willing students donate an amount of money between \$1 and \$5. They could pick a charity of some sort and then as a class invest the money in a stock. They become really vigilant when it's real money. There are considerations when doing this. Someone has to buy it and profits or losses will go on income tax (whether or not the charity is involved). A parental permission might be a good idea. There are some who may not wish their child to participate.

The Stock Market

Name _____

K What I Know	W What I Want to Know	L What I Learned

About the Stock Market

Go online to Edustock at <http://library.thinkquest.org>. Select "The Stock Market" from the menu and answer the questions below.

Stock Market History

1. What was traded at Trinity Church in Manhattan 200 years ago? Why?
2. How did bonds come into existence?
3. In what year was the New York Stock Exchange (NYSE) started?
4. What was the purpose of the NYSE?
5. What is AMEX and how did it get started?

How It Works

1. What is a share of stock?
2. What is a brokerage house?
3. What is the procedure when you choose to buy a stock?
4. What happens with a mutual fund?
5. What is the Securities Exchange Commission (SEC)?
6. What is a stock crash?
7. What is a common stock and why is the company's performance important to this type of stock?
8. What is the difference between publicly and privately held corporations?

Market Trends

List five reasons why the stock market goes up and down.

1. _____

2. _____

3. _____

4. _____

5. _____

About Stocks

1. What is a stock?

2. What is a proxy ballot?

3. What are the three types of stock and how do you distinguish them?

a. _____

b. _____

c. _____

About the Stock Market Answers

Stock Market History

1. What was traded at Trinity Church in Manhattan 200 years ago? Why?

They traded silver for paper saying they owned shares in cargo that came in every day.

2. How did bonds come into existence?

During the Revolution, the government sold bonds to raise money for the war. They collected money in exchange for getting a profit in the future.

3. In what year was the New York Stock Exchange (NYSE) started?

1792

4. What was the purpose of the NYSE?

To sell shares in companies and charge a commission or fee to buy and sell these shares.

5. What is AMEX and how did it get started?

AMEX is the American Stock Exchange. It started when some stocks were not deemed good enough so they were traded outside on the "curb."

How It Works

1. What is a share of stock?

A share of stock is simply a piece of paper that says you own part of a company.

2. What is a brokerage house?

A brokerage house is where you buy stock.

3. What is the procedure when you choose to buy a stock?

You call a broker, who calls a person on the floor at the stock exchange. The stock exchange representative buys the amount requested. He or she then tells the broker about the successful purchase.

4. What happens with a mutual fund?

You turn over control of what you buy to professionals.

5. What is the Securities Exchange Commission (SEC)?

A government agency that regulates the stock market. It tells what is legal and sets standards for brokers and investors.

6. What is a stock crash?

When the price of stock falls dramatically.

7. What is a common stock and why is the company's performance important to this type of stock?

Common stock is the basic stock a corporation issues. It is directly influenced by failures and success of the company.

8. What is the difference between publicly and privately held corporations?

Public corporations mean that the public can buy and control the corporation. Private corporations are controlled by a small group of individuals by a family.

Market Trends

List five reasons why the stock market goes up and down.

1. A company may make or lose money.
2. If interest rates are high, the stock market is low.
3. If the economy is better, more money is floating around with which people can buy stock.
4. Time of year.
5. Publicity.

About Stocks

1. What is a stock?

A stock is a representation of the amount of a company that you own.

2. What is a proxy ballot?

A ballot that you mail to the company because you can't be at the company meeting.

3. What are the three types of stock and how do you distinguish them?

- a. Penny stocks – small companies that have almost no chance of making it big.
- b. Growth stocks – new companies with a lot of chance of success-risky.
- c. Blue chip stocks – safest investment you can make but it takes more time to profit from them.

Stock Information

Name _____

On the Internet, go to <http://finance.yahoo.com>. Where it says "Get Quotes" on the top left side of the page, put in either the company name or the company's ticker symbol to find the answers.

Write the Ticker Symbol	Write the Company Name	Find the Information
1.	Nike	P/E =
2. DIS		52-week low =
3.	Gap, Inc.	52-week high =
4. WMT		Dividend =
5.	Honda Motor Corp.	Ave. Volume =
6.	Dell, Inc.	Last Trade Price =
7. IBM		Volume =
8. RBK		Current Price =
9. PEP		Change =
10.	Delta Air Lines	P/E =

The **52-week high and low** columns show the highest and lowest prices of the issue during the preceding 52 weeks plus the current week, but not the current trading day.

