BITE-SIZE ECONOMICS 2012-2013

FEDERAL RESERVE BANK OF KANSAS CITY

DESCRIPTION:

The following activities are taken from the 2012-13 Teacher Talk Planner. These activities and discussions can be easily integrated into the classroom. Teachers can introduce the economic concepts which can be developed by the suggested literature, problem solving, social studies, language and art activities.

GRADE LEVEL: K-12

WANTS

Things people like and desire

NEEDS

Things you must have to live

ELEMENTARY ACTIVITY

Introduce wants and needs and give examples of each concept. Tell the students that they will be planning a picnic lunch and will make a chart of wants and needs for the picnic. Draw a T-chart on the board, labeling one side "Needs" and the other "Wants." Ask students for ideas to complete the chart, telling whether each idea is a need of a want.

MIDDLE SCHOOL ACTIVITY

Ask the class to imagine they have landed on a deserted island and will be living there until they are rescued. Have them work in pairs to develop two lists: one of their daily needs to survive, and the other of their wants while on the island. Share lists and discuss ideas with the class.

HIGH SCHOOL ACTIVITY

After reviewing the definitions and some examples of wants and needs, divide students into two teams to debate the following topic: "All needs are wants." One team should argue that needs are also wants because we want to survive. The other team should argue that needs are more basic than wants and therefore different.

- While watching TV commercials within a given time period, identify how many of the products advertised are wants and how many advertised are needs. Using your results, calculate the percentage of each and report to the class.
- "You Can't Always Get What You Want" by the Rolling Stones is a classic rock song that refers to wants and needs. Brainstorm a class list of other songs on the topic of wants and needs.
- Cut out or draw pictures of three of your top wants. Estimate how much they cost and determine a budget or way to save for these items. Present your wants and savings plan to the class.
- Compare the prices of store-brand items you need (milk, soap, clothing, etc.) versus the name-brands you want. Are the name-brand items worth the price? Give reasons to back your opinion.
- Make a chart comparing the costs of a new sports car and a used compact car. Figure out the expenses for each car, including loan payment, fuel and insurance. If transportation to your job is a need, which car is the better choice?
- Write a short story about your last five purchases and whether each was a want or a need. Include lessons you've learned about your spending habits and steps you can take in the future to purchase fewer wants and more needs.
- Review your monthly family budget to determine how much your family spends on wants versus needs. Discuss how your family might reduce the dollar amount of wants over the next few months. Report your budget-saving measures to the class.
- Wants and needs may vary depending on culture. Research wants and needs around the world and compare and contrast them with your own community.
- Explain the meaning of the following quote: "Our necessities new equal our wants." Benjamin Franklin



SAVE

SPEND

To keep money to spend later

To use money to buy goods and services

ELEMENTARY ACTIVITY

Introduce the definitions for save and spend. Describe short-term savings goals as items students want that will require saving for several months. Ask students to choose an item as a savings goal, estimate the cost of the item and figure the amount they would have to save weekly to reach their goal. Have students share their goals and savings plans with the class.

MIDDLE SCHOOL ACTIVITY

Ask students to keep a financial journal, writing down what they spend and save for 30 days. They should keep track of the amount they spend in one column and the amount they save in another column. At the end of the 30 days, ask them to total the amounts of each column and figure the percentage of money they spend and the percentage they saved.

HIGH SCHOOL ACTIVITY

Give students a sample budget of expenses for a family. Have them identify the fixed expenses (the same amount monthly) and the variable expenses (a changing amount monthly). Ask students to draw sentences out of a hat representing events that might change a monthly budget, such as buying holiday gifts or fixing a flat tire. Have the students identify whether the expense if fixed or variable and then modify the budget to incorporate the added expense.

