Introduction: Provides an overview to the economic way of thinking, which is the underlying theme in the Personal Financial Literacy standards.

## Economic Reasoning

Priority Academic Student Skills
Personal Financial Literacy
The economic way of thinking involves the ability to develop and practice critical thinking skills that enhance decision-making. It requires students to realize that life is about making choices because we have limited resources and unlimited wants. Using the "economic reasoning" model, students will realize that all choices have costs, and nothing in life is "free." This introductory lesson lays the foundation for the remaining modules.


## Lesson Objectives

$\Rightarrow$ Identify the steps in economic reasoning.
$\Rightarrow$ Define the terms associated with economic reasoning.
$\Rightarrow$ Demonstrate the ability to apply economic reasoning.
$\Rightarrow$ Demonstrate the ability to use the PACED Decision-Making Model.

## Personal Financial Literacy Vocabulary

Choice: Decision made or course of action taken when faced with a set of alternatives.

Cost/benefit analysis, risk/reward relationship: A tool used to choose among alternatives; weighing the cost of a product or service against the benefit(s) it will provide.

Disincentive: A factor or disadvantage that discourages people from doing something.
Incentive: Any reward or benefit that motivates people to do something.
Opportunity cost: The value of the second-best alternative that a person gives up when making one choice instead of another.

Scarcity: An economic condition created by an excess of human wants over the resources necessary to satisfy them; an inability to satisfy all of everyone's wants.

Trade-off: Giving up a little of one thing in order to get more of something else.

## Introduction



Most choices in life have very little to do with money. However, the results of those choices generally have costs that may eventually determine how much money we have.

Have you ever heard the saying, "There is no such thing as a free lunch?" Basically, it means there are no free rides in life. Even if advertised as free, there is still a cost and somebody has to pay.

## Lesson

To understand the roles of choices, we need to start by examining a typical day. The alarm clock goes off and what happens? We make a choice. We can choose to get up, hit the snooze button and sleep a little longer, or turn off the alarm and sleep later. Once we get up, we choose what to wear, what to eat, where to go, who to see, and when to go back to bed.

## TEACHING IDEAS

The multimedia presentation for this lesson outlines the content in this section. You may want to use it with your students, or print off the slides to use as lecture notes.

All of those choices are part of life. Think about that first choice: getting up, hitting the snooze button, or turning off the alarm. If we choose to hit the snooze button, what do we gain? We gain an extra ten minutes of sleep, right? What do we lose? We lose ten minutes of time that we might spend with a friend, to study for an exam, to watch TV, to play video games, or whatever. The extra ten minutes of sleep is a benefit; the ten minutes lost by doing another activity is our cost.

When we make choices, we try to determine how we can get the most benefit for the least cost. That process means that we have priorities or goals. If spending time with a friend or playing video games is important to us, we make that a priority. That is why we give up the opportunity to sleep ten more minutes. Of course, the opposite is also true. If sleeping ten more minutes is important, that is our priority, and we give up the extra time with friends or playing video games.

The idea of considering our benefits and our costs is called "the economic way of thinking." It simply means that we have some awareness about what we gain, and some awareness of what we give up; that awareness helps us decide which option is best.

Of course, sometimes our choices do not turn out as we expected. Why is that? Maybe we had a lack of information when making a decision. Suppose we get up, look outside and see the sun is shining without a cloud in the sky. With just that amount of information we do not see any need to find our coat or umbrella. We would expect it to be nice outside, and we would dress accordingly. But, what if the DJ on the radio says that it is cold or that a rain storm is coming? Would that change what we wear? It probably would because the DJ gave us additional information.


All choices are not as simple as what to wear. Some choices are very complex, which makes it more difficult to make a good decision. If we are deciding which car to buy, or where to go to college, there is a lot more to consider. Even still, the process is the same. Our goal is to determine how to get the greatest benefit for the least cost, and we choose the alternatives that we think will accomplish that goal.

In the box below, list all of the choices you have made (or will make) today:

## Why We Have to Make Choices

It would be great if we could just have everything and not have to worry about it? Well, maybe so, but that is not very realistic. Unfortunately, we make choices because we cannot have everything we want. Even the wealthiest people in the world must decide where to go and what to do. Their list of choices may be different from yours, but still they must choose.
"As simple as it sounds, we all must try to be the best person we can: by making the best choices, by making the most of the talents we've been given."

