

BITE-SIZE ECONOMICS

FEDERAL RESERVE BANK of KANSAS CITY

DESCRIPTION:

The following activities are taken from the 2010-11 Teacher Talk Planner. These activities and discussions can be easily integrated into the classroom. Teachers can introduce an economic concept which can be developed by the suggested literature, problem solving, social studies, language and art activities.

GRADE LEVEL: K-12

SCARCITY

When there is not enough for all who want it

ELEMENTARY ACTIVITY

Play a game of musical chairs or a game where there is not enough gym equipment for all players. Discuss how the lack of chairs or equipment makes the game more difficult. Scarcity forces us to make choices or decisions.

MIDDLE SCHOOL ACTIVITY

Ask the class to brainstorm ways they could spend \$10. List ideas and ask them to narrow it down to one, since the class has only one \$10 bill. When there is disagreement on which one, discuss that the scarcity of the money to be spent forces us to make choices.

HIGH SCHOOL ACTIVITY

Have students list all the extra-curricular activities they could participate in for the first semester, including sports, clubs and competitions. Discuss that scarcity of time forces them to choose between several activities they may be interested in.

BITE-SIZE IDEAS

- Read *Monster Musical Chairs* by Stuart Murphy. Use the children's literature lesson to discuss the topic of scarcity in the story: www.stlouisfed.org/education_resources/assets/lesson_plans/MonsterMusicalChairs.pdf
- Use the Fifty Nifty Card Teacher Resource Guide's "Word of the Week" activity to integrate the concept of scarcity into reading, language and art: www.federalreserveeducation.org/resources/fiftynifty
- A class of 28 students earned popsicles. The teacher bought 2 boxes of popsicles, with 12 in each box. How many more popsicles does the teacher need to avoid a scarcity in her classroom? (4 more)
- The Bureau of Engraving and Printing produces currency daily to avoid a scarcity of money. How many bills are produced in a day? A) 3,500 B) 350,000 C) 3.5 million D) 35 million Answer: (D)
- Write about a situation where a scarcity of food, money or time caused a problem, and how that problem was solved.
- Draw a picture showing how a scarcity of natural resources can affect your daily life.
- Just for fun, try saying this tongue twister quickly three times: Skyler scored the scarce scholarship.
- Discuss the meaning of this scarcity quote: "There is no scarcity of opportunity to make a living at what you love; there's only a scarcity of resolve to make it happen." - Wayne Dyer



OPPORTUNITY COST

The next best choice that you give up

ELEMENTARY ACTIVITY

Discuss opportunity costs in buying school supplies with students. What backpack choices did they make, and what designs were their second choices? Did they consider mechanical pencils vs. regular pencils? Did they choose markers or crayons? Talk about how they made their decisions.

MIDDLE SCHOOL ACTIVITY

Talk about the choices and opportunity costs of school cafeteria lunches with students. Compare the entrée, salad, sandwich and other choices for the day. What final choice did they make? What was their opportunity cost? Continue each day for a week and have students graph individual and class choices and opportunity costs.

HIGH SCHOOL ACTIVITY

Discuss homecoming expense choices and opportunity costs. For example, with a limited amount of money, would you choose a fancy limo for transportation? Would you spend more money for a high-dollar outfit instead? Or would you spend your dollars on an expensive restaurant meal before the dance? Discuss the reasoning behind your decisions.

BITE-SIZE IDEAS

- Read *Something from Nothing* by Phoebe Gilman. Use the children's literature lesson to discuss the topic of opportunity cost in the story: www.stlouisfed.org/education_resources/assets/lesson_plans/SomethingNothing.pdf
- Discuss with students how they make daily decisions, selecting one choice and giving up a second as an opportunity cost. Have them draw two locations for their next birthday party, make a final decision, and label one "my choice" and the other "my opportunity cost."
- You have two possible babysitting jobs for Saturday - one watching 6-year-old twins for four hours at \$3 an hour, and one with two kids, ages 1 and 3, for four hours at \$4 an hour. How much would you earn from each job? What would your choice/opportunity cost be?
- If you had to choose a president for a new \$200 bill, which choice would you select and which would be your opportunity cost? A) John Kennedy or B) Franklin Roosevelt. Have students discuss why they made their choice.
- Write about the problem that occurs when people do not recycle resources and the resulting opportunity cost on the environment.
- Create a collage using magazine pictures of items you'd like to purchase in the future. Narrow your choices to two favorites. What would your final choice/opportunity cost be?
- Make up a rap about regretting a buying decision (buyer's remorse) and wishing you had purchased your opportunity cost instead. Perform it for the class.
- Discuss the meaning of this quote: "An opportunity cost is an opportunity lost."



