

Resources Are Scarce

LESSON DESCRIPTION AND BACKGROUND

The students examine hypothetical companies that produce various goods made from wood. They discover that some companies do better than others at producing goods that people want to buy. The companies that produce goods that people want to buy at prices high enough for the producer to be profitable will be successful.

The lesson introduces students to concepts that help to describe and explain many important personal finance decisions. The concepts include productive resources, scarcity, and price.

Resources are required to produce every good and service we want, but all resources are scarce and command a price. Thus, each good or service will also command a price. In our day-to-day lives, similarly, our resources are scarce. We can't have everything we want; in our personal finance decisions, therefore, we must try to satisfy our wants within the limits of budget constraints.

Lesson 1 correlates 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

- Capital resources
- Human resources
- Natural resources
- Entrepreneur
- Scarcity
- Unlimited wants

OBJECTIVES

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

- Define and provide examples of **natural resources**, **human resources**, **capital resources**, and **entrepreneur**.
- Explain that resources are scarce.
- Explain that resources are allocated by markets to provide the goods and services people want most.
- Explain that because resources are scarce, we must pay a price for using them.

TIME REQUIRED

Two 45-minute periods

MATERIALS

- A transparency of **Visual 1.1**, **1.2**, **1.3**, and **1.4**
- A copy for each student of **Introduction to Theme 1** and **Introduction** and **Vocabulary** sections of **Lesson 1** from the *Student Workbook*
- A copy of **Exercise 1.1** from the *Student Workbook*, with the company cards cut out so that each group of 4 or 5 students receives one of the cards.
- A copy of **Exercise 1.2** from the *Student Workbook*.
- Index cards

ADDITIONAL RESOURCES



To download visuals, find related lessons, correlations to state standards, interactives, and more, visit <http://fffl.councilforeconed.org/6-8/lesson1>.

PROCEDURE

1. Introduce the idea of unlimited wants by giving each student an index card. Ask the students to list on their cards all the things they want that can be bought with money (i.e., no listing of intangibles, such as world peace).

2. After three minutes, ask the students if they have listed everything they want. **(Most will probably say they have not.)**

3. Explain that human wants are unlimited. For most people, it is always possible to think of one more thing that it would be nice to have. Thus, even if the students had more than three minutes to write their lists, they would probably not be able to list all the things they want.

4. Tell the students to write down approximate prices next to each of the items on their lists. Then call on volunteers to give examples of items they listed and the prices they put down for those items. Briefly discuss the accuracy of the price listings. Ask: Could you afford to buy any of these items right now? **(Answers will vary; some students might be able to afford some of the items they have listed right now.)**

5. Tell the students to divide the price of each item by two. Ask: Could you afford to buy more of the items now, at this new price? **(The students most likely will say that they could afford to buy more items at the new price.)**

6. Tell the students to draw a line through each price they have listed, including the new half-off price, because now everything on the list is free. Ask: What additional items would you add to your lists if all items on the list were free?

7. Distribute a copy of **Introduction to Theme 1** and **Introduction** and **Vocabulary** sections of **Lesson 1** from the *Student Workbook* to each student. Have the students review the handouts and discuss them briefly, if necessary.

8. Explain that in the following portions of the lesson, the students will discover why the items on their lists are not free, and why some items are priced higher than others. The explanation

will involve a consideration of “natural resources,” “human resources,” “capital resources,” and the role of “entrepreneurs.”

9. Begin with natural resources. Divide the class into groups of four or five students. Distribute a company card from **Exercise 1.1** from the *Student Workbook* to each group of students. Optional: You may wish to provide each student with their own copy of their company’s card. Explain that you own a valuable resource, wood. You have only two units of wood available for sale. You will sell your wood at an auction, to the highest bidder. The bidders will be the companies that are represented by each group of students.

10. Begin an auction to sell your wood at \$5 per unit; increase your asking price at \$5 increments. Only two companies, Triple A Bat Company and Buckingham Furnishings, will be able to pay \$30 per unit. After the auction, ask students from each group to read their company’s story to the rest of the class.

11. Explain that wood is used in many ways, from building homes to making pencils. Companies that produce goods made from wood must buy from wood producers. However, there are only so many forests available for harvesting wood. Wood is scarce.

12. Explain that companies must produce goods that consumers are willing and able to buy at a price that is high enough for the producer to earn a profit and stay in business.

13. Ask the following questions.

a. Why couldn’t the Maple Wooden Hat Company buy wood to make more hats? **(Consumers were not willing to buy wooden hats. Wooden hats are uncomfortable and impractical.)**

b. Why couldn’t the Fanciful Furniture Company buy more wood to make more tables? **(Consumers were not willing to buy the colorful furniture.)**

c. Why couldn’t Premier Ashtray Company buy more wood to make more ashtrays? **(Consumers were not willing to buy**

ashtrays. The number of smokers in the country has been going down steadily over the past several years.)