Dividend is the cash amount of money that the company will pay you each year for each share of stock you own.

P/E is the price-earnings ratio. It is the price of the stock divided by the earnings for that year.

Volume is the amount of stocks that were traded the day before. The number is given in hundreds. (If there is a "z" in front of the number, this is the actual number.)

High and low are the highest and lowest prices of the stock the day before.

Close is the price at which the stock sold at the end of the previous day.

Net Change is the change of the price of the stock from the previous day. It tells you whether the price is dropping or rising.

Profit or Loss

1. Find the **percent of increase or decrease** for each of the following fictional companies:

a. ACME Tire, Inc. Purchase Price = 40.625 Current Price = 43.375

To Solve:

$$43.625 - 40.375 = 3.25$$

$$3.25 / 40.375 = .0804 \times 100 = 8\% \text{ increase}$$

b. LenJor Inc. . Purchase Price = 7.5 Current Price = 9.125

c. TOWN Ltd. Purchase Price = 22 Current Price = 25.1875

d. HVS Inc. Purchase Price = 11.5 Current Price = 9.875

e. TOWS Inc. Purchase Price = 71.5 Current Price = 68.375

2. Choose two stocks, record the name and beginning prices, then record the closing or last price for the next five days. On the final day, calculate the percentage of increase or decrease of both stocks.

a. Corporation #1

Beginning Price: _____

Day 1 Closing Price: _____

Day 2 Closing Price: _____

Day 3 Closing Price: _____

Day 4 Closing Price: _____

Day 5 Closing Price: _____

Percent of Increase/Decrease: _____

b. Corporation #2

Beginning Price: _____

Day 1 Closing Price: _____

Day 2 Closing Price: _____

Day 3 Closing Price: _____

Day 4 Closing Price: _____

Day 5 Closing Price: _____

Percent of Increase/Decrease: _____

Profit or Loss Answer Sheet

To find the percent of increase or decrease:

1. Subtract the smaller number from the larger number.
2. Divide this number by the original amount. You get a decimal answer.
3. Convert decimal into a percent (multiply by 100).
4. If the original number is larger than the current number, you have a loss. If the original number is smaller than the current number, you have a gain.

Profit and Loss

1. Find the percent of increase or decrease for each of the following fictional companies:

a. **ACME Tire, Inc.**

Purchase Price = 40.375

Current Price = 43.625

To Solve:

$$43.625 - 40.375 = 3.25$$

$$(3.25 / 40.375) \times 100 = \mathbf{8\% \text{ increase}}$$

d. **HVS Inc.**

Purchase Price = 11.5

Current Price = 9.875

To Solve:

$$11.5 - 9.875 = 1.625$$

$$(1.625 / 11.5) \times 100 = \mathbf{14.1\% \text{ decrease}}$$

b. **LenJor Inc.**

Purchase Price = 7.5

Current Price = 9.125

To Solve:

$$9.125 - 7.5 = 1.625$$

$$(1.625 / 7.5) \times 100 = \mathbf{21.6\% \text{ increase}}$$

e. **TOWS Inc.**

Purchase Price = 71.5

Current Price = 68.375

To Solve:

$$71.5 - 68.375 = 3.125$$

$$(3.125 / 71.5) \times 100 = \mathbf{4.3\% \text{ increase}}$$

c. **TOWN Ltd.**

Purchase Price = 22

Current Price = 25.1875

To Solve:

$$25.1875 - 22 = 3.1875$$

$$(3.1875 / 22) \times 100 = \mathbf{14.48\% \text{ increase}}$$

2. Choose two stocks, record the name and beginning prices, then record the Closing or Last price for the next five days. On the final day, calculate the percentage of increase or decrease of both stocks.

a. **Corporation #1**

Beginning Price: _____

Day 1 Closing Price: _____

Day 2 Closing Price: _____

Day 3 Closing Price: _____

Day 4 Closing Price: _____

Day 5 Closing Price: _____

Percent of Increase/Decrease: _____

b. **Corporation #2**

Beginning Price: _____

Day 1 Closing Price: _____

Day 2 Closing Price: _____

Day 3 Closing Price: _____

Day 4 Closing Price: _____

Day 5 Closing Price: _____

Percent of Increase/Decrease: _____

Corporate Research

Find one company and find out the following items about it. One site you can use is www.kplay.cc/finance.html. Select "Company Information."

