

The Economic Way of Thinking

LESSON DESCRIPTION AND BACKGROUND

The students are introduced to the final two principles of the economic way of thinking.

- People's choices have consequences.
- People respond to incentives.

They engage in activities that require an analysis of choices, using the economic way of thinking.

Lesson 3 is correlated with national standards for mathematics and economics, and with personal finance guidelines, as shown in Tables 1-3 in the introductory section of this publication.

ECONOMIC AND PERSONAL FINANCE CONCEPTS

- Consequence
- Incentive
- Opportunity cost

OBJECTIVES

At the end of this lesson, the student will be able to:

- Identify the costs and benefits of a choice.
- Identify and evaluate **incentives**.
- Analyze choices and predict **consequences**.

TIME REQUIRED

Two 45-minute class periods

MATERIALS

- A transparency of **Visual 1.4** from **Lesson 1**
- A transparency of **Visual 3.1, 3.2, and 3.3**
- A copy of the **Introduction** and **Vocabulary** sections from **Lesson 3** of the *Student Workbook* for each student
- A copy for each student of **Exercise 3.1, 3.2, and 3.3** from the *Student Workbook*

- A copy for each student of **Lesson 3 Assessment** from the *Student Workbook*
- Calculators

ADDITIONAL RESOURCES



To download visuals, find related lessons, correlations to state standards, interactives, and more, visit <http://fffl.councilforeconed.org/6-8/lesson3>.

PROCEDURE

1. Open the lesson by having the students read the **Introduction** and **Vocabulary** sections for **Lesson 3**. Display **Visual 3.1**. By reference to the visual, introduce the lesson's focus on making choices. Explain that, in our everyday lives, we experience scarcity through our lack of time, space, and money. Time is limited: There are only 24 hours in each day to be used to accomplish everything we want to do. Space is limited: We have only so much land available for houses, schools, and shops. Money is limited: The things we want must be made from scarce "productive resources," which have a price. Because resources are scarce, we must make choices. No one earns enough money to have everything he or she wants. Ask the students to recall from **Lesson 1** the economic wants listed on the Bill and Melinda Gates Foundation website. (**A clean and sanitary environment in areas of the world where people have no clean water and no sewerage system; eradication of diseases, such as HIV and malaria; public libraries with computers and Internet access; job training for young people; aid and support for victims of domestic violence.**) Not even Bill Gates can have everything he wants!
2. Display **Visual 1.4** from **Lesson 1** and review the first four points. Read the first principle and discuss the following:

- a. What are “natural resources”? (**Resources found in or on the earth; these resources are used to produce goods and services.**)
 - b. What are some examples of scarce natural resources? (**Many possible answers: Water, oil, coal, iron ore, etc. Choose one suggested answer to be used in c., below.**)
 - c. Name some goods and services that are produced using _____. (**Answers will vary depending on the natural resource chosen.**)
 - d. Can _____ (name of natural resource) be used to make as many of these goods and services as we want? Why or why not? (**No. Students should recognize that there is no limit to the amount of these goods and services that we would want. They should state that there isn't a sufficient amount of this natural resource to make an unlimited supply of each good and service wanted.**)
3. Read the second principle of the economic way of thinking and ask the following questions:
 - a. What word do we use to describe this condition of having unlimited wants and limited resources? (**Scarcity.**)
 - b. Why can't people have everything they want? (**People's wants are unlimited, but productive resources are limited.**)
 - c. How do people solve the problem of unlimited wants and limited resources? (**People must make choices; they can't have everything they want.**)
 4. Read the third principle of the economic way of thinking and ask the following questions:
 - a. There is a new movie out that everyone says must be seen on a large screen. On the other hand, there is a Monster Truck show in town this weekend. You have \$10 and no time to earn any more money. Admission to each of these events is \$10. You choose to go to one event. What economic term would you use to describe the event you did not choose? (**Opportunity cost.**)
 - b. Let's say these two events are your favorite choices. Then you find out that the circus is in town for the weekend. While trying to decide, you write the three events in your order of preference, 1. Monster Truck show, 2. movie, and 3. circus. Which of these events is your opportunity cost? (**The movie, because it is the next-best alternative you did not choose.**)
 5. Reiterate that every choice involves an “opportunity cost”: the next-best alternative that is given up when a choice is made. Display **Visual 3.2** and review the statements about how people have to make choices because scarce resources limit our time, space, and money.
 6. Discuss **Visual 3.2**. Ask: What are the choices and opportunity costs in the three examples it poses? (**When Sofia chooses to study, her opportunity cost is not getting to read. When Maurice chooses to use his limited locker space for books, his opportunity cost is the space that could have been used for shoes. When Nguyen chooses to use his limited money to buy snacks, his opportunity cost is the movie ticket he could have bought.**)
 7. Have the students suggest personal experiences that have involved limited time, space, or money. Have them identify their choices and opportunity costs in these experiences. (**The students should focus on their choices and what they had to give up in each instance. They should use the term “opportunity cost” as they discuss their choices and what they gave up.**)
 8. Divide the class into pairs. Distribute a copy of **Exercise 3.1** from the *Student Workbook* to each student. Have the students complete the exercise, following the examples given in **Visual 3.2**. When the students have completed the exercise, engage them in a discussion of the statements they made. (**Sample answers: Shaundra can choose to get her mom a less-expensive gift, or she can tell her mom she'll have the gift for her later, after she saves more**