INCENTIVE

Something that influences the behavior of people

ELEMENTARY ACTIVITY

Discuss Halloween and the practice of “trick-or-treating.” Would this holiday be as much fun if the incentive of candy wasn’t given out to trick or treaters? Would you still want to “trick-or-treat?” The “treat” can influence the behavior of kids. Take a survey to decide which type of treat is the best incentive: chocolate bars, fruit-flavored candy, gum and other choices.

MIDDLE SCHOOL ACTIVITY

Debate the pros and cons of using money as an incentive for getting higher grades. Is this a good practice? Will this encourage students to work harder for grades?

HIGH SCHOOL ACTIVITY

Discuss the topic of behavioral incentives and teens. Ask students which types of incentives work best to keep teens in line: extending curfew; car privileges; more computer/video game time; increasing allowance/funds. Tell students to give reasons for their choices.

BITE-SIZE IDEAS

- Read *Earth Day-Hooray!* by Stuart Murphy. Use the children’s literature lesson to discuss the topic of incentives in the story: www.stlouisfed.org/education_resources/assets/lesson_plans/EarthDayHooray.pdf
- Discuss “interest” as “payments made for the use of money.” Ask students if they think earning interest when they deposit money in a savings account is a good incentive to save. Why or why not?
- The class has been earning incentive points towards a party since the beginning of the year. They’ve earned 576 points in 8 weeks. What was the average number of points earned each week? How many more points do they need to reach their 1000 point goal?
- Discuss the fact that \$5, \$10, \$20, \$50 and \$100 bills have all been redesigned by the Treasury and will be updated again in the future. What is the incentive for our government to do this redesigning?
- Write an essay on the topic of rebates as incentives for consumers when they purchase goods and services, such as electronics, cars, etc. Do you think rebates motivate people to spend more? Why or why not?
- Create a trophy that could be awarded as a classroom incentive for the best singer, athlete or leader in the group.
- Write and perform a skit showing the impact of incentives on changing poor cafeteria behavior.
- Discuss this quote: “Competition is not only the basis of protection for the consumer, but is the incentive to progress.” - Herbert Hoover



RESOURCES

Things used to make goods and provide services

ELEMENTARY ACTIVITY

Introduce the three types of resources, giving examples of each:

- Natural - gifts of nature used to make goods and services;
- Human - workers who make goods and provide services;
- Capital - goods made and used to provide other goods and services.

Hand out magazines and have students find pictures of each type of resource. Use images to create a class resource poster with three columns labeled for the different resource types.

MIDDLE SCHOOL ACTIVITY

Discuss capital resources in the area of technology by brainstorming types of technological resources used daily by students. Have students rank these devices by importance in their lives. Which of these capital resources could they do without? How would they compensate?

HIGH SCHOOL ACTIVITY

Focus on and discuss human capital: the skills, talents and education that people possess. Discuss how improving human capital through education and training correlates with increasing income. Ask students to research and share education levels and average income of chosen careers by going to the Bureau of Labor Statistics website to look at the Occupational Outlook Handbook: www.bls.gov/oco.