Corporation Name: _____ **Ticker Symbol:** _____

Overview

History

Management

Products

Income and Stock Analysis

Diversification

Diversification means buying stock in a range of different industries.

“The idea is that, because you cannot possibly know which stocks will perform better or worse than average, you cannot afford to put all your money into one company, or even in companies within a single industry. You have to spread the risk – and the opportunity. Only by diversifying will you be able to realize your average return objective with lower risk.” (*Starting and Running a Profitable Investment Club*, Thomas E. O’Hara and Kenneth S. Janke, Random House, 1998)

Diversification by Sector

- Basic Material (agriculture, chemicals, oil and gas, steel, etc.)
- Conglomerates (very large companies such as General Electric)
- Consumer Goods (appliances, beverages, farm products, etc.)
- Financials (banks, insurance companies, brokerage companies, etc.)
- Health Care (hospitals, drug companies, medical research, etc)
- Industrial Companies (cement, building contractors, lumber, wood, etc.)
- Services (broadcast, electronics, clothes, publishing, etc.)
- Technology (computers, phones, data storage, etc.)
- Utilities (electric, gas, water, etc.)

For a listing of companies by sector, go to <http://biz.yahoo.com/p>

Diversification by Company Size

Size	Dollar Value	Growth Potential
Large	\$3 billion to \$4 billion	5 percent to 7 percent
Medium	\$400 million to \$3 billion	7 percent to 12 percent
Small	\$400 million or less	12 percent and greater

Vocabulary

Asset: Something of value owned by the company. May be tangible, such as a piece of machinery, or intangible, such as goodwill.

Bear market: A declining market.

Bid: The price offered by a buyer.

Bond: An instrument of debt. In issuing bonds, a corporation agrees to pay holders a stated rate of interest until principal is repaid on a specific date.

Bull: A rising market.

Broker: A firm or individual who arranges a transfer of securities between a buyer and a seller, charging a fee for the service.

Capital gain/capital loss: Profit or loss from the sale of a capital asset.

Dividend: Payment a company makes, in cash or stock, to its shareholders.

Earnings per share: Of paramount concern to the common shareholder, earnings per share is found by dividing net income after any preferred dividends by the number of shares of common stock outstanding.

Government bond: An evidence of U.S. government debt, considered to offer the lowest possible financial risk.

Income stock: A stock offering a liberal yield.

Inflation: A period during which the purchasing power of the dollar is declining.

Interest: Payment to a creditor by a borrower for the use of money.

Limit order: An order to a broker to buy a specified quantity of a security at or below a specified price or to sell it at or above a specified price (called the limit price).

Market price: The price at which transactions in a security take place.

Mutual funds: Typically consist of a group of stocks, bonds or money-market securities from more than one source. There are three types: income, growth funds and balanced funds.

Maturity: The date on which an obligation falls due.

Net worth: All assets minus all liabilities of a corporation; equivalent to stock, paid in capital, and retained earnings.

New York Stock Exchange: The largest auction market securities in the nation.

Portfolio: All of the securities held by an individual, investment club or institution.

Price/earnings ratio: The market price of a security divided by the earnings per share. Used to determine whether a stock represents value at a given price.

Profit: Earnings or income.

Revenues: Synonymous with sales and receipts

Shareholder: Synonymous with stockholder or shareowner; the owner of one or more shares of a corporation.

Stock: Businesses need money to grow. To get this money, some businesses sell shares, which are units of ownership of their company.

Stock split: The issuance of a number of shares for each share of stock outstanding. The common purpose of a split is to broaden ownership and increase marketability.

Stop order: A market order to buy or sell a certain quantity of a certain security if a specified price is reached or passed.

Stop-limit order: An order to buy or sell a certain quantity of a certain security at a specified price or better but only after a specified price has been reached.

Treasury bill: A U.S. government obligation that matures within a year of issuance.

Treasury bond: A U.S. government obligation that matures more than five years from the date of issuance.

Treasury note: A U.S. government obligation that matures from one to five years from the date of issuance.

Yield: The per-share dividend divided by the per-share cost of the stock.

Vocabulary from *Starting and Running a Profitable Investment Club* by Thomas E. O'Hara and Kenneth S. Janke, Random House, 1998.

Protecting My Identity From Scams and Schemes

Overview

Students find information about different scams and learn ways to avoid them.