money. If she chooses the less-expensive gift, her opportunity cost is that she had to give up dollars that could have been used to make partial payment for the necklace. Angelo's alternatives are to keep an aquarium or a flat screen TV in his room. If he chooses the aquarium, his opportunity cost is the flat screen TV. Raul's alternatives are to take the time to raise \$15 or to spend the time doing something else. If Raul chooses to spend his time doing something else, his opportunity cost is to participate in the raffle.)

9. Define “incentives” as factors that motivate and influence human behavior. Explain that incentives can come in the form of money or in other forms. “Monetary incentives” include money, income, and economic wealth. “Non-monetary incentives” motivate people for reasons other than money, wealth, or income. For example, parents might turn down higher-paying jobs in another town so that their children do not have to switch schools. Or a student might give up a baby-sitting job in order to spend time with friends.

10. Explain that in a market economy, self-interest is an important motivator, whether that interest is monetary or non-monetary. For example, “entrepreneurs” take risks in order to

start businesses, many of them hoping to make lots of money. However, they may also have non-monetary incentives, such as being their own boss or proving that they have good ideas.

11. Explain that non-monetary incentives can be physical, emotional, spiritual, or social. For example, people exercise to maintain good health and to look better. People in religious orders provide care and shelter for the poor and sick because of a spiritual incentive to help others.

12. Display **Visual 3.3**. Have the students suggest incentives that might help to explain the choices listed in the chart. **(Answers will vary; possible responses follow.)**

13. Again, divide the class into pairs of students. Explain that when consumers are presented with different economic choices, they must consider both the benefits (what you gain) and the costs (what you give up) of each choice to determine which one offers the greatest economic incentive.

14. Distribute a copy of **Exercise 3.2** from the *Student Workbook* to each student; also distribute calculators. Have the students calculate the savings they would enjoy from each coupon; determine which is the better incentive in each instance; and record their decision and an explanation on the answer sheet. **(Answers are on the following page.)**

Answers to Visual 3.3

Choices	Monetary Incentives	Non-monetary Incentives
Save half of earned babysitting money in a savings account	Parents agree to match your savings, dollar for dollar	You want to make a donation of money to the local food pantry (spiritual, emotional, or social)
Buy a new bike	Price of bike is reduced	You can get exercise by riding the bike (physical)
Lend \$10 to a classmate	Your friend agrees to pay you \$11 at the end of the month for a \$10 loan today	The classmate is a good friend (emotional or social)
Join a walk-a-thon for charity	Every participant gets a free T-shirt (although this may be considered a non-monetary incentive)	You feel good about yourself when you help others (spiritual or emotional)

15. Distribute a copy of **Exercise 3.3** from the *Student Workbook* to each student. Have the students work in small groups to complete the exercise. Discuss their answers. **(1. Finances were limited; the students did not have enough money to pay for both a DJ and a video-sound show. 2. The committee chose the video-sound show. 3. Its incentive was the expectation of making more money and achieving higher attendance. 4. The opportunity cost of choosing the video-sound show was the choice of having the DJ. 5. Cost: higher-priced entertainment carried risk of losing money. They also had to forgo the use**

of a DJ. Benefit: possibility of making more money because more students would attend. 6. Consequences were that a larger number of students attended the dance, and the Honor Society made more money than expected. They also took more risk as a consequence of their choice.)