Mary Lou Retton,
Olympic Gymnast

We must make choices because we have limited resources. This problem is called scarcity. As individuals, limited resources (time, money, space, etc.) keep us from having everything we want. The same is true for society: there is only so much land and so many workers (resources) that must produce all of the things that people want.

Can you think of a situation where people have disagreed over how to use a particular resource? Imagine that your town decides to build a new school on a vacant lot near the highway. The town needs a new school, and this vacant lot is a good location. That land is owned by the Jones family. Should the Jones family sell it so that a school can be built? The answer is: it depends.
(Note: In Handout 1, you will help the Jones family decide. Right now, you need more information before advising them.)

## Opportunity Cost

Using the Jones family's vacant lot as an example, suppose that someone wants to build houses on that land instead of a school. Without knowing anything else, you may still think building a school is best. Building a new school on the land means you cannot build new houses on it. Your opportunity cost for building a new school is not being able to build new houses. However, if you want to build new houses, then you cannot build a new school. That means your opportunity cost for building houses is not building a new school.

This cost is called an opportunity cost. By building a new school, you give up the opportunity to build new homes on
 that land. By building new homes, you give up the
opportunity to build a new school. An opportunity cost is your second best choice the choice you gave up.

Before going on to the next part of this lesson, look back to the first box in this lesson where you listed all of the choices that you have made, or will make, today. Use those choices to fill in the table below:

| Today I decided (or will decide) to: |  |
| :--- | :--- |
| 1. | My opportunity cost for this choice is: |
| 2. |  |
| 3. |  |
| 4. |  |
| 5. |  |

When using this kind of cost/benefit analysis, we use incentives to measure our costs and our benefits. An incentive is a reward for our behavior. A disincentive is a punishment for our behavior. Choices with positive outcomes are always better than choices with negative outcomes. For example, it is better to do your homework and get a good grade (incentive) instead of receiving a zero for missing the assignment (disincentive).

Another example: Suppose you have a part-time job after school and on weekends. What happens to your wages if you are always on time and do whatever you are assigned to do at work? Generally, we get to keep our job-and we may even get a pay raise or a bonus. Those are also incentives.

Take a minute to reflect on these questions:

- If we get the same outcome or reward as people who rarely come to work, do a poor job, cause trouble and fail to get their assignments completed, why should you even try to do the right thing?

- If there is no reward for good behavior, or no punishment for bad behavior, what is your incentive to be a good employee?

Our behavior is shaped by the incentives and disincentives available to us. Those incentives generally relate to rules, regulations and laws imposed by different groups in different settings.
In the following box, list three incentives and three disincentives.

| Incentives | Disincentives |
| :--- | :--- |
|  |  |
|  |  |

When making a choice, do you prefer incentives or disincentives? Why?

Now that you have a better idea of how to make good choices, here is your opportunity to help the Jones family make a decision about selling their vacant lot.


> COMPLETE: What Should the Jones Family Do With
> Their Vacant Lot? - Activity 1
> - Hand out this activity to your students.
> - Ask the following questions:
> ○ What did you learn from this activity?
> ○ How will it influence the way you make choices?
> - Review their answers before continuing this lesson.

What did you learn about making choices from this activity?

How will it influence the way you make choices?

## PACED Decision-Making Model

Making good decisions about simple matters will help us make good decisions about more complex, important situations. Decision making is a process. That means it involves action to achieve the desired results. The PACED Decision-Making Model can help us make better choices with better outcomes.

The five steps to good decision making include:
P = State the PROBLEM.
A = List the ALTERNATIVES.
C = Identify the CRITERIA.
E = EVALUATE the options, based on the criteria.
D = Make a DECISION.


PROBLEM: What decision do you need to make? Are you trying to decide which pair of jeans to buy? Which movie to see? Where to go for dinner with friends? Where to attend college? To solve a problem, start by writing down what decision must be made.

ALTERNATIVES: Each of the questions above has several possible answers, which means you have a lot of options from which to choose. Make a list of all of the possible choices that you have.

CRITERIA: What is important to you? What are you using to measure your options? For example, suppose your problem is deciding where to have dinner and you are trying to choose which place serves the best pizza. Some of the criteria might include price, location, quality of food, buffet or no buffet, and so forth.