Standards Addressed

Social Studies, Economics

Grade 11

11-12 Benchmark E. Explain the use of a budget in making personal economic decisions and planning for the future.

Personal Finance / Y2003.CSS.S04.G11-12.BE.L11.I13

13. Explain the consequences of the economic choices made by individuals and the tools which they use to manage their financial resources including:
- Budgets
 - Savings
 - Investments
 - Credit
 - Philanthropy

Procedure

- Student handout: Protecting My Identity (p. 69-71)
1. Ask the students what a scam is and if anyone they know has ever been the victim of a scam. Tell them that scams are very common and that they will be doing research on types of scams and what to do about them.
 2. Have the students work in groups on the Protecting My Identity student handout.
 3. There are two options now. Either the students could look up all of the scams listed on the handout or you could assign each team one scam to investigate. The second option allows this lesson to be completed in one class period.
 4. Tell the students to use a search engine such as Google to research one or all of the terms listed on the handout and answer the questions listed.
 5. After research is completed, have the students report their findings. If they only looked up one, you could suggest that the students fill in the information about the other scams using the information given by each team.

Vocabulary

scam, fraud, pyramid

Evaluation

If students complete the entire sheet, there are 17 possible answers. A percentage of the total is a good evaluation tool. This lesson could also be used to engender discussion.

Protecting My Identity

A **scam** is generally a deception act or operation used to take a person's money. Many scams involve credit and not all scams are illegal. Scams often target people who are in financial difficulty. Some also prey on people wanting to make easy money quickly.

Your task is to find information on these scams. Use a search engine and type in the name of the scams listed below. Then list five things that will help you to avoid being drawn into the scam.

Identity Theft

How does the scam operate?

What is the targeted population?

Credit Card Scam

How does the scam operate?

What is the targeted population?

College Financial Aid Scam

How does the scam operate?

What is the targeted population?

Pyramid Scam

How does the scam operate?

What is the targeted population?

Payday Loan Scam

How does the scam operate?

What is the targeted population?

Rent to Own

How does the scam operate?

What is the targeted population?

What are some ways to avoid being drawn into a scam?

- 1.
- 2.
- 3.
- 4.
- 5.

Protecting My Identity – Answers

A **scam** is generally a deceptive act or operation used to take a person's money. Many scams involve credit and not all scams are illegal. Scams often target people who are in financial difficulty. Some also prey on people wanting to make easy money quickly.

Your task is to find information on these scams. Use a search engine and type in the name of the scams listed below. Then list five things that will help you to avoid being drawn into the scam.

Identity Theft

How does the scam operate?

Identity theft and identity fraud are terms used to refer to all types of crime in which someone wrongfully obtains and uses another person's personal data in some way that involves fraud or deception, typically for economic gain. It is a crime. A thief takes your Social Security number, bank account or credit card number, telephone calling card number and/or other valuable identifying data and uses your credit for their good.

What is the targeted population?

Anyone who allows his or her personal information to be taken.

Credit Card Scam

How does the scam operate?

The scammer takes either the physical card or data associated with the card, including the card account number or other information and pretends he or she is you. Or they collect credit card offers that come in the mail and fill them out with a different address and then get the card and use it. You have no knowledge of this because you never get a bill, but your credit is being ruined.

What is the targeted population?

Anyone who has a credit card or gets offers either online or through the mail.

College Financial Aid Scam

How does the scam operate?

Scholarship offers encourage you to send them money up front, but provide little or nothing in exchange. Alternatively, a scam offers you an unusually low-interest educational loan with the requirement that you pay a fee before you receive the loan.

What is the targeted population?

College students and upper-class high school students., plus parents who are sending their children to college.

Pyramid Scam

How does the scam operate?

The essential idea behind this scam is that the individual makes only one payment, but is promised to somehow receive exponential benefits from other people as a reward.

What is the targeted population?

General population.

Payday Loan Scam

How does the scam operate?

Check cashers, finance companies and others are making small, short-term, high-rate loans. Fees charged for payday loans are usually a percentage of the face value of the check. A cash advance loan secured by a personal check – such as a payday loan – is very expensive credit. Some finance charges are as high as 391 percent.

What is the targeted population?

Anyone who has a shortfall of money and needs a quick infusion of dollars.

Rent to Own

How does the scam operate?