BITE-SIZE IDEAS

- Read *The Goat in the Rug* by Charles Blook and Martin Link. Use the children's literature lesson to discuss the topic of resources in the story: www.stlouisfed.org/education_resources/assets/lesson_plans/GoatintheRug.pdf
- Divide students into two teams. Hold up pictures of natural, human and capital resources and take turns asking teams to identify the type of resource each is. Teams score points for correct answers.
- Discuss the correlation between a country's resources and what goods they export and import. Have students choose countries, research their major resources, exports and imports, and share their findings. Discuss which countries might make good trading partners.
- Resource Trivia: What two fabric resources are used to make paper currency? (linen - 25%; cotton - 75%)
- Ask students to compose a story about becoming an entrepreneur, including the name and type of their new business and a description of the capital and human resources they'd need.
- Have students draw a picture of their perfect vacation spot and include as many natural resources as possible.
- Develop a chart listing 10 tips that will help the environment through protecting natural resources. (Example: Pick up litter along trails and waterways.)
- Discuss this quote: "I think the environment should be put in the category of our national security. Defense of our resources is just as important as defense abroad. Otherwise, what is there to defend?" - Robert Redford



INCOME

Amount of money you earn or receive from different sources

ELEMENTARY ACTIVITY

Brainstorm ways students can earn income and make a chart of ideas. (Examples: allowance, chores, birthday/holiday gifts, garage sales, etc.) Ask students to set future savings goals (for things they will spend their income on) and share with the class.

MIDDLE SCHOOL ACTIVITY

Develop a classroom currency to use as pay for completing projects, following rules and helping others. Discuss income earned from these tasks each week and plan a future action to spend this income at the end of the quarter, semester or year.

HIGH SCHOOL ACTIVITY

Use lesson 2, “W is for Wages, W4 and W2,” from *It’s Your Paycheck* personal finance curriculum to learn what deductions are taken from weekly/monthly income. Discuss why these deductions are necessary for the government and the individual. www.stlouisfed.org/education_resources/assets/lesson_plans/paycheck/IYP_lesson2.pdf

BITE-SIZE IDEAS

- Read *Pickle Patch Bath Tub* by Frances Kennedy. Use the children’s literature lesson to discuss the topic of income in the story: www.stlouisfed.org/education_resources/assets/lesson_plans/PicklepatchBathTub.pdf
- Discuss the use of income to purchase holiday gifts and ask students to make a list of five items they’d like to buy for friends, including the price of each gift. Looking at the total amount they’ll need, will they earn enough income to make purchases? How might they earn more money to complete their shopping?
- Solve this income problem: Jay shoveled snow for five neighbors on his block. He earned \$10 from two of them, \$12 from the third, and \$15 from the fourth and fifth. What was his income total? What was his average income from each shoveling job? (Total income: \$62.00. Average income per job \$12.40)
- Research President Obama’s 2009 total income by going to: www.whitehouse.gov. (\$5,505,409) What is his yearly presidential salary? (\$400,000) From what sources did he earn most of his additional income? (sales of his books and winning the Nobel Peace Prize.)
- Create an invention or innovation that would make life easier. Name and describe your invention. What price would you sell it for? What would your income be if you sold 100? 250? 500?
- Choose a job and research its income in two different countries. (Example: a starting teacher in Mexico is paid \$10,465 a year, while a starting teacher in Canada is paid \$35,400 a year.) Discuss why the same job can have different salary levels in different countries.
- Play “Econ Bingo” after reading directions, downloading bingo cards and sample money from the Fifty Nifty Econ Cards website: www.federalreserveeducation.org/resources/fiftynifty. Award \$5 of money for each bingo during the game. Let winning students use their income to purchase incentives you have supplied.
- Hold a discussion on this topic: “When choosing a career, income is more important than passion for the job.” Ask students to give reasons for their views.



CURRENCY

Paper money that is used by a country

ELEMENTARY ACTIVITY

Look carefully at a picture of a \$10 bill. Identify the following features that make the bill legal currency: denomination amount; presidential portrait; serial numbers; Federal Reserve and Treasury seals; important signature. Ask students to look for additional features and discuss.

MIDDLE SCHOOL ACTIVITY

Examine samples of foreign currency by going to: www.clevelandfed.org/Learning_Center/Online_Activities/explore_money/index.cfm. Compare bill features for three chosen countries. How are these notes similar? How are they different? What are some basic features that are common to all currency studied?

