# The Goat in the Bug

By Charles L. Blood and Martin Link / ISBN: 0-689-71418-1

## Lesson by

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## **Lesson Description**

Students listen to the book *The Goat in the Rug*, about a Navajo weaver named Glenmae who uses mohair from her goat Geraldine and a number of resources and intermediate goods to make a traditional Navajo rug. The students are placed in groups to learn about productive resources and intermediate goods. The students play a matching game and make posters to classify the natural resources, human resources, capital resources, and intermediate goods used in the story to produce the rug.

## Age Level

8-10 year olds

#### **Content Standards**

#### **National Standards in Economics**

- Standard I: Students will understand that 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.
  - Benchmark 9, Grade 4: Productive resources are the natural resources, human resources, and capital goods available to make goods and services.
  - Benchmark 10, Grade 4: Natural resources, such as land, are "gifts of nature"; they are present without human intervention.
  - Benchmark ll, Grade 4: Human resources are the quantity and quality of human effort directed toward producing goods and services.
  - Benchmark 12, Grade 4: Capital goods are goods produced and used to make other goods and services.

#### Concepts

Productive resources Natural resources Human resources Capital resources Intermediate goods

#### **Objectives**

Students will:

- 1. Define productive resources as capital resources, human resources, and natural resources.
- 2. Define capital, human, and natural resources.
- 3. Define intermediate goods.
- 4. Classify the things used in a production process as capital resources, human resources, natural resources, or intermediate goods.
- 5. Explain how productive resources and intermediate goods are used to produce goods and services.

## **Time Required**

60 minutes

#### Materials

- Copy of *The Goat in the Rug* by Charles L. Blood and Martin Link (0-689-71418-1)
- Visual 1
- A copy of Handout l for each group of four students and one for the teacher, printed on white card stock, cut apart, and paper clipped
- A copy of Handout 2 for each student
- One sheet of poster paper for each group of four students and one for the teacher
- One poster marker for each group of four students and one for the teacher
- One roll of clear tape or a glue stick for each group of four students
- Eight paper clips for each group of four students
- One index card for each student

### Procedures

- 1. Introduce the lesson by asking the following questions:
  - Have you ever made something? (Answers will vary.)
  - What did you make? (Answers will vary.)
  - What were some things you needed to make it? (Answers will vary.)
- 2. Tell the students that in the past you have made lemonade. Ask them what things you would have used to make the lemonade. (*Lemons, lemon juicer, pitcher, water, spoon, measuring cup, sugar, knife*) Write these items on the board. Tell the students these items are called productive resources and intermediate goods.
- 3. Display Visual 1. Tell students that producers use many different things to make all of the goods and services people consume. Explain that **productive resources** are the natural resources, human resources, and capital resources used to make goods and services.
- 4. Explain that **natural resources**, such as land, are "gifts of nature"; they are present in the earth. Refer to the items used in the production of lemonade listed on the board. Ask the students for the natural resources in the list. (*Lemons, water*) Explain that there are many different natural resources used by producers to produce different goods and services. Discuss the following:
  - What are some examples of natural resources used to produce other goods and services? (*Answers will vary but may include land, water, oil, sunlight, and trees.*)
  - What is the primary natural resource used in producing gasoline? (Oil)
  - What are some natural resources used in producing vegetables? (Answers will vary but may include land, sunshine, water, and seeds.)
  - What are some natural resources used in producing milk? (*Cows*, *land*, *animal feed*)
  - What are some natural resources used at school? (Answers will vary but may include land, sunlight, and water.)

- 5. Explain that **human resources** are the quantity and quality of human effort directed toward producing goods and services. All of the people who produce the goods and services people consume are called human resources. Ask the students what human resources were used when you made lemonade. (*You were the human resource used in making the lemonade.*) Discuss the following:
  - What are some examples of human resources used to produce other goods and services? (Answers will vary but may include doctors, barbers, sales clerks, and teachers.)
  - What do we call the human resources that bake bread? (Bakers)
  - What kind of resources are the farmers who grow vegetables? (Human resources)
  - What human resources are used at school? (Answers will vary but may include teachers, custodians, secretaries, and principals.)
- 6. Explain that **capital resources** are the tools, equipment, and buildings used to make other goods and services. Every good used over and over again to make other goods and services is called a capital resource. Refer to the items used in the production of lemonade listed on the board. Ask the students for the capital resources in the list. (Lemon juicer, pitcher, spoon, measuring cup, knife) Discuss the following:
  - What are some examples of capital resources used to produce other goods and services? (Answers will vary but may include factories, computers, robots, hammers, desks, and chairs.)
  - What are some capital resources used in baking a cake? (*Mixer, spoon, bowl, baking pan, oven, cooling racks*)
  - What are some capital resources used at school? (*Answers will vary but may include school building, desk, chairs, rulers, textbooks, and computers.*)
- 7. Explain that **intermediate goods** are goods that were previously produced and are used up in the production of new goods and services. Refer to the items used in the production of lemonade listed on the board. Ask the students for the intermediate good in the list. (*Sugar*) Explain that the sugar used was previously made from sugar beets or sugar cane and that it was used up in the production of the lemonade. Therefore, it was an intermediate good in the production of lemonade. Discuss the following:

- What are some intermediate goods used to build houses? (Lumber, nails, toilets, sinks, cabinets, roofing materials)
- What are some intermediate goods used to make books? (*Paper, ink, cardboard*)
- What are some intermediate goods used at school? (Paper, crayons, pencils)
- 8. Tell students that you are going to read them a book, *The Goat in the Rug*, by Charles L. Blood and Martin Link. Show them the cover of the book. Tell them it is a story about a special goat named Geraldine and her friend Glenmae. Tell them to listen very carefully to the story so that they can determine all of the things used to make the rug and who is telling the story. Be sure to show the pictures as you read the story.
- 9. Discuss the following:
  - Who is telling the story? (*Geraldine, the goat*)
  - How do we know that Geraldine is telling the story? (Because the story begins "My name is Geraldine and I live near a place called Window Rock…")
  - Who is Glenmae? (Glenmae is Geraldine's friend. Glenmae is a Navajo weaver.)
  - What are some of the things Glenmae used to produce the rug? (Scissors, mohair from the goat, roots from yucca plants, water, buckets, carding combs, spindle, dye, pots, loom) As the students list the items used to make the rug, write them on the board.
  - How did Glenmae produce the rug? (By using and combining many different productive resources and intermediate goods)
- Explain to the students that they are going to play a special matching game.Display Visual 2 and review the following instructions for playing the game:
  - The object of the game is to categorize the things Glenmae used to make the rug into four groups: natural resources, human resources, capital resources, and intermediate goods.
  - Shuffle one deck of cards and lay the cards face down on a desk in the four by six pattern shown on next page, without looking at what is on the front of the cards.

- Turn over two cards you select from the pattern to see if they are a match. A match is found when one card shows something used to make the rug and the other shows its corresponding resource category.
- Group members should take turns trying to make matches.
- If you have a match, you can remove the two cards from the pattern, paper clip them, and set them aside. Then you should turn over two more cards to see if you can get a match. Keep going until you are no longer able to get a match.
- If you do not have a match, both cards get turned back over and the next group member gets to select two cards.
- As cards are turned over and returned to the face down position, group members should be sure to remember where each card is in the pattern because it will help them to make a match on their next turn.
- Keep taking turns until all of the cards in the pattern have been matched and paper clipped.
- Continue to demonstrate playing the game until you have matched three sets of cards.

- II. Divide the students into groups of four or less. Instruct the students to push their desks together to create a playing surface. Distribute one deck of cards and eight paper clips to each group of students. Give the students time to play the matching game.
- 12. After all of the groups have completed the matching game, distribute one sheet of poster paper and a marker to each group. Using your own sheet of poster paper, show the groups how to fold the paper into fourths, unfold the paper, draw a line along each fold, and label the top of each quadrant that is created. The resulting poster should look like the diagram shown below:

Natural	Human
Resources	Resources
Capital	Intermediate
Resources	Goods

13. Ask groups to place their game cards in the appropriate quadrant of their poster.

- 14. Discuss the following:
  - What were the natural resources used in the story to make the rug? (*Mohair*, *yucca plants*, *water*)
  - What were the human resources used in the story to make the rug? (Glenmae)
  - What were the capital resources used in the story to make the rug? (*Scissors, carding combs, buckets, spindle, large pots, loom*)
  - What were the intermediate goods used in the story to make the rug? (Storebought dyes and yarn)
  - How did Glenmae produce the rug in the story? (*By using and combining pro-ductive resources and intermediate goods*)
- 15. Have students correct their card matches based on these discussion questions. Distribute tape or a glue stick to each group. Instruct the groups to take each matched pair of cards and tape or glue the cards to the appropriate quadrant on their poster.