Rent to own is not a wise way to buy televisions, appliances or furniture. A rent-to-own store will sell these goods on credit by calling the transaction a lease. The rent-to-own customers never get a disclosure of the interest rate, which may be higher than 100 percent.

What is the targeted population?

People who are staying somewhere for a short period of time and people who don't have enough money to make expensive purchases.

What are some ways to avoid being drawn into a scam?

There are many ways to avoid scams. Make a list of all the suggestions the students present.

Who's Your Boss?



Jiazhou Yang, a 17-year-old student at University School in Cleveland and resident of Beachwood, wants to capitalize on video game trends by holding and promoting video game tournaments for teenage and college-age students. He raises philanthropic awareness by donating a portion of his proceeds to charity.



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**Financial Literacy:
Donating**

Philanthropy

Overview

Students learn what philanthropy is and reasons that they should consider philanthropic donations, both of time and money. They look at three organizations and decide whether they are worthy of a donation.

Standards Addressed

Social Studies, Economics

Grade 11

11-12 Benchmark E. *Explain the use of a budget in making personal economic decisions and planning for the future.*

Personal Finance / Y2003.CSS.S04.G11-12.BE.L11.I13

13. Explain the consequences of the economic choices made by individuals and the tools which they use to manage their financial resources including:
- Budgets
 - Savings
 - Investments
 - Credit
 - Philanthropy

Procedure

Note: Students could actually conduct a planned philanthropic activity such as a food or coat drive for local community agencies.

- Student handout: Charity Analysis (p. 79)

1. Introduce the concept of philanthropy by asking the students if they do any volunteer work or if they make donations to any agencies. Ask them why they donate either their time or money to this activity. Following are some possible responses:
 - a. They like to help people.
 - b. It enriches their lives.
 - c. It will look good on their college application.
 - d. They can deduct it from their income tax.
2. Some discussion might include the concept of for-profit and nonprofit organizations.

-
3. Ask students to think of the reasons why they chose the places they did when they either volunteered or gave money. Following are possible answers:
 - a. They had an interest in what this organization did.
 - b. It was close to their home.
 - c. The hours they were available matched the hours the agency needed.
 - d. They liked the people with whom they were working.
 - e. They had a personal connection with someone who worked at the location they selected.
 4. Have the students divide into groups of two.
 5. Distribute the Charity Analysis student handout.
 6. Have the students conduct research information on three charities that feed the hungry and write what they find on the worksheet. Two of the charities are national or international. The students can select the other one. They can be local, state, national or international.

Evaluation

The student is asked to make 15 responses. The teacher can take the percent correct to determine the evaluation of this topic.

Charity Analysis

Name _____

Research the charities listed below. A good resource for background information is Charity Choices, www.charitablechoices.org/categories/hunger.asp. Select a third charity of your choice to research.

	Feed the Children	Salvation Army	
Mission			
Program Results			
Percent of Donations That Goes Directly to Those in Need			
Response to Requests for Information			
Other Information			

Of these three, we would send money to _____ .

Charity Analysis Answers

	Feed the Children	Salvation Army	
Mission	Delivers food, medicine, clothing and other necessities to individuals, children and families who lack these essentials due to famine, war, poverty, or natural disaster.	Been at the forefront in the fight to remedy socially impairing issues such as poverty, inadequate and unaffordable healthcare, and access to education, amidst other problems.	
Program Results	Shipped 135 million pounds of food and other essentials to children and families in all 50 states and in 32 foreign countries, supplementing almost 800,000 meals a day worldwide.	Has provided refuge via hostels, homes, or other forms of shelter to a capacity of over 80,000 people in need.	
Percent of Donations That Goes Directly to Those in Need	13.2 percent	16.8 percent	
Response to Requests for Information	Not necessary	Not necessary	
Other Information	Founded 1979		

Of these three, we would send money to _____.

Who's Your Boss?

Adrian Lindsey, a 17-year-old senior at Cuyahoga Valley Christian Academy and resident of Akron, created All-Net Sak, a nylon basketball carrier that is for sale at Quicken Loans Arena, Wal-Mart in Severance City Mall and online.



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Taxes

Taxes

Overview

Students look at different kinds of taxes and how these taxes – along with other payroll deductions – influence a person’s net income.

Standards Addressed

Social Studies, Economics

Grade 11

11-12 Benchmark D. Analyze the role of fiscal and regulatory policies in a mixed economy.

