

FROM BOXES TO SHEEP

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LESSON DESCRIPTION

Productive resources are the natural resources, human resources, and capital goods (capital resources) available to make goods and services. In this lesson, students participate in two group activities that involve distinguishing among types of resources and identifying intermediate goods (ingredients) used in production. Through the activities students also learn that people use resources in different ways to produce different goods and services.

AGE LEVEL

9-11 years old

CONCEPTS

Productive resources
Human resources
Natural resources
Capital goods (capital resources)
Intermediate goods

CONTENT STANDARD

Productive resources are limited. Therefore, people cannot have all the goods and services they want; as a result, they must choose some things and give up others.

BENCHMARKS

Productive resources are the natural resources, human resources, and capital goods available to make goods and services.

Natural resources, such as land, are “gifts of nature;” they are present without human intervention.

Human resources are the quantity and quality of human effort directed toward producing goods and services.

Capital goods are goods produced and used to make other goods and services.

OBJECTIVES

- ◆ Define natural resources, human resources, capital goods (capital resources), and intermediate goods.
- ◆ Give examples of natural resources, human resources, capital goods (resources) and intermediate goods.
- ◆ Explain that people use resources and intermediate goods to produce different goods and services.

TIME REQUIRED

Two to three class periods

MATERIALS

- One small box with a lid for each group of 3 to 4 students – each box wrapped with colored paper and labeled “Production Box”
- One pair of scissors, markers, and one container of glue placed in each box
- Paper clips, rubber bands, paper, pine cones, acorns, nuts, seashells, stones, rice, leaves, toilet paper roll placed in each box (Substitute available resources from your region.)
- Copy of Activity 1 for each student
- Transparency of Activity 1
- Two sheets of drawing paper and markers or crayons for each group

PROCEDURE

1. Explain that students will work in groups to produce something. Divide the class into groups of 3 to 4 students. Give each group a Production Box. (See Materials section.)

2. Have students open the boxes and name the things in the box. As students name items, list them on the board.

LESSON ONE

3. Explain that all these items can be used to produce goods and services. Some items are called productive resources, and some are called intermediate goods.

4. Define **intermediate goods** as things that are made by people and used up in the production of other goods and services.

5. Ask how many students have made cookies. Explain that when people make cookies, they use flour. People make flour from wheat and can use it to produce other goods, such as cookies. Flour is an intermediate good because it is made by people and used up in the production of other things.

6. Ask how many students have made a paper airplane (or another toy from paper). Point out that people make paper from wood pulp and use the paper to produce other things, such as paper airplanes. Paper is an intermediate good. Discuss the following.

- A. Give an example of an intermediate good found in the production boxes. (*paper clip, rubber bands, glue, toilet paper roll, paper*)
- B. Why is this item an intermediate good? (*It is something that was made by people, and it is something that will be used up in the production of other things.*)

7. Explain that other items in the production boxes are productive resources. **Productive resources** are the natural resources, human resources, and capital goods (capital resources) available to make goods and services.

8. Point out that there are two types of productive resources in the boxes, natural resources and capital goods (or capital resources). **Natural resources** are gifts of nature used to produce goods and services. Natural resources are present in and on the earth without human intervention.

9. Explain that water, trees, coal, and sand are examples of natural resources. Ask for examples of natural resources found in the production boxes. (*seashells, rice, pine cones, acorns, stones, nuts, leaves*)

10. Define **capital goods** (capital resources) as things produced and used over and over to produce other goods and services. Explain that the desks, school building, overhead projector, and chalkboard are examples of capital goods (capital resources) used to produce education. These are things that were produced and are used over and over each day to produce education. Ask for examples of capital goods (capital resources) found in the production boxes. (*scissors, marker*)

11. Tell students that they will work in their groups to produce products using the resources and intermediate goods in the production boxes. Emphasize the following.

- Each group may produce only one product.
- Groups will have 15 minutes to work.
- Groups should be as creative as possible.
- A group reporter should be prepared to tell the class about the group's product.

12. After 15 minutes, have each group share its product with the class. Discuss the following.

- A. What item(s) were used from the production boxes to produce the goods? (*Answers will vary.*)
- B. Did any group use something not found in the production box to produce its good? (*Students might mention the building, desks, sunlight, etc. As students mention these items ask them to categorize the items as natural resources, capital goods or capital resources, or intermediate goods.*)
- C. If not mentioned, point out that students were used to produce.

13. Explain that people are a type of productive resource, too. People are human resources. **Human resources** are the quantity and quality of human effort directed toward producing goods and services. Students were the human resources in this production activity.

14. Ask students for examples of human resources working at school. (*teacher, principal, cafeteria worker, janitor, nurse, librarian, bus driver*) Discuss the following.