HIGH SCHOOL ACTIVITY

Discuss the exchange rate of currency as the ratio at which a unit of currency in one country can be exchanged for that of another country. Research the exchange rate for bills from five countries by going to: www.xe.com and using the exchange rate calculator. Which notes were worth more than the American dollar? Which were worth less? Why do you think one country's currency is valued higher than another?

BITE-SIZE IDEAS

- Follow the lesson plan for “Abraham Lincoln and the Five-Dollar Note” to learn why Lincoln is portrayed on this note and the features of the redesigned \$5 bill: [www.stlouisfed.org/education_resources/assets/lesson_plans/Lincoln\\$5Note.pdf](http://www.stlouisfed.org/education_resources/assets/lesson_plans/Lincoln$5Note.pdf).
- Introduce counterfeit money (“fake currency”) as the major reason bills have been redesigned. Look at a real note online: www.newmoney.gov/currency/20.htm. Identify security measures placed on new U.S. currency including color, watermarks and micro-printing.
- Add together all the bill denominations currently in circulation. What is your dollar total?
($\$1+\$2+\$5+\$10+\$20+\$50+\$100=\188)
- What is the value of the largest note ever printed? (\$100,000) Which president was on the bill? (Woodrow Wilson)
- Nominate a president or famous person in U.S. history (no longer living) for a new \$500 bill. Write an essay describing how your nominee contributed to American history and why he/she would be a worthy candidate.
- Design a new \$500 bill with your nominee in the portrait. Remember to include legal currency details, such as denomination, serial numbers, seals and signatures. Add additional details to make your note unique.
- Currency is produced by the Bureau of Engraving and Printing, located in Washington, D.C. and Fort Worth, Texas. Look at the new \$100 bill to be released soon at www.newmoney.gov/currency/default.htm. Examine the interactive \$100 note and take the quiz on its features.
- Discuss this quote: “Information is the currency of democracy.” - Thomas Jefferson



CONSUMERS

People who buy and/or use goods and services

ELEMENTARY ACTIVITY

Discuss how commercials influence what consumers buy. Ask students to give examples of commercials that convinced them to buy a product. Were they happy or disappointed with the purchases? Tell them to give reasons for their answers.

MIDDLE SCHOOL ACTIVITY

Explain that smart consumers are aware of how advertising affects them, how to protect their information, and how to spot scams. Practice these skills by going to: www.ftc.gov/youarehere to visit a virtual mall and make smart financial decisions.

HIGH SCHOOL ACTIVITY

Introduce the Federal Trade Commission's Bureau of Consumer Protection as our nation's consumer protection agency. Its job is to prevent fraud, deception and unfair business practices. Have students research the seven divisions of this agency by going to: www.ftc.gov/bcp/about.shtm. Discuss the importance of each division to consumers.

BITE-SIZE IDEAS

- Consumers can pay for purchases by using cash, checks, debit or credit cards. Use the lesson and role play for "Payment Parliament": www.kansascityfed.org/education to introduce these different forms of payments to students.
- You have saved enough money to buy your first computer! Which is the better buy: a laptop for \$599, a case for \$29, and a mouse for \$19; or a desktop monitor for \$149, a computer tower for \$469, and a keyboard with mouse for \$39? (laptop package=\$647; desktop package=\$657)
- Discuss the difference between fact and opinion statements used to market a product. Hand out advertisements from magazines that contain both types of statements and ask students to identify the facts and opinions given. How can an awareness of these statements help consumers make wise choices?
- Consumer trivia: What is phishing? (a scam where internet fraudsters send spam or pop-up messages to lure personal information from unsuspecting victims.) Why should consumers be aware of this scam?
- Use the "Professor Finance and Fed Boy Meet the Catastrophe Clan" lesson: www.kansascityfed.org/education to introduce the Credit CARD Act and consumers' credit rights and responsibilities.
- Discuss the growing threat of identity theft. Ask students to write tips for consumers to follow in keeping their identity safe. (Example: Memorize your Social Security number so you won't need to carry your card with you.)
- Compose a song or a rap about being a "savvy shopper." Include verses about comparison shopping, purchasing quality vs. quantity, and avoiding buyer's remorse.
- Discuss the quote: "In our rich consumers' civilization, we spin cocoons around ourselves and get possessed by our possessions." - Max Lerner



MARKET

A place where buyers/sellers exchange goods or services for money

ELEMENTARY ACTIVITY

Ask students if they have ever run a lemonade stand. Point out that this is an example of a market, where buyers purchase lemonade from sellers. Discuss how sellers set their prices so buyers are willing to purchase. Ask students to give examples of goods from other types of markets they have visited, such as farmers markets, flea markets and garage sales.