Government and the Economy / Y2003.CSS.S04.G11-12.BD.L11.I10

10. Analyze issues related to the use of different types of taxes to fund public goods and services including:
 - Proportional tax
 - Progressive tax
 - Regressive tax

Procedure

Activity 1: Types of Taxes

- Student handout: Taxes (p. 85-86)

1. Ask the students if they ever had a job where they were issued a paycheck. Discuss the fact that payroll deductions such as taxes may come directly out of a paycheck.
2. Distribute the Taxes student handout.
3. Review the three types of taxes.
4. Allow the students to work with a partner and complete the student handout.

Vocabulary

tax, proportional tax, progressive tax, regressive tax

Answers for student handout:

1. a. \$120
b. \$120
c. Proportional tax
2. a. \$35,000
b. \$4,500
c. Progressive tax
3. a. 2 percent
b. 2.5 percent
c. Regressive tax
4. Progressive tax
5. Regressive tax
6. Proportional tax

Evaluation

A percent of the number correct would be a good evaluation for this activity.

Activity 2: Deductions

- Student handout: Payroll Deductions (p. 87-88)
1. Ask students if they ever had a job. Ask how they were paid (hourly, salary). Ask if they were surprised when they got their paycheck and why. Students come up with the idea of payroll deductions. Distribute the Payroll Deductions student handout.
 2. Discuss with the students how hourly wages and number of hours worked determines the gross pay.
 3. Review the Tax Vocabulary student handout.

4. Work through the Payroll Deductions student handout.
Note: This is an excellent activity to do with a spreadsheet program such as Excel.
5. Have the students work through the remaining problems.

Answers

Name	Hours Worked	Hourly Rate	Gross Pay	Federal Income Tax 18%	State Income Tax 6%	Social Security 6.2%	Medicare Tax 1.45%	Total Deductions	Net Pay
1. Joe	40	7.10	284.00	51.12	17.04	17.61	4.12	89.89	194.11
2. Nikki	25	6.15	153.75	27.68	9.23	9.53	2.23	48.67	105.08

3. a. $\$10 \times 1.5 = \$15/\text{hour}$
b. $40 \text{ hours} \times 10/\text{hour} = \400
 $5 \text{ hours} \times 15/\text{hour} = \75
 $400 + 75 = \$475 \text{ gross pay}$
4. $\$410 \times .04 = \16.40 (health care cost)
 $\$280.24 - 16.40 = \263.84

Evaluation

There are 20 possible points on the student handout. A percentage correct would be a good evaluation measure.

Taxes

Taxes are money paid to the government for financing public expenses. Taxes can be paid by an individual or by a company. In return, the government protects the economy from foreign and domestic enemies, undertakes large-scale infrastructure works of general benefit and enforces the rights and obligations of a civil society.

Types of Taxes

A **proportional tax** is a fixed-rate tax. In other words, everyone – rich or poor – pays the same tax on an item. This is generally true for retail sales. If you buy a new car, the sales tax paid for that particular car is the same for everyone.

A **regressive tax** is a tax imposed in such a manner that the tax rate decreases as the amount subject to taxation increases. In simple terms, it imposes a greater burden on the poor than on the rich. **Property taxes** are often called regressive because the cost of property taxes often consumes a higher percentage of a lower income budget than it does for a higher income budget.

A **progressive tax** is a tax by which the tax rate (or the percentage paid) increases as the taxable amount increases. The term is frequently applied to personal income taxes, where people with more disposable income (or income after paying all expenses) pay a higher percentage of that income in tax than do those with less income.

Let's look at two people. Mario earns \$100,000 per year as a television executive. David earns \$30,000 per year as a teacher aide. They are both single and have no deductions.

1. Mario and David each decided that because they work very hard, they are going to treat themselves to a new HD television that costs \$2,000. The tax is 6 percent.
 - a. How much tax will Mario pay? _____
 - b. How much tax will David pay? _____
 - c. What type of tax is this? _____

2. It is April 13, which means it's time to pay federal income tax. The income tax rate for Mario, who makes \$100,000 yearly, is 35 percent. The income tax rate for David, who makes \$30,000 yearly, is 15 percent. (To compute the amount of tax, multiply the tax rate percentage by the base amount.)
 - a. How much tax will Mario pay? _____
 - b. How much tax will David pay? _____
 - c. What type of tax is this? _____

STUDENT HANDOUT

3. Mario lives in a house worth \$300,000. His taxes are \$6,000. David lives in a home worth \$100,000. His taxes are \$2,500.