CLOSURE

Display **Visual 1.4** and discuss the final two points. Explain to the students that the economic way of thinking involves understanding these six points. Have the students look through

Answers to Exercise 3.3

<p>1. Incentive #1 is the better deal. #1: $20\% \text{ off} = \\$29.99 - \\$6.00 = \\$23.99$ #2: $\text{Save } \\$5.00 = \\$29.99 - \\$5.00 = \\24.99</p>	<p>2. Incentive #2 is the better deal. #1: $\text{Two boxes cost } \\$5.98, \text{ get one free. Therefore, 3 boxes cost } \\$5.98, \text{ or } \\$1.99 \text{ each } (\\$5.98/3).$ #2: $\text{Save } \\$1.50 \text{ on each box} = \\$2.99 - \\$1.50 = \\$1.49 \text{ each. Therefore, 3 boxes cost } \\$4.47.$</p>
<p>3. Incentive #1 is the better deal. #1: $\text{Two 32-oz. jars cost } \\$2.56, \text{ or } \\$1.28 \text{ each, or } \\0.04 per ounce. #2: $\text{Two 48-oz. jars cost } \\$5.98, \text{ minus } \\$0.50 \text{ each} = \\$4.98, \text{ divided by } 96 \text{ ounces} = \\0.05 per ounce.</p>	<p>4. Incentive #2 is the better deal. #1: $\\$69.95 + \\$34.98 = \\$104.93 \text{ for 2 pairs.}$ #2: $\\$100.00 \text{ for two pairs.}$</p>
<p>5. Incentive #2 is the better deal. #1: $\\$5 \text{ off} = \\$240 (\\$40 \times 6 \text{ tickets}) + \\$9.99 \text{ for root beer} = \\$249.99.$ #2: $\\$45 \times 5 \text{ tickets} = \\225</p>	<p>6. Both incentives are the same. #1: $4 \text{ nights} \times \\$8.00 = \\$32.00; 2 \text{ nights} \times \\$4.00 = \\$8.00; \\$32 + \\$8 = \\40 #2: $5 \text{ nights} \times \\$8.00 = \\$40.00; 1 \text{ night free; total } \\40</p>
<p>7. Incentive #1 is the better deal. #1: $\\$16.99 + \\$16.99 = \\$33.98$ #2: $\text{Two pizzas for } \\35.00</p>	<p>8. Incentive #2 is the better deal. #1: $\\$35.99 + \\$35.99 + \\$49.99 = \\$121.97 \text{ for three games}$ #2: $3 \text{ games} \times \\$49.99 = \\$149.97 \text{ minus } \\$29.99 (20\%) = \\$119.98 \text{ for 3 games}$</p>

local newspapers to find articles about economic decisions. (Examples can be frivolous or serious, and can represent decisions in politics, entertainment, media, sports, business, etc.) Divide the class into groups and have each group analyze one decision, using principles from the economic way of thinking. Remind the students to examine choices, costs, benefits, incentives, and consequences. After the groups finish their analyses, engage the class in a discussion of each group's news articles and their analyses of the respective decisions.