- d. Why couldn't the Fold 'n Go Chair Company buy more wood to make more chairs? **(Consumers were not willing to buy the chairs. They were heavy and cumbersome.)**¹⁴ Explain that the price of goods made from wood reflects the price of wood. If there were a never-ending supply of trees, wood would be free, and products made from wood would be much less expensive.
14. Display **Visual 1.1**. Shield the visual from the students, revealing only the Natural Resources line. Define "natural resources" as resources that occur naturally in and on the earth; explain that natural resources are used to produce goods and services. Discuss the following three examples:
 - a. Oil is a natural resource. What is oil used to produce? **(Help the students identify various uses for oil—in producing, e.g., gasoline, fuel for home heating, machine lubrication, and plastic.)**
 - b. Lead is a natural resource. What is lead used to produce? **(Glass on television sets, car and truck batteries, solder, wheel weights, radiation shields, etc.)**
 - c. Water is a natural resource. What is water used to produce? **(Recreation, at pools and fountains; steel; lead; irrigation for crops; restaurant meals; carwashes, and many other goods and services.)**
15. Explain that because these resources (and all others) are scarce, producers must be willing to pay a price that will direct the resources to their products. In other words, producers receive the resource because they are willing and able to pay the market price for it.
16. Divide the class into five groups. Distribute a copy of **Exercise 1.2** from the *Student Workbook* to each student. Assign each group one of the resources listed. Allow five or ten minutes for students to name as many uses as possible for their natural resource.
17. When time is up, ask students from each group to report their findings. As an optional activity, allow the students to add to their lists by researching uses on the Internet. Display **Visual 1.2** and ask the following questions.
 - a. What uses do we have for water? **(Answers might include swimming, drinking, bathing, flushing toilets, operating carwashes, cooking, irrigation, brushing teeth, making paper, creating electricity, cooling nuclear plants, etc.)**
 - b. Seventy percent of the earth is covered by water, but 97 percent of that water is in the oceans. Why is water scarce? **(We have a limited supply of fresh water, and many uses for it.)**
 - c. What uses do we have for oil? **(Answers might include producing gasoline, kerosene, jet fuel; lubricating engines and industrial machines; producing paint, detergent, asphalt, plastics, medicines, ink, the soles of sneakers, man-made fibers for clothing, curtains, and carpets.)**
 - d. There are approximately 1.3 trillion barrels of oil reserves in the world. The world consumes about 85 million barrels of oil each day. (Source: BP Statistical Review of World Energy 2008.) Some people estimate that we have a supply for roughly 40 years of oil use in known reserves. Why is oil scarce? **(We have a limited supply of oil, and many uses for it.)**
 - e. What uses do we have for one city block of land? **(Answers might include establishing a skate park, a dog park, a wading pool, a fountain; building houses, apartments, stores, a church, a school, a playground, a homeless shelter, a sculpture park, a community garden, a parking lot, etc.)**
 - f. What uses do we have for 10 city blocks of land? **(Answers might include building a business district, a zoo, a science center, a**

botanical garden, houses, an industrial park, a stadium, a museum district, a park, a high school, a cemetery, etc.)

- g. Why is land scarce? **(We have a limited supply of land, and many uses for it.)**
- h. What uses do we have for sand? **(Answers might include producing bricks, asphalt, glass, concrete, plaster, sand boxes, sand paper; providing traction for tires; creating sand traps on golf courses; replenishing eroded beaches. Furthermore, any families that have built sandboxes know that they had to pay someone to acquire the sand—a sure sign that sand is a scarce resource.)**
- i. We seem to have a lot of sand, but do we have enough? Why or why not? **(We do not have enough sand because we have so many uses for sand. If you made a long list of these uses, someone could always think of one more that you forgot.)**

18. Turn to human resources. Reveal the Human Resources line on **Visual 1.1** and define “human resources” as people performing mental or physical work to produce a good or service. Explain that human resources are also scarce; thus, there is a price for the services of human resources. When a producer of baseball bats pays for a worker, the money the worker earns increases the cost of producing bats. Thus somebody who buys a bat pays for the wood that goes into the bat and for the work done by the worker who makes the bat.

19. Turn to capital resources. Reveal the Capital Resources line on **Visual 1.1** and define “capital resources” as manmade goods that are produced for the purpose of producing other goods and services. Examples of capital resources include machines, buildings, and tools. Baseball bat producers must have machines, such as saws, lathes and sanders, to shape the bats they produce. They pay a price for the machines they use, and the cost of the machines adds to the cost of the bats. So someone who buys a bat pays for the wood in the

bat, the work of the worker who makes the bat, and the machine that helps the worker do his or her work.