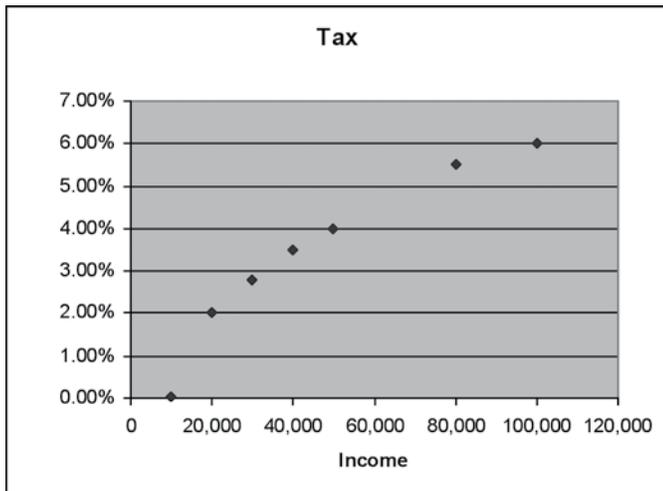
- a. What percent of his income did Mario pay in property tax? _____
- b. What percent of his income did David pay in property tax? _____
- c. What type of tax is this? _____

4. What type of tax is shown on graph 1? _____

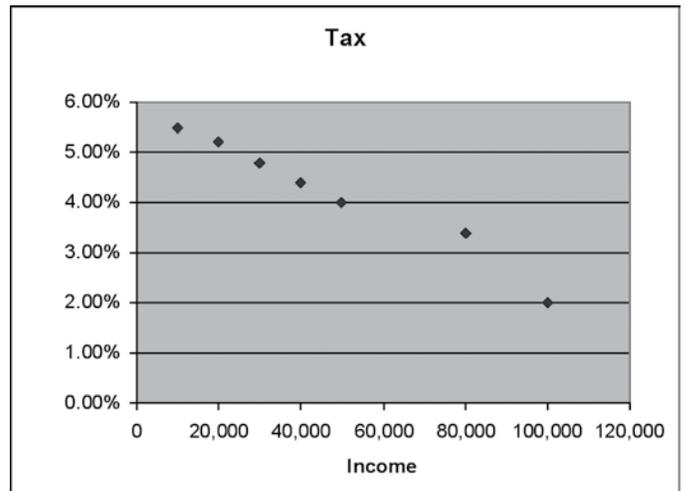
5. What type of tax is shown on graph 2? _____

6. What type of tax is shown on graph 3? _____

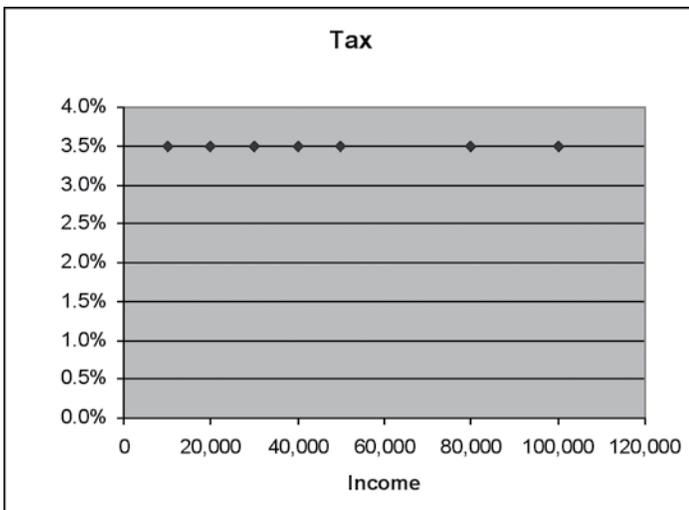
Graph 1



Graph 2



Graph 3



Payroll Deductions

You just started your first full-time job. You will work 40 hours per week and will be paid \$10.25 per hour. How much do you expect to make in a week?

$$\text{Salary} = \text{hours worked} \times \text{rate of pay}$$

The income that you calculated from the example above is called the **gross pay**, or the total amount of money earned before any deductions are made.

What a surprise when you got your first check! Deductions took a lot of money from your pay, so the amount of money received was far less than what you thought it should be. The amount of money left after deductions are taken out is called **net pay**.