- Research the characteristics of a savings account, certificate of deposit, money market account and savings bond. Using the scenario of a short-term savings goal, decide which one would be the best place for your money and explain your reasoning.
- Discuss the fable of the *Grasshopper and the Ant* and its "saving for the future" moral. Rewrite the fable using human characters to make the spending and savings decisions.
- How can pocket money make someone a millionaire? Use an online compound interest calculator to see how a small monthly investment can grow over time by compounding. Write a plan to reach a financial goal using a compound interest.
- Read Rock, Brock and the Savings Shock by Sheila Bair. Illustrate the benefits of saving by using two clear jars, one for Rock and one for Brock, and adding or removing beans whenever the boys save or spend money.
- Use magazine picture to create a collage of future wants. Develop a budget that includes long-term savings goals to purchase these items within the next five to 10 years.
- Announce a "Savings Week" and plan ways to save money daily, such as not buying candy or chips. Put marbles in a clear container to represent every dollar the class saved. Graph the savings total daily.
- Use the role play There's No Business Like Bank Business to explore the benefits of saving money in a bank: www. kansascityfed.org/publicat/education/teachingresources/Bank_Business_script.pdf.
- In groups, construct story problems that feature characters needing to calculate amounts to save or spend. Example: Joe wants to save \$500 for a trip to Chicago in six months. How much does he need to save each week to meet his goal?



COST

Monetary or nonmonetary loss because of an action taken or a decision made

BENEFIT

Monetary or nonmonetary gain because of an action taken or a decision made

ELEMENTARY ACTIVITY

Introduce the economic meanings of cost and benefit. Discuss that both are not always money-related, using the example of the costs and benefits of doing homework. Have students brainstorm a list of costs (losses) and benefits (gains) they experience by doing their homework. Take a vote to decide if the costs outweigh the benefits or vice versa.

MIDDLE SCHOOL ACTIVITY

Share pictures of different careers, and challenge students to analyze the costs and benefits of working in each career. Have them research information on salaries, education levels, work environment and job outlook by going to: www.bls. gov/oco/ooh_index.htm. Ask them to make a table listing this information for five careers, and then decide which career provides the most benefits and the least costs.

HIGH SCHOOL ACTIVITY

Discuss the costs and benefits, both monetary and nonmonetary, of having a public school system. Research what it costs taxpayers per year for a student to attend public school, using your state department of education website. What are the benefits of public education? Are there any costs? What are the benefits to taxpayers that make them willing to share the costs? Write a brief essay explaining your ideas.

- Explain the benefits as well as the costs (monetary and nonmonetary) of owning a pet. Draw a picture of three pets, listing one cost and one benefit for each.
- Summarize the tale of *Little Red Riding Hood*. What was the cost of Little Red ignoring her mother's advice on her way to Grandmother's house? What would have been the benefit if she had listened?
- Develop a list of economic, social and environmental costs and benefits of developing a new city park. Develop another list of the development of a large chain store like Wal-Mart in the same area. How are the costs and benefits the same or different?
- Create a PACED (Problem, Alternatives, Criteria, Evaluate, Decision) grid to determine the costs and benefits of a used car decision. Possible criteria include model, year, gas mileage and insurance costs. Visit www.econedlink.org/lessons/docs_lessons/463_PACED1.pdf for a sample grid.
- Opportunity cost is the next best choice given up when making a decision. Write and perform a skit where the main character makes a decision on whether to take a part-time job. Make sure to include the opportunity cost.
- Review the story of the *Three Little Pigs*. Do a cost/benefit analysis to compare their houses of straw, sticks and bricks in terms of materials, labor, cost and effectiveness.
- Calculate the monetary costs and benefits of running a lemonade stand using the following assumptions: mix that makes 32-oz. of lemonade costs \$3 per container and a package of 50 8-oz. cups is \$5. You sell 48 8-oz. cups for \$2 each. (costs = \$44, benefits = \$96)
- Research the meaning of marginal cost and marginal benefit. Businesses think on the margin, deciding whether the benefit of producing one more unit would be greater than or less than the cost. Share an example of this marginal cost/benefit situation from your research.
- Discuss what economists mean when they say, "There is no such thing as a free lunch." How does this quotation relate to costs and benefits?



PRODUCERS

People who use resources to make goods and services

CONSUMERS

People who buy and/or use goods and services to satisfy wants

ELEMENTARY ACTIVITY

Introduce the concepts of producers and consumers. Brainstorm a list of producers, such as artists, bakers, farmers and manufacturers of different products. Ask students to role-play various producers as they create their products. Have classmates guess what good or service each producer provides for consumers.

MIDDLE SCHOOL ACTIVITY

Discuss the resources used in the production of chocolate (cocoa beans, sugar, milk) and the producers of each resource. Ask students to choose any product, make a list of resources used in its production, and count the number of producers involved in the process. Can anyone find a product that has more than five producers?

