

Tortilla Factory

By Gary Paulsen / ISBN: 0-15-201698-8

Lesson by

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Lesson Description

Students observe the teacher produce a paper taco and produce their own paper tacos following the process demonstrated by the teacher. Students learn about the productive resources—human resources, natural resources, and capital resources—and intermediate goods used to make final goods and services. They listen to the book *Tortilla Factory* and identify the productive resources and intermediate goods used to produce corn tortillas. Students classify the resources used to produce their paper tacos.

Age Level

8-10 year olds

Content Standards

National Standards in Economics

- **Standard 1:** 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 11, 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.

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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 resources used in a production process as capital resources, human resources, natural resources, or intermediate goods.
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Time Required

60 minutes

Materials

- Copy of *Tortilla Factory* by Gary Paulsen
- Copy of Visual 1
- A copy of Handout 1 for each student and one for the teacher, cut apart and paper clipped together
- A copy of Handout 2 for each student
- One paper plate for each student
- Green, yellow, red, and brown crayons, one for each student and one for the teacher
- Scissors, one per student and one for the teacher
- Glue sticks, one per student and one for the teacher
- Large paper clips, one per student and one for the teacher

Procedures

1. Ask students if they have ever eaten a taco. (*Answers will vary.*) Have the students that have eaten a taco explain what the ingredients are in a taco and record those ingredients on the board. (*Answers will vary but will likely include flour tortilla, hard corn tortilla, chicken, beef, seafood, cheese, taco sauce, lettuce, hot peppers.*)
2. Tell students that you are going to show them how to make a paper taco and then they will have a chance to make their own paper tacos using the process you demonstrate. Explain that the paper tacos the class will be making will represent chicken tacos.
3. As the students watch, demonstrate how to make the paper taco.
 - Show students the paper plate. Explain that the paper plate will represent a flour tortilla. There are two basic kinds of tacos. Hard tacos are usually made with corn tortillas that have been crisped in hot oil. Soft tacos are made with flour tortillas. Fold the paper plate in half.
 - Show students the cheese wedge card. Explain that the cheese wedge will represent the shredded cheese used in real tacos. Use the yellow crayon to color the cheese wedge and cut it out using the scissors.
 - Show students the tomato card. Explain that the tomato will represent the chopped tomato used in real tacos. Use the red crayon to color the tomato and cut it out.
 - Show students the lettuce card. Explain that the lettuce wedge will represent the shredded lettuce used in real tacos. Use the green crayon to color the lettuce and cut it out.
 - Show students the chicken card. Explain that the chicken will represent the chopped chicken used in real tacos. Use the brown crayon to color the chicken and cut it out.
 - Open the folded paper plate and show the students how to use the glue stick to attach the cheese wedge, tomato, lettuce, and chicken to the inside of the paper plate.
 - Fold the paper plate closed and paper clip it along the edge to keep it closed.

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4. Display Visual 1. Distribute one set of cards from Handout 1, a paper plate, one crayon of each color (green, yellow, red, and brown), a pair of scissors, and a glue stick to each student. Tell the students to make their own paper tacos according to the process you demonstrated and directions outlined on the visual. Give the students time to work on their tacos.

5. Tell students that producers use many different things to make all of the goods and services we consume. Explain to the students that **productive resources** are the natural resources, human resources, and capital resources used to make final goods and services.

6. Explain that **natural resources**, such as land, are "gifts of nature"; they are present without human intervention. Explain that there are many different natural resources used by producers. Discuss the following:
 - What are some examples of natural resources? (*Land, water, oil, sunlight, trees.*)
 - What is the primary natural resource used in producing gasoline? (*Oil.*)
 - What are some natural resources used in producing vegetables? (*Land, sunshine, water, seeds.*)
 - What are some natural resources used in producing milk? (*Cows, land, animal feed.*)
 - What are some natural resources used at school? (*Land, sunlight, water.*)

7. 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 we consume are called human resources. Discuss the following:
 - What are some examples of human resources? (*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.*)

8. 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. Discuss the following:

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- What are some examples of capital resources? (*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.*)
9. Explain that **intermediate goods** are goods that were previously produced and are used up in the production of new goods and services.
- 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, and pencils.*)
10. Tell students that you are going to read a book, *Tortilla Factory*, by Gary Paulsen. Show the cover. Ask them to listen carefully for all of the productive resources used to produce the tortillas. Read the book.
11. Discuss the following:
- From the beginning of the story until the tortillas reach the kitchen, what natural resources were mentioned in the story? (*Black earth, yellow seeds, corn, hot sun.*)
 - What additional natural resource is not mentioned in the story but would be needed in order for the corn to grow? (*Water.*)
 - In the story, who uses the flour and machinery to make dough? (*Workers in the tortilla factory.*)
 - What adjective was used to describe the people that work in the factory? (*Laughing.*)
 - What adjective was used to describe the machinery that mixes the flour into dough? (*Clank-clunking.*)
 - What do the factory workers do after they mix the dough? (*Push the dough, squeeze the dough, flatten the dough, bake the dough.*)
 - What term do we use to describe the tortilla factory workers? (*Human resources.*)
 - What other human resources were used in the production of tortillas? (*Farmers.*)