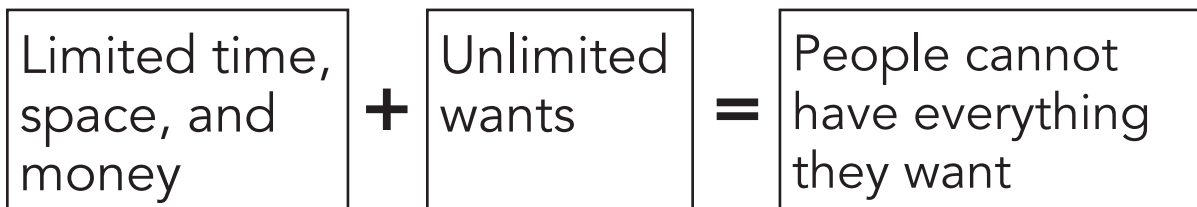
ASSESSMENT

Distribute **Lesson 3 Assessment**, The Economic Way of Thinking, from the *Student Workbook*. Sample answers can be found in **Visual 3.4**.

EXTENSION

Have the students keep a diary of their economic and financial decisions for a week. After they complete the diary, have them write a description of one of the decisions, stating the incentives for choosing as they did and the opportunity cost and consequences associated with their choice.

Why Must We Choose?



Every Choice Has an Opportunity Cost

Because resources are scarce, people can't have everything they want; they have to make choices. Every choice involves an opportunity cost—the next-best alternative not chosen.

Because time is limited, people have to make choices.

- Example: Sofia must decide whether to finish her math assignment or read a book right after dinner. If she chooses to use her limited time to do the math assignment, the opportunity cost is reading the book.

Because space is limited, people have to make choices.

- Example: Maurice must decide whether to put books or gym shoes on the shelf in his locker. If he chooses to use the shelf space for books, the opportunity cost is space for his shoes.

Because money is limited, people have to make choices.

- Example: Nguyen must decide whether to spend his allowance for snacks or a movie ticket. If he chooses to buy snacks, the opportunity cost is the movie ticket.

Incentives Matter

Choices	Monetary Incentives	Non-monetary Incentives
Save half of earned babysitting money in a savings account	<i>Parents agree to match your savings, dollar for dollar</i>	
Buy a new bike		<i>You can get exercise by riding the bike (physical)</i>
Lend \$10 to a classmate		
Join a walk-a-thon for charity		

Lesson 3 Assessment: Answer Key

A. Examine the decisions made by the people in the following situations by using the economic way of thinking. Answers may vary. Some possible answers include:

1. Instead of putting an extra \$3,000 in their retirement fund, Florence and Joe decided to fly from Chicago to Florida for a week of golf and relaxation.

Choice: **(Fly to Florida.)**

Opportunity Cost: **(Add \$3,000 to their retirement fund.)**

Incentive: **(Chance to play golf and relax.)**

Consequences of their choice: **(Won a tournament; lost a golf club.)**

Benefits: **(Met new friends at the tournament; had a relaxing vacation.)**

2. Brian and Sheryl paid their credit card debt instead of making a down payment on a new convertible.

Choice: **(Paid credit card balance.)**

Opportunity Cost: **(Enjoyment of new convertible.)**

Incentive: **(Eliminate monthly payments and high interest charges.)**

Consequences of their choice: **(Had more money to save or spend on other purchases.)**

How did Brian and Sheryl benefit from their choice? **(Had more disposable income to spend or save because they no longer had to make monthly credit card payments.)**

3. Su-Zee, Lorena, and their friends went to the beach instead of working at the school book sale last weekend.

Choice: **(Weekend at the beach.)**

Opportunity cost: **(Spending time with other friends at the book sale.)**

Incentive: **(Get a suntan; enjoy time at the beach.)**

Consequences of their choice: **(Sunburn; friends at book sale angry that Su-Zee, Lorena, and friends didn't help at the book sale.)**

How did Su-Zee, Lorena, and their friends benefit from their choice? **(Nice tan, day of fresh air and exercise, fun at the beach.)**

B. Using the economic way of thinking, answer this question: Why do math teachers give homework every day?

Teacher's Choice: **(Give homework, have to check it.)**

Opportunity Cost: **(Free time with no homework to check.)**

Incentives for Making the Choice: **(Students will learn more; students will do better on tests.)**

Consequences of Choice: **(Missing good TV shows; less time with family.)**

Who benefits? How?: **(Students learn more, teachers get good evaluations from parents and administrators, teacher has a feeling of accomplishment.)**