HIGH SCHOOL ACTIVITY

The mission of the Consumer Financial Protection Bureau (CFPB) is to make markets for consumer financial products and services, such as banking and credit, work for Americans. Research the CFPB at: www.consumerfinance.gov/regulations. Choose a regulation and share whether or not you think it is beneficial for businesses as well as consumers.

- If a company produced 10 items at \$7 per item and sold all 10 at \$8.50 each, what is the profit for the producer? (10 x \$1.50 = \$15)
- Use the following questions to interview three people about their spending habits as consumers: Where do you shop the most? Are you more concerned with price or quality? Is customer service important to you? Compare interview results with a classmate.
- Draw a cartoon to portray one of the following label instructions found on consumer goods: hairdryer never use while sleeping; iron do not iron clothes on body; child's costume cape does not enable user to fly.
- Choose a product and research the price of that product during a 10-year period. Graph the changes over time and discuss possible reasons for those changes, such as the increasing price of materials, a better quality product, inflation, etc.
- Trivia: Did you know that the United States is the world's largest consumer of oil? No other country consumes even half as much of the 20 million barrels a day used by the United States.
- Using your local newspaper, find three advertisements for products. List examples of marketing techniques that producers use to entice customers to buy their products, such as bargain prices or use of brand names. Share your results.
- Debate the importance of producers using social media, such as Facebook, YouTube and Twitter, to get attention of consumers in order to sell their products.
- Create a consumer profile, such as a 20-year-old college athlete, and make a collage of products or services using newspaper, magazine ads and/or computer-generated images that would appeal to that type of consumer.
- Explain this quote: "Competition is not only the basis of protection to the consumer, but is the incentive to progress" - Herbert Hoover



IMPORTS

The goods and services that consumers in one nation buy from sellers in another nation

ELEMENTARY ACTIVITY

EXPORTS

The goods and services that producers in one nation sell to buyers in another nation

Introduce the concepts of important exports. Learn the top three imports and exports of your state by visiting: www. census.gov/foreigntrade/statistics/state/data/index.html. Discuss the possible reasons why these resources made the top of the list. Choose a neighboring state and do the same research. Create two Venn diagrams comparing both states' imports and exports.

MIDDLE SCHOOL ACTIVITY

Display items manufactured by different countries, such as electronics, food products and clothing. Ask students to list the manufacturing country of each good. Have them locate these countries on a large blank world map, using one dot per manufactured good. Discuss reasons why some countries may have more dots than others.

HIGH SCHOOL ACTIVITY

Research the United States' top 15 trading partners by going to: www.census.gov/foreign-trade/statistics/highlights/topcurmon.html. Create a bar chart that shows three things: U.S. total trade with its top 15 trading partners; U.S. exports with its top 15 trading partners; and U.S. imports with its top 15 trading partners. Discuss the graph and what it shows about U.S. trade.

- Create a song or rap that promotes interdependence (when people or nations depend on one another for the goods and services they want) as a way of increasing imports and exports.
- Research the concept of balance of trade. Define this term and explain what it means to the U.S. economy.
- Design a trophy celebrating an important export from your state and explain your choice and reasoning with the class.
- If U.S. exports to China are worth \$8 billion, and U.S. imports from China are worth \$34 billion, what is the total trade amount? (*\$42 billion*) What is the trade deficit? (*\$26 billion*)
- Write a short essay explaining the reasoning for tariffs on important to the United States.
- Play "Another Action Hero" in Show Business: The Economic\$ of Entertainment at www.bos.frb.org/entertainment/ index.htm to learn what the film industry can teach about international trade and globalization.
- Research the World Trade Organization (WTO) at www.wto/org/english/thewto_e/whatis_e.htm. What is the goal of the WTO? List three benefits of the WTO trading system.
- Discuss this quote: "America's support for human rights and democracy is our noblest export to the world." William Bennett



INCOME

Amount of money you earn or receive from different sources

ELEMENTARY ACTIVITY

EXPENSES

Payments for goods and services

Introduce the concepts of income and expenses. Give students the following scenario: Your family has decided to take a summer vacation to Disney World. You are responsible for earning money to spend on park passes and souvenirs during the trip. Brainstorm three ways to earn money and estimate approximately how much income you might receive from each activity. Write a letter to your parents explaining your fundraising plans.