20. Continue with entrepreneurial ability. Reveal the Entrepreneur line on **Visual 1.1** and define an “entrepreneur” as a person who takes the risks and gathers the resources to provide a new or improved good or service to the marketplace. Each of the companies bidding for wood was begun by an entrepreneur who had confidence in his or her idea and took the risk to produce a product.

21. Display **Visual 1.3**. Explain the term “scarcity”: It refers to the fact that human wants are unlimited, but the resources available to satisfy those wants are limited. This point has been illustrated in the foregoing discussions of water, oil, land, labor, etc.

CLOSURE

1. Display **Visual 1.4**, shielding all points except the first one: Productive resources are limited. Tell the students that this point about limited resources is an important element of something called the economic way of thinking. As they become familiar with the economic way of thinking, they will become better able to evaluate their own decisions and those of others.

2. Reveal the second point on **Visual 1.4**: People cannot have everything they want. Explain that because productive resources are scarce, producers must pay for the resources they need to produce goods and services. Consumers pay for those resources when they buy a good or service. (Do not reveal the other points on the Visual. They will be revealed in the next two lessons.)

3. Explain that no one has enough income to buy all the goods and services he or she wants. Therefore, consumers must learn to make wise choices—deciding which goods or services it is most important to buy.

4. Use the following questions to review the lesson:

- a. How would you define “natural resources”? **(The term refers to resources that occur naturally in and on the earth; these resources are used to make goods and services.)**
- b. How would you define “human resources”? **(The term refers to people performing mental or physical work to produce a good or service.)**
- c. How would you define “capital resources”? **(The term refers to manmade goods that are produced for the purpose of producing other goods and services.)**
- d. How would you define “entrepreneur”? **(The term refers to a person who takes the risk and gathers the resources to provide a new or improved good or service to the marketplace.)**
- e. Why can’t we have everything we want? **(Our resources are scarce.)**
- f. How do we determine who should be able to obtain scarce productive resources? **(The resources typically go to those who are willing and able to pay for them.)**

ASSESSMENT

1. Define natural resource. **(Resources that occur naturally in and on the earth that are used to make goods and services.)**
2. Name two natural resources that were not mentioned in the lesson. **(Iron ore, sun, natural gas.)**
3. Define capital resource. **(Man-made goods that are produced for the purpose of producing other goods and services.)**
4. Name two capital resources that were not mentioned in the lesson. **(Hammer, delivery truck, drill, computer.)**
5. Define human resource. **(People performing mental or physical work to produce a good or service.)**
6. Define entrepreneur. **(A person who takes**

the risk and gathers the resources to provide a new or improved good or service to the marketplace.)

7. Challenge question:

Why aren’t wooden chairs free? **(The chair manufacturer must buy wood. Wood is scarce and is, therefore, only available to those producers who can pay the price for the wood. Manufacturers must charge customers for the cost of the wood and the other resources used to produce chairs.)**

EXTENSION

Students have examined alternative uses for scarce natural resources. Human resources are also scarce. Students can examine why human resources are also scarce by looking at the alternative uses for human resources with similar skills. Refer students to <http://www.payscale.com/best-colleges/popular-majors.asp> to view different occupations students with various college degrees could choose.

Scarce Productive Resources

- **Natural Resources:** resources that occur naturally in and on the earth that are used to produce goods and services.

Examples: wood, oil, lead, water

- **Human Resources:** people performing mental or physical work to produce goods and services.

Examples: Doctors, teachers, trash haulers

- **Capital Resources:** manmade goods that are produced for the purpose of producing other goods and services.

Examples: Machines, computers, buildings, tools

- **Entrepreneur:** a person who takes the risk and gathers the resources to provide a new or improved good or service to the marketplace.

Example: Small-business owner

Scarce Natural Resources

Seventy percent of the Earth is covered by water, but 97 percent of that water is in the oceans. Of the remaining three percent of fresh water, much of it is in the form of glaciers.

- Why is water scarce?

There are approximately 1.3 trillion barrels of oil reserves in the world. The world consumes about 85 million barrels of oil each day. (Source: BP Statistical Review of World Energy 2008.) Some people estimate that we have a supply for roughly 40 years of oil use in known reserves.

- Why is oil scarce?

Scarcity

Wants > Resources = Scarcity

The Economic Way of Thinking

1. Productive resources are limited.
2. People cannot have everything they want.
3. People must make choices.
4. Every choice involves a cost.
5. People's choices have consequences.
6. People respond to incentives.