MIDDLE SCHOOL ACTIVITY

Introduce the stock market as a market in which the public buys and sells stock, or shares of ownership in companies. Brainstorm companies that students are familiar with (such as McDonalds, Nike, Toys R Us, etc.) and ask students to nominate the five best choices for stock purchases. Discuss the reasons for their picks.

HIGH SCHOOL ACTIVITY

Explain a market economy as an economy that operates by voluntary exchange between buyers and sellers in a free market not planned or controlled by government. Ask students to research this and other types, such as traditional and command economies: <http://www.councilforeconed.org/resources/lessons/whateconisabout-sample.pdf>. Discuss the differences in the three economies and why a market economy works best in our country.

BITE-SIZE IDEAS

- Read *Supermarket* by Kathleen Krull. Use the children's literature lesson to discuss how technology has changed markets: www.stlouisfed.org/education_resources/assets/lesson_plans/supermarket.pdf
- Set up a classroom market where students can experience the buying and selling of goods and services by using the "Math: Paying the Price: activity from the Nifty Fifty Econ Cards website: www.federalreserveeducation.org/resources/fiftynifty
- Which is the better milk buy? one gallon for \$2.49; 1/2 gallon for \$1.29; or one quart for \$.69? (One gallon at \$2.49)
- Many supermarkets have non-food services such as floral departments, pharmacies, banks, dry cleaning and DVD rentals. Why do you think supermarkets offer these additional services?
- Before buying clothes or shoes, consumers should consider several features, such as price, quality, fit, style and comfort. Discuss and rank these features with students to see which ones are most important to them in making a purchasing decision.
- Ask students to design the "Market of the Future" by drawing a blueprint of their dream store. Have them include basic food departments and cashier areas, and then add original areas to make their market unique.
- Play "The Price is Right" by showing student teams a variety of store items, having them take turns estimating the price of each. The team closest to the price without overestimating wins a point. Keep track of points to determine the winning estimators.
- Discuss this quote: "If you can't pay for a thing, don't buy it. If you can't get paid for it, don't sell it. Do this and you will have calm and drowsy nights, with all of the good business you have now and none of the bad." - Benjamin Franklin



INVEST

To use money to gain profit

ELEMENTARY ACTIVITY

Discuss investing in a savings account to earn interest (payment made for the use of your money). Show how interest is compounded. For example: $\$100 \times 5\%$ annual interest = \$105 in a year 1; $\$105 \times 5\%$ annual interest = \$110.25 in year 2; $\$110.25 \times 5\%$ annual interest = \$115.76 in year 3. Ask students to use calculators to figure the savings account totals in years 4 and 5. (Year 4 = \$121.55; Year 5 = \$127.63)

MIDDLE SCHOOL ACTIVITY

Introduce certificates of deposit and savings bonds as two ways to invest money. Look at the financial website: <http://financialplan.about.com/od/savingmoney/a/wheretokeepsave.htm>. Compare and contrast these two methods of saving to look at the advantages and disadvantages of each.

HIGH SCHOOL ACTIVITY

Discuss the stock market as a public place to invest dollars in stocks, or shares of ownership in a company. Go to: www.esortment.com/invest-money-mutual-funds-stocks-17734.html to learn about stocks vs. mutual funds. Which type of stock would you invest in? Give reasons for your answers.