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- What do we call the machinery used to bake the tortillas and the factory? (*Capital resources.*)
 - Show the students the picture early in the book of the farmer using a hoe. What kind of tool is the farmer using to work the black earth? (*Hoe.*) How would we classify the hoe? (*Capital resource.*)
 - What intermediate good is used in the production of dough? (*Flour.*) Explain that the flour is an intermediate good because it was made from the corn and used up in the production of the dough. What intermediate good is used in the production of tortillas? (*Dough.*) The dough is an intermediate good because it was made from the flour and is used up in the production of the tortillas.
 - What happened to the tortillas after they arrived in the kitchen? (*They were filled with beans and eaten by the workers who grew the corn.*)
12. Show the students the pictures of farming that appear on the pages after the tortillas are eaten. Discuss the following:
- What capital resources appear in the pictures on these pages? (*Shovel, tractor, planting attachment for the tractor, combine for harvesting corn, truck, silos.*)
 - What natural resources appear on these pages? (*Earth, sunshine, corn.*)
 - What human resources appear on these pages? (*Farmers.*)
13. Have the students remove the paper clip from their paper tacos. Discuss the following:
- What capital resources were used to produce the paper tacos? (*Scissors, desks, chairs, school building.*)
 - What human resources were used to produce the paper tacos? (*Students, teacher.*)
 - What natural resources were used to produce the paper tacos? (*Sunlight through the windows, land under the building.*)
 - What intermediate goods were used to produce the paper tacos? (*Paper plate, taco ingredient cards, crayons, paper clip, glue.*)

Closure

14. Discuss the following:
 - 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.*)

15. Tell students to pretend that they are going to make a peanut butter and jelly sandwich for a friend. Discuss the following:
 - What capital goods would you use to make the peanut butter and jelly sandwich? (*Knife, cutting board, kitchen counter.*)
 - What human resources will be used to make the peanut butter and jelly sandwich? (*Students.*)
 - What natural resources will be used to make the peanut butter and jelly sandwich? (*Perhaps sunlight through the window.*)
 - What intermediate goods will be used to make the peanut butter and jelly sandwich? (*Bread, peanut butter, jelly.*)

Assessment

16. Distribute a copy of Handout 2 to each student. Ask them to read the directions and complete the handout. *Answers to the assessment:*
 1. *Natural*
 2. *Human*
 3. *Capital*
 4. *Intermediate*
 5. *Productive*

<i>Natural Resources:</i>	<i>sunlight, land under the house</i>
<i>Human Resources:</i>	<i>Eva</i>
<i>Capital Resources:</i>	<i>knitting needles, pattern, chair, house</i>
<i>Intermediate Goods:</i>	<i>yarn</i>

Visual 1: Paper Taco Directions

- Fold the paper plate in half.
- Color the cheese wedge yellow.
- Cut out the cheese wedge using the scissors.
- Color the tomato red.
- Cut out the tomato.
- Color the lettuce wedge green.
- Cut out the lettuce wedge.
- Color the chicken brown.
- Cut out the chicken.
- Unfold the paper plate.
- Glue the cheese wedge, tomato, lettuce wedge, and chicken to the inside of the paper plate.
- Refold the paper plate closed.
- Paper clip the paper plate along the edge to keep it closed.

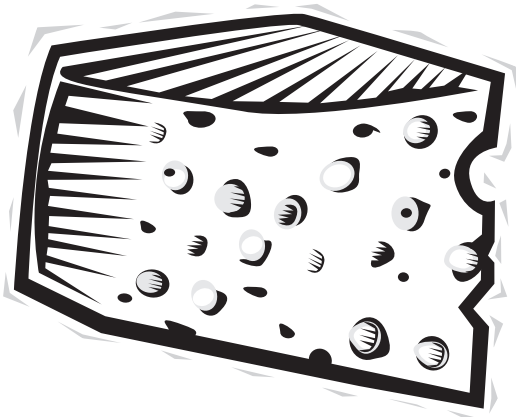
Handout 1: Taco Ingredient Cards



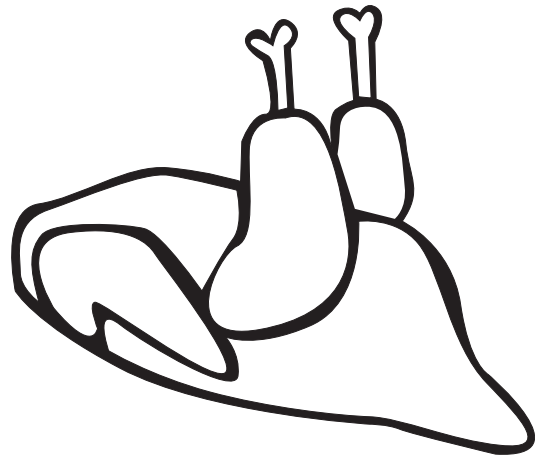
Lettuce



Tomato



Cheese



Chicken

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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 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 below the story.

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

Natural Resources	
Human Resources	
Capital Resources	
Intermediate Goods	