MIDDLE SCHOOL ACTIVITY

Ask students to work with a partner on the following income/expenses problem: You want to convince your family to buy a new computer to replace the outdated one at home. Create a visual that gives family members ideas on how to cut monthly expenses (such as food, clothing and entertainment) in order to save income for the purchase.

HIGH SCHOOL ACTIVITY

Discuss the difference between fixed expenses (those costs that do not change) and variable expenses (those costs that can change). Ask students to interview a parent to discover what fixed and variable expenses they pay monthly. Report finding to the class.

- Read A Chair for My Mother by Vera B. Williams. Use the children's literature lesson to discuss how part of the family income was saved to reach a goal: www.stlouisfed.org/education_resources/assets/lesson_plans/ChairForMother.pdf.
- Brainstorm types of financial emergencies (car break-downs, medical problems, home repairs, etc.). Discuss why it is important to have an emergency fund for unexpected expenses.
- Jennifer sells craft items for extra income. She sold \$236 worth of items in October, \$348 in November, and \$559 in December. What was her income for the three months? (\$1142) What was her average income from crafts monthly? (\$381)
- Place a variety of job titles with their associated incomes in a hat and then place an assortment of typical monthly expenses in another hat. Draw one job and income, and five monthly expenses. Determine if the income exceeds the monthly expenses.
- Trivia: The Federal Reserve Act was signed by President Woodrow Wilson in 1913. The average annual income that year was \$800.
- Think of a time when you paid for an expense you planned to buy (food, school supplies, etc.) and one you didn't plan to buy (spu-of-the-moment purchase). Write a song that explains which was the better decision and why.
- Use Lesson 2: "W is for Wages, W4 and W2" at www.stlouisfed.org/education_resources/assets/lesson_plans/paycheck/IYP_lesson2.pdf to learn about gross pay, net pay and the different deductions that are taken from paychecks.
- Track expenses for a week and then create a spending plan to make sure your expenses don't exceed your income.
- Research three universities you may want to attend. Evaluate each one using a decision grid with these criteria: size, location, fields of study and tuition cost.
- Discuss this quote: "Expenditures rise to meet income." C. Northcote Parkinson



PROFIT

The money a business makes after it pays its production costs

LOSS

The money a business loses after it pays its production costs

ELEMENTARY ACTIVITY

Introduce the concepts of profit and loss. Organize a classroom business selling a food or craft product. Have students figure the cost of materials (expenses); create the products; and decide on a selling price (income) to make a profit. Invite another class to view and buy the products using fake money. After the sale, have students figure the class profit/loss based on this formula: total income - total expenses = profit.

MIDDLE SCHOOL ACTIVITY

Use the above activity to develop small group businesses with four to five students. Each group should decide on its product, follow the production steps and sell the products to classmates using fake money. Students may choose to incorporate marketing techniques to increase sales. Groups should give a final business report, noting profit/loss, to the class.

HIGH SCHOOL ACTIVITY

Introduce stocks as shares of ownership in a company. Ask students to choose a company they are familiar with and follow its stock price online or in a newspaper. Have them record the closing stock price each Friday for a month. Ask them to give a presentation with the following information: the weekly profit/loss from shares purchased (subtract closing prices from one week to the next) and the monthly profit/loss (subtract week one from four).

- Read *Isabel's* Car Wash by Sheila Bair and Judy Stead. Discuss how Isabel started her car wash with help from investors, who became part owners with her. Did the car wash earn a profit or show a loss in the story?
- When a company wants to increase its profit, it can reduce costs (expenses) or increase their sales (income). You are the owner of a new sushi restaurant. Describe two ways to increase your sales and two ways to reduce costs.
- If a company's losses are much greater than its profits, the owners might consider filing for bankruptcy. Research the concept of bankruptcy and write an essay describing the advantages and disadvantages.
- Read Free Enterprise: The Economic of Cooperation, available at www.dallasfed.org/educate/classroom.cfm, to learn about the role of businesses in a free-enterprise system.
- Your school had a pancake breakfast to raise funds for the sports teams. Expenses included paying for food and set-up costs, which were \$949. The number of dinners sold was 275 at \$6 each. What was the total income from the event? What was the profit after expenses? (\$1650, \$701)
- Starting your own business as an entrepreneur has opportunity for profit and possibility of loss. Brainstorm a list of potential businesses to start and then list possible profits and losses for one of those businesses. Debate whether the business risks are worth the rewards.
- Trivia: Eldercare services are predicted to be one of the most profitable business opportunities in 2012-2013 due to a boom in the elderly population and longer overall life spans.
- Calculate this profit/loss stock statement: 100 shares of XYZ Electronics bought at \$29 each + \$1.50 broker fee (\$2901.50); 100 shares sold at \$35 each \$1.50 broker fee (\$3498.50); (\$3498.50 \$2901.50 = \$597 profit).