BITE-SIZE IDEAS

- Read *My Side of the Mountain* by Jean Craighead George. Use the children's literature lesson to discuss investing in human capital through acquiring skills and knowledge: www.stlouisfed.org/education_resources/assets/lesson_plans/MySideMountain.pdf
- Discuss how businesses invest in capital resources, such as newer computers, machines and technology. How can spending money on these resources lead to profits in the long term?
- Investment Math: Introduce the "Rule of 72" as a method to determine the number of years it will take for your savings to double in value. Give this example: if the interest rate is 2%, dividing 72 by 2=36 years to double your savings. Ask students to figure out the number of years for 4% (18); 6% (12); and 8% (9).
- Which is greater: \$1 million, or a penny that doubles in value for 30 days? Use a calculator to figure out the compound interest of the doubling penny by taking each new total and multiplying by 2 to double. (The final total for the doubling penny is \$5,368,709.12)
- Create a rap or song titled, "Invest in Yourself." Include all the ways to invest in your human capital, such as more education, training and practicing to gain experience, and taking care of your health. Perform your verses for the class.
- Brainstorms items of value that people invest in, such as real estate, gold, art, coins and jewelry. Ask students to write an essay discussing whether they think these options are better investment areas than the stock market and give their reasons for their opinions.
- A bear market is one where stocks steadily decline and investors are motivated to sell; a bull market is one where stocks are steadily increasing with investors' optimism. Ask students to design two new symbols (animal or other) to replace the bear and bull images and share why their symbols are good representations of these markets.
- Discuss this quote: "Don't put all your eggs in one basket," and relate it to diversifying, or having a variety, of stock investments. Why is diversification a good strategy?



ENTREPRENEUR

One who takes a risk by producing a product or starting a new business

ELEMENTARY ACTIVITY

Introduce and discuss the characteristics of an entrepreneur, such as being a risk taker; having high energy; being competitive; having a strong desire to be your own boss; and possessing a “never quit” attitude. Ask students to rank themselves “+” or “-” on each of these characteristics to assess their own potential for entrepreneurship.

MIDDLE SCHOOL ACTIVITY

Discuss famous entrepreneurs that students are familiar with, such as Bill Gates, Oprah Winfrey, Walt Disney and J.K. Rowling. Look at: www.thelittlee.com/html/famous_entrepreneurs.html and ask students to choose one entrepreneur they are impressed with to research and share with the class.

HIGH SCHOOL ACTIVITY

After discussing entrepreneurship, ask students to interview an entrepreneur in their community. Interview questions could include: describing their business; explaining how they financed their venture; discussing any challenges in their business; and describing a typical work day. Share completed interviews with the class.

BITE-SIZE IDEAS

- Read *Uncle Jed's Barbershop* by Margaree King Mitchell. Use the children's literature lesson to discuss the challenges of entrepreneurship: www.stlouisfed.org/education_resources/assets/lesson_plans/UncleJedsBarbershop.pdf.
- Use the “Creative Story Starter-Enterprising Entrepreneur” activity from the Fifty Nifty website: www.federalreserveeducation.org/resources/fiftynifty to have students write about a new product or business they would create.
- You have opened a new video game store and hired five full-time employees. If starting salaries are \$8.50 an hour and all employees work a 40-hour week, how much should you budget for employee salaries weekly? (\$1,700)
- Before Harry Truman became the 33rd president, he was a Kansas City entrepreneur in which business? A) Finance B) Newspaper C) Clothing. Answer: C) He ran a business that tailored men's clothing.
- Many entrepreneurs get their start through designing an invention or innovation that becomes successful. Research famous inventors by looking at: www.ideafinder.com/articles/thelists/entrepreneur.htm. As a group, vote on the top three inventors based on their creativity and success.
- As entrepreneurs invent new products, they often make former products obsolete, or out of date and no longer used. An example of this would be the typewriter, which is now rare because of computer word processing. This concept is called “creative destruction.” Ask students to brainstorm and discuss other examples of creative destruction due to new inventions.
- Develop a role play about an entrepreneur whose ideas for a new product or business are not well accepted and how he/she meets these challenges and eventually becomes successful. Perform the role play for your class.
- Discuss how this quote relates to entrepreneurship: “Wanting something is not enough. You must hunger for it. Your motivation must be absolutely compelling in order to overcome the obstacles that will invariably come your way.” - Les Brown