- A. What are the three categories of productive resources? (*natural resources, human resources, and capital goods or capital resources*)
- B. Give examples of natural resources. (*sunlight, water, trees, land*)
- C. Give examples of capital goods (capital resources). (*scissors, machine, computer, building*)
- D. Did every group produce the same product? (*No.*) Why? (*different wants and different ideas*)

15. Write the following statement on the board, “As consumers, people use resources in different ways to satisfy different wants. Productive resources can be used in different ways to produce different goods and services.” Explain that intermediate goods can be used in different ways for production, too.

16. Point out that each group had the same items in its production box, but groups used the items to make different products because people in the groups had different tastes, different abilities, different ideas, and different wants.

17. Explain that there are many different uses for the same resource. For example, crude oil is a natural resource that can be used to produce many different goods. Ask for examples of goods that are produced from crude oil. (*gasoline, kerosene, petroleum jelly, plastic products, fibers*)

18. Distribute a copy of Activity 1 to each student, and display a transparency of the activity. Explain that a sheep is a natural resource. The picture identifies many parts of the sheep that are used to produce goods. Ask the following questions. As students respond, write the answers on the transparency in the appropriate box. Tell students to write the answers on their copy as you write them.

- A. What could be produced from sheep wool? (*felt house (yert), blankets, carpet, cloth, sweaters, bags, hat, scarves, felt boots, gloves*]
- B. What could be produced from sheep leather? (*sheepskin coat, fur coat, shoes, bags, belts, caps, gloves, riding tacks, whips*)
- C. What could be produced from sheep excrement? (*fuel for heating, fertilizer*)
- D. What could be produced from sheep bones? (*buttons, jewelry, souvenirs, toys*)
- E. What could be produced from sheep milk? (*yogurt, cheese, cream, butter*)
- F. What could be produced from sheep meat? (*ground meat, sausages, steaks, liver, fat for cooking*)
- G. What could be produced from sheep stomachs? (*bags for butter and yogurt*)

19. Explain that students will work in their same groups. Each group will be assigned a natural resource, capital good (capital resource), human resource, or an intermediate good. One person in the group should draw a picture of the resource. All members of the group should identify things that could be produced with the resource. One member of the group should list all the products on a sheet of paper.

20. Distribute two sheets of paper and markers or crayons to each group. Tell groups to select someone to draw the picture and someone to write the list. Assign each group one of the following.

LESSON ONE

- Natural Resource: wood, water
- Capital Good (capital resource): computer, truck
- Human Resource: carpenter, teacher
- Intermediate Good: chocolate, steel

21. Allow time for groups to work. Have students share their work. Suggested answers for each resource follow.

- Wood (*fuel, furniture, shelter, toys, playground equipment, wagons, weapons*)
- Water (*drinking, bathing, cleaning, putting out fires, cooking, swimming and boating, fish habitat*)
- Computer (*write stories, design web pages, create advertisements, write music, search for information, bookkeeping, accounting*)
- Truck (*delivery service, hauling service*)
- Carpenter (*houses, cabinets, furniture, other buildings*)
- Teacher (*teach, tutor, baby-sit, cook*)
- Chocolate (*candy, hot chocolate, cookies, cake, pudding, chocolate milk, ice cream*)
- Steel (*buildings, road signs, eyeglass frames, tools, ships, pipes, machines, knives, and scissors*)

CLOSURE

Review the main points of the lesson with the following.

1. Name the three types of productive resources. (*natural resources, human resources, capital goods*)
2. Define human resources. (*the quantity and quality of human effort directed toward producing goods and services*) Give examples. (*teacher, doctor, nurse, carpenter*)
3. Define capital goods. (*goods produced and used to make other goods and services*) Give examples. (*hammer, machine, tool, factory*)

4. Define natural resources. (*“gifts of nature” that are present without human intervention*) Give examples. (*tree, land, water, coal, sand*)

5. What are intermediate goods? (*things produced by people and used up in the production of another good or service*) Give examples. (*flour, butter, cloth, lumber*)

6. Both natural resources and intermediate goods are used up in production. How are intermediate goods different from natural resources? (*People produce intermediate goods. Natural resources occur naturally in or on the earth.*)

7. People produce both capital goods and intermediate goods. How are capital goods and intermediate goods different? (*Intermediate goods are used up in the production of another product. Capital goods are used over and over again to produce other products.*)

ASSESSMENT

1. Have students list three examples of each of the following: natural resources, capital goods, human resources, and intermediate goods.

2. Have students identify the resources used to produce a pair of jeans and categorize each resource as a natural resource, human resource, capital good, or intermediate good.

EXTENSION

1. Create a map and draw symbols to illustrate the resources found in different regions of a country.

2. George Washington Carver was an American who invented over 100 uses for the peanut. Have students read his biography or research his life and inventions on the Internet.

Activity 1

How Can You Use This Resource?