SHORTAGE

Having fewer goods, services or resources available than you want

SURPLUS

Having more goods, services or resources available than you want

ELEMENTARY ACTIVITY

Introduce the concepts of shortage and surplus. Give examples of a popular new toy on sale before the holidays as a possible shortage situation and a less popular toy as a possible surplus. After brainstorming other shortage/surplus situations, have students write a short story titled "Standing in line to buy..."

MIDDLE SCHOOL ACTIVITY

Use the limerick below to introduce surpluses and shortages. Ask students to make up their own poem about surpluses and shortages to share.

There once was a price too high, So that no one would bother to buy. On the shelf the stuff sat, Gathered dust like a floor mat. A surplus needs a lower price - that's why!

And then there was a price oh so low, That folks stood in a long line, oh no! But the shelves were soon bare, Those still waiting sure cared. A higher price would have solved their shortage woes.

HIGH SCHOOL ACTIVITY

Discuss that many economic scenarios can cause either a shortage or surplus of used cars. Ask students to brainstorm situations where a used car shortage might develop and where a used car surplus might develop. If you were a used car dealer, what would you do to avoid a large surplus or shortage?

- Food shortages occur throughout the world due to disasters, war and population increases. Research how the United States helps at: http://foodaid.org/resources/the-history-of-food-aid/. Create a visual illustrating how these food programs enable countries to become more self-sufficient.
- Learn about market equilibrium, or the point at which there is no shortage or surplus of a good or service, by watching the third episode of the Economic Lowdown Video Companion Series at: www.stlouisfed.org/education_resources/video_podcasts.cfm.
- Stores often have a surplus of holiday candy after Halloween and Valentine's Day. What methods do store managers use to quickly sell their surplus? (half-price sales, special display) Describe three new and creative ways to reduce this surplus.
- Some areas routinely experience water shortages. List the ways you use water every day. How could you cut down your usage or recycle water to help reduce water shortages? Create a public service announcement featuring your water saving ideas.
- North Dakota's oil surplus has led to a low unemployment rate and a state budget surplus. Research North Dakota's boom and write an essay about whether or not you would be interested in moving to the state under current circumstances.
- Weather conditions can create shortages. Work with a partner to make a list of hardware and department store items that might be in short supply during a snowstorm (snow blowers, shovels, gloves, hats, etc.). Pantomime the use of each item for the class to guess.
- Discuss this quote: "A man with a surplus can control circumstances, but a man without a surplus is controlled by them, and often has no opportunity to exercise judgment." Marshall Field





ASSET

Something of monetary value owned by an individual or organization

LIABILITY

A debt or payment owned by an individual or organization

ELEMENTARY ACTIVITY

Introduce the concepts of asset and liability. Brainstorms a list of students' current assets and discuss items that they would like to own as future assets. Ask students to design a tri-fold showing their assets now, possible future assets and their savings plan to get these assets.

MIDDLE SCHOOL ACTIVITY

Ask students to inventory their personal assets and liabilities and develop a graphic organizer with their results. Have them rate their personal finance situation as great, okay or needing improvement. Tell them to write three goals for their financial health in the next year.

HIGH SCHOOL ACTIVITY

Introduce the following formula: Assets - Liabilities = Net Worth, or your economic wealth. Use Money Circle Theme 3, Lesson 1 found at *www.federalreserveeducation.org/resources/MoneyCircle*. Discuss the assets, liabilities and net worth of the student in the Activity 1 story. Ask students to write a similar story about themselves, listing current assets, liabilities and assessing their net worth.