## ADDITIONAL INFORMATION

For more information on the PACED Model, refer to Financial Fitness for Life, Grades 6-8, published by the National Council on Economic Education.

EVALUATE: How well does each option meet your criteria? If your favorite pizza place is The House of Pizza, it might not be the best choice if it takes an hour to get there-especially if you only have an hour to eat before the movie starts.

DECIDE: Based on your evaluation of the options you have listed, what is the best choice for you? It may not be your favorite place, but it may be the best solution to your problem at this time.

When making choices, oftentimes we must make trade-offs. A trade-off means that we give up a little of one thing in order to get more of something else. With the pizza example, we may give up the great tasting pizza at The House of Pizza to get a closer
location. We still get pizza, even though it may not be our favorite, and we are able to make it to the movie theater before show time.

Source: Financial Fitness for Life, published by the National Council on Economic Education.


## Conclusion

It would be great if we could just have everything we want without having to make choices. While it may be fun to fantasize about that idea, it is not very realistic. Good decisions are well thought out and based on the information we have at the time we make the choice. Making good choices takes a little time and effort, but the results are worth it. The benefits of gathering information and making informed choices far outweigh the costs of just hoping or guessing. Good choices can also save us valuable resources, like time and money.

## TEACHING IDEAS

Search for stories in the newspaper or on Internet about the choices people made. Then use the economic way of thinking to examine the other possible alternatives, the choices and benefits, the incentives and the potential short-term and long-term consequences of those choices.

Have students use the PACED Decision-Making Model to plan their activities for the weekend.

## Optional Activities

- Search for stories in the newspaper or on the Internet about the choices people made. Then, use the economic way of thinking to examine the other possible alternatives, the choices and benefits, the incentives, and the potential shortterm and long-term consequences of those choices.
- Have the students use the PACED Decision-Making Model to plan their activities for the weekend.

Name: $\qquad$ Class Period: $\qquad$

## Economic Reasoning Review Lesson Introduction

Answer the following questions and give the completed lesson to your teacher to review.

1. Why do we have to make choices?
2. Name the three types of scarcity.
3. List the steps in making a decision.
4. What is the opportunity cost of going to a movie instead of going to the mall?

Name: $\qquad$ Class Period: $\qquad$

## What Should the Jones Family Do with Their Vacant Lot? - Activity 1

The Jones family has a dilemma. They own a vacant lot on the edge of town, but want to sell it. Because it is on the main highway, the land has a high value. The Jones family is one of the original families in the community, having settled there over 100 years ago. They want to be sure that whoever buys the land uses it to benefit the community and they want the townspeople to be happy with their choice.

Once the FOR SALE sign went up, they had four groups who want to buy the land. Each group would give the family the same amount of money, but they are not sure which group is the best choice to buy it. Remember, the family's goal is to do what will provide the greatest benefit to the town.

## Can you help them?

Group 1: The local school board wants to build a new school, and the Jones land is a perfect location. People in the community could easily come and go to the events at the school and busses would no longer have to drive down the city's narrow streets to
 drop off students at the school. Building a new school on the edge of town would provide opportunities for the district to expand and have new, improved facilities for all grade levels. Some parents worry about their children going to school on such a busy highway, and others are concerned about having to drive all the way across town to take their children to school. Others are concerned about removing the property from the tax rolls because schools do not pay property taxes. They also are concerned about finding the money to pay for a new school.

Group 2: MEGAMALL, Inc., wants to build a new shopping center in town. The new shopping area would provide many jobs for people living in the area, increase the amount of sales tax received in the community, increase the amount of property taxes paid to the school, and make shopping more convenient for everyone in the area. The vacant lot is the perfect location because it is on the main highway, allowing easy access for people in town as well as people in neighboring communities. Some of the local business people are concerned that MEGAMALL would have a negative impact on their sales. They also are concerned that their employees will want to go to work for the

new stores in the mall or want higher wages to stay in their current jobs. Others are concerned about the traffic congestion that might be caused by people coming and going to the mall.