#### Closure

- 16. Review the important points of the lesson by asking the following:
  - What are productive resources? (*Productive resources are the natural resources, human resources, and capital resources used to make goods and services.*)
  - What do we call the "gifts of nature" used to produce goods and services? (*Natural resources*)
  - What do we call the quantity and quality of human effort directed toward producing goods and services? (*Human resources*)
  - What do we call the tools, equipment, and buildings used to make other goods and services? (*Capital resources*)
  - What do we call the goods previously produced and used up in the production of goods and services? (*Intermediate goods*)
  - Why do people use productive resources and intermediate goods? (*To produce goods and services*)

- 17. Tell students to pretend that they are going to make a turkey and cheese sandwich for a friend. Discuss the following:
  - What capital goods will be used to make the turkey and cheese sandwich? (*Knife, cutting board, kitchen counter*)
  - What human resources will be used to make the turkey and cheese sand-wich? (*Student*)
  - What natural resources will be used to make the turkey and cheese sandwich? (*Perhaps sunlight through the window*)
  - What intermediate goods will be used to make the turkey and cheese sandwich? (*Bread*, *turkey*, *cheese*, *mustard*)

#### Assessment

18. Distribute an index card to each student. On the board, write the following list of items and ask the students to write a sentence on the front of their index card explaining what they would produce from the items.

Flour, eggs, water, sugar, shortening, mixer, oven, mixing bowl, spoon, baking pan, measuring cups and spoons, you

After the students have completed their sentence, ask them to turn their card over and categorize each of the items from the list as a natural resource, a human resource, a capital resource, or an intermediate good. (Answers will vary, but it is likely that students will identify a baked good of some type as the item they could produce from the items on the list. The items should be categorized as follows: Natural resources are water and eggs. The human resource is the student. Capital resources are the mixer, oven, mixing bowl, spoon, baking pan, and measuring cups and spoons. Intermediate goods are the flour, sugar, and shortening.)

- 19. Distribute a copy of Handout 2 to each student. Ask them to read the directions and complete the handout. Answers to the assessment:
  - Natural
    Human
    Capital
    Intermediate
    Productive
    Natural Resources: sunlight, land under the house
    Human Resources: Eva
    Capital Resources: knitting needles, pattern, chair, house
    Intermediate Goods: yarn

## Visual 1: Resources and Intermediate Goods

- Productive resources are the natural resources, human resources, and capital resources used 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 to producing goods and services.
- **Capital resources** are the tools, equipment, and buildings used to make other goods and services.
- Intermediate goods are goods that were previously produced and are used up in the production of new goods and services.

## Visual 2: How to Play the Matching Game

- Groups of up to four students can play the game.
- The object of the game is to categorize the things Glenmae used to make the rug into four groups: natural resources, human resources, capital resources, and intermediate goods.

- Shuffle the cards and lay the cards face down on a desk in the four by six pattern shown above, without looking at what is on the front of the cards.
- Turn over two cards you select from the pattern to see if they are a match. A match is found when one card shows something used to make the rug and the other card shows its corresponding resource category.
- If you have a match, you can remove the two cards from the pattern, paper clip them, and set them aside. You get to turn over two more cards to see if you can get a another match. Keep going until you are no longer able to get a match.
- If you do not have a match, both cards should be turned back over and the next member of your group can select another two cards to try to get a match.
- Be sure to remember where each card is in the pattern because it will help you to make a match on your next turn.
- Keep taking turns until all of the cards in the pattern have been matched and paper clipped.

## Handout 1: Matching Game Cards

Glenmae	Scissors	Carding Combs
Store-bought Dyes	Mohair	Yucca Plant
Water	Buckets	Spindle
Large Pots	Loom	Yarn

Human	Capital	Capital
Resource	Resource	Resource
Intermediate	Natural	Natural
Good	Resource	Resource
Natural	Capital	Capital
Resource	Resource	Resource
Capital	Capital	Intermediate
Resource	Resource	Good

## Handout 1: Matching Game Cards (continued)

#### Handout 2: Assessment

Name: \_\_\_\_\_

- Directions: Complete the sentences by filling in the correct answer in each blank in questions 1 to 5.
- 1. \_\_\_\_\_ resources are the "gifts of nature" used to produce goods and services.
- 2. \_\_\_\_\_ resources are the quantity and quality of human effort directed toward producing goods and services.
- 3. \_\_\_\_\_ resources are the tools, equipment, and buildings used to make other goods and services.
- 4. \_\_\_\_\_ goods are the goods previously produced and used up in the production of new goods and services.
- 5. \_\_\_\_\_ resources are capital resources, human resources, and natural resources.

Directions: Read the story in the box below and identify the natural resources, human resources, capital resources, and intermediate goods in the spaces provided.

Eva decided to knit a new sweater. She went to the craft store and bought some yarn, knitting needles, and a pattern. When Eva returned home, she sat in her favorite chair by the window in the sunshine and knit the sweater according to the pattern.

Natural Resources	
Human Resources	
Capital Resources	
Intermediate Goods	