- Invite a small business owner to speak to the class. Ask students to prepare interview questions about the assets and liabilities most business owners have and ways to increase the net worth of a business.
- Is a home an asset or liability? Research this question and then draw an illustration to explain what you learned and whether you think a house is an asset or liability.
- Change the lyrics of a popular song so that they now convince someone to keep their liabilities low for better financial health.
- Use the Core Concepts Cards net worth calculator, available at: www.federalreserveeducation.org/resources/coreconcepts/worksheets/whatsyournet to figure your net worth. How can you increase assets or decrease liabilities to add value to your net worth?
- Trivia: U.S. household and nonprofit organizations' liabilities, which include mortgages, consumer credit, loans and securities, totaled almost \$14 billion in 2010.
- What does Penny Pigeon learn about saving and building assets? Read the Financial Fable Penny Pigeon and the Missing Nest Egg to find out at: http://www.kansascityfed.org/education/fables/index.cfm.
- Justin's assets are a \$250 bike, a \$1,299 computer and \$582 in savings. His liabilities are \$475 owed on a loan for the computer and \$138 owed to his mom. Add Justin's assets and subtract his liabilities from the total. What is Justin's net worth? (\$2,131 \$613 = \$1,518
- Learn what happens when the price of an asset becomes artificially high in Recession Lesson: Asset Bubbles, available at: www.kansascityfed.org/publicat/education/teachingresources/RecessionLesson-AssetBubbles.pdf.
- Discuss this quote: "No one has a greater asset for his business than a man's pride in his work." Hosea Ballou



SUPPLY

The amount that producers are willing and able to produce and sell at all possible prices at a given time

ELEMENTARY ACTIVITY

DEMAND

The amount that consumers are able and willing to buy at all possible prices at any given time

Introduce the concepts of supply and demand. Give students play money and set out items for sale such as pencils, erasers and stickers. Set some prices low to encourage sales and others higher to discourage buyers. Let students shop, and then discuss the demand for the products at various prices.

MIDDLE SCHOOL ACTIVITY

The launch of the Air Jordan retro basketball shoe sale caused long lines, fights and store closings across the United States. Discuss the concepts of supply and demand in this situation. Ask students to give reasons why these shoes sold out, even though their retail price was \$180 a pair.

HIGH SCHOOL ACTIVITY

Introduce the concept of market clearing price (MCP): where buyers and sellers agree on a price to reflect supply and demand; also called an equilibrium price. Discuss the MCP of tickets to a concert. What can you assume if the concert is sold out? (MCP is too low.) If few tickets are sold? (MCP is too high.) If you were a concert promoter, what criteria would you use to set ticket prices?

- Watch the Economic Lowdown video on supply at: www.stlouisfed.org/education_resources/podcasts/economic_lowdown_video_1.cfm. Draw and explain the basic supply curve shown in the video. How can this curve change based on market conditions?
- What could happen to the price of gasoline if demand increases worldwide? Will prices increase or decrease? What could happen to the price if new oil pipelines add to the supply of gasoline? Will prices increase or decrease?
- Taylor purchased candy bars from the store at 50 cents each. She wants to sell them at school after lunch for \$1 each. From what you've learned about supply and demand, what advice would you give Taylor regarding her price?
- Watch the Economic Lowdown video on demand at: www.stlouisfed.org/education_resources/podcasts/economic_ lowdown_video_2.cfm. Take notes on the six ways demand can change, giving an example for each. Create and present a skit showing the effects of supply and demand on the purchase of the newest cell phone, tablet or electronic device.
- Learn about the sectors of the Federal Reserve's Beige Book in the lesson Exploring Economic Sectors, available at: www.kansascityfed.org/publicat/education/teachingresources/Exploring-Economic-Sectors.pdf. Use the discussion questions provided for each sector to explore the concepts of supply and demand.
- Watch the Economic Lowdown video on equilibrium at: http://www.stlouisfed.org/education_resources/podcasts/ economic_lowdown_video_3.cfm. How do the concepts of surplus and shortage relate to market equilibrium?
- Two friends set up a lemonade stand, charging 75 cents for two glasses sold. They lowered their price to 60 cents, selling four glasses. Their final price of 50 cents led to sales of six glasses. Create a demand graph that shows this information. What was the twins' total revenue? (\$6.90)
- Discuss this quote: "As scarce as truth is, the supply has always been in excess of the demand." Josh Billings