Group 3: Wid-Get Manufacturing wants to build a new manufacturing plant in the community. It would provide high-paying jobs for people in the community and would attract workers from other communities to move into town or shop there. Other companies who do business with Wid-Get have indicated they may relocate to that part of the state, too. The vacant lot is a great location because
 the big trucks can easily come and go from the facility because it is on the main highway. And, it would be a convenient location for employees. The manufacturing plant would generate more property taxes for the schools in town and provide opportunities for growth. Some people worry about an outside employer coming into town who has little concern for the environment or the local customs. They also worry that the plant might close down in a few years and the building would sit empty. Others are concerned about the increased truck traffic in and around the new building, and some fear that a big employer like Wid-Get would bring strangers to town, upsetting the local way of life.

Group 4: Builduahome is owned by a local home builder who has also lived in town for many years. He went to school there and his children are currently attending the local schools. He wants to buy the land to build a new housing development and apartments so people in town have more choices in places to live. Builduahome is known for building quality homes and neighborhoods. Developing a new area of town would provide more places to live, encouraging people from other communities to consider moving to town. The construction phase would provide a lot of jobs for people in the area, many
 of whom have been driving to other cities to work. The construction of homes could be a big boost to local businesses because Builduahome would need to buy carpeting, appliances, and tools from them-and contract with local plumbers, electricians and bricklayers. Some people in town worry about the increase in traffic as people go and come from the neighborhood. They also fear it will attract too many "outsiders" who would buy the houses and move to town. Others are concerned that the houses may not sell, so they would sit empty and become rundown.

Use your economic reasoning tools to help the Jones family decide what to do.

## Economic Reasoning

1. We have to make choices.

We cannot have everything we want because society has limited resources and people have unlimited wants. This difference creates a problem called scarcity. We have to make choices because of scarcity.

What is the scarcity problem facing the Jones family? (Hint: How many lots do they own and how many people want to buy it?)
$\qquad$
$\qquad$
$\qquad$
2. Every time we make a choice, we give up something.

All choices have benefits and costs; there are no perfect choices. Each time we choose, we gain something-but we also lose the opportunity to do something else. What we lose or give up is called our opportunity cost.

What are the costs and benefits of the choices facing the Jones family? Rank their choices from 1 to 4 , with one being their "best" choice. The second choice you listed is their opportunity cost.

1. $\quad 3$.
2. $\qquad$
3. 
4. 

$\qquad$
$\qquad$

In this case, the opportunity cost is building a $\qquad$ .
3. We respond to incentives.

Incentives are rewards for making our choice. People will change their behavior or modify their choices as their incentives change. We use incentives to evaluate the costs and benefits of our alternatives when making a decision. Disincentives-or punishment-also plays a role in shaping our choices; we try to avoid making choices that have a negative result.

What are some of the incentives and disincentives for the Jones family?
Incentives: $\qquad$

Disincentives: $\qquad$

## 4. Economic systems influence our choices.

Economic systems have rules that influence what we can and cannot do. Those rules influence our incentives, and the incentives influence our choices. When the rules change, our incentives, and our choices will also change. The rules may be written, such as laws or regulations-or they may be unwritten, such as customs and traditions.

What are some possible economic systems (laws, regulations, customs or traditions) that will influence the choice made by the Jones family?
$\qquad$
$\qquad$
$\qquad$
5. Choices have consequences for the future.

Choices have consequences, outcomes or results that can last for many years. The choices we make today will impact our available choices for the future. Some consequences are short-term, lasting only a brief time; others are longterm, lasting for the rest of our life. What seems like a good idea or benefit today, may be a cost tomorrow. When we make choices, we should focus on the future. Focusing of what happened or should have happened is useless because we cannot change the past.

What are some possible future consequences for the land, the town and the Jones family?
$\qquad$
$\qquad$
$\qquad$
So, what do you recommend the Jones family do with their vacant land?

Name: $\qquad$ Class Period: $\qquad$

## Making a Decision - Activity 2

Complete this activity, using the PACED Decision-Making Model to make a decision.

1. Write down a decision you need to make $\qquad$
$\qquad$
2. Make a list of three possible solutions, alternatives or options.
a. $\qquad$
b. $\qquad$
C. $\qquad$
3. List three things that are important to you (your criteria) when making this decision.
a. $\qquad$
b. $\qquad$
C. $\qquad$
4. Place the three possible solutions and three criteria on the chart below. Determine how well your criteria fit your possible solutions by placing a plus or minus sign in the corresponding boxes.

|  |  |  |  |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

5. Evaluate your results. Which option is the best decision?
$\qquad$
Why?