Payroll deductions almost always include the following:

- **FICA Social Security tax:** Provides for old-age, survivors and disability insurance.
- **Federal income tax:** Tax collected to fund services provided by the federal government, including defense, human services, trade regulations, etc.
- **Local income tax:** Tax collected by the city or other local government, including schools, police and fire protection, etc.
- **State income tax:** Provides services provided by the state, including roads, safety, education, health, etc.

Payroll deductions that are sometimes deducted include the following:

- **Medical insurance:** Provides the employee and family insurance against medical expenses.
- **FICA Medicare tax:** Provides for a certain health care insurance.
- **Dental and/or vision insurance:** Provides the employee and family insurance for dental and/or vision services.
- **Retirement savings plans:** A tax-deferred savings plan for retirement.

Sample Income Deductions

Hours Worked	Hourly Rate	Gross Pay	Federal Income Tax 18%	State Income Tax 6%	Social Security 6.2%	Medicare Tax 1.45%	Total Deductions	Net Pay
40	10.25	410.00	73.80	24.60	25.42	5.95	129.77	280.24

Gross Pay: (hours worked X hourly rate) $40 \times 10.25 = \$410.00$

Federal Income Tax: (gross pay X 18%) $410 \times .18 = \$73.80$

State Income Tax: (gross pay X 6%) $410 \times .06 = 24.60$

Social Security: (gross pay X 6.2%) $410 \times .062 = \$25.42$

Medicare Tax: (gross pay X 1.45%) $410 \times .0145 = \$5.95$

Total Deductions (federal income tax + state income tax + Social Security tax + Medicare tax) $73.80 + 24.60 + 25.42 + 5.95 = \129.77

Net Pay: (gross pay - total deductions) $\$410 - 129.77 = \280.23

STUDENT HANDOUT

Now you try!

1. Joe

Hours Worked	Hourly Rate	Gross Pay	Federal Income Tax 18%	State Income Tax 6%	Social Security 6.2%	Medicare Tax 1.45%	Total Deductions	Net Pay
40	7.10							

2. Nikki

Hours Worked	Hourly Rate	Gross Pay	Federal Income Tax 18%	State Income Tax 6%	Social Security 6.2%	Medicare Tax 1.45%	Total Deductions	Net Pay
25	6.15							

A standard work week is considered to be 40 hours. If you work more than 40 hours (called overtime), you generally are paid time-and-a-half, or 1.5 times your hourly rate.

3. Instead of working 40 hours, you worked 45 hours. You make \$10 per hour and get time-and-a-half for overtime. (Correct answer worth 2 points each for a and b)

a. How much would you get paid per hour for your 5 extra hours?

b. What would your gross pay be?

4. In the first example listed above, your gross pay was \$410. You decide to buy health insurance through your company. This is 4 percent of your gross pay. What will your new net pay be? (Correct answer worth 2 points.)

Taxes and Payroll Deduction Vocabulary

Dental and/or vision insurance: Provides the employee and family insurance for dental and/or vision services.

Federal income tax: Tax collected to fund services provided by the federal government (includes defense, human services, trade regulations, etc.).

FICA Medicare tax: Provides for certain health care insurance.

FICA: Social Security tax: Provides for old-age, survivors and disability insurance.

Gross pay: The total amount of money earned before any deductions are made.

Life insurance: Pays a designated beneficiary when death occurs.

Local income tax: Tax collected by the city or other local government (includes schools, police and fire protection, etc.).

Long-term disability insurance: Provides benefits in case the employee is completely disabled.

Medical insurance: Provides the employee and family insurance against medical expenses.

Net pay: The amount of income left after all deductions are taken out of the gross pay.

Proportional tax: A tax in which the tax rate remains constant regardless of the amount of the tax base (example: sales tax).

Progressive tax: Any tax in which the rate increases as the amount subject to taxation increases (example: income tax).

Regressive tax: Taxation that takes a larger percentage of a lower income and a smaller percentage of a higher income (example: property tax).

Retirement savings plan: A tax-deferred savings plan for retirement.

State income tax: Pays for services provided by the state (includes roads, safety, education, health, etc.).

Tax rate: Percent of amount involved.

Time-and-a-half: When working a number of hours greater than 40 (standard work week), rate of pay is multiplied by 1.5 so worker gets the hourly rate plus half of the hourly rate.

Notes



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