The Tortilla Factory


Lesson Authors

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Standards and Benchmarks (see page 11)

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 The 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.

Grade Level

3-5

Economics Concepts

Capital resources
Human resources
Intermediate goods
Natural resources
Productive resources

Objectives

Students will

• define productive resources as capital resources, human resources, and natural resources;
• define capital resources, human resources, and natural resources;
• define intermediate goods; and
classify the resources used in a production process as capital resources, human resources, natural resources, or intermediate goods.

Time Required
60 minutes

Materials
- Visual 1
- Handout 1, one copy for each student and one for the teacher, cut apart into cards and paper clipped together
- Handout 2, one copy for each student
- Paper plates, one for each student
- Green, yellow, red, and brown crayons, one set for each student and one set for the teacher
- Scissors, one pair for each student and one pair for the teacher
- Glue sticks, one for each student and one for the teacher
- Large paper clips, one for each student and one for the teacher

Procedures
1. Ask students if they have ever eaten a taco. (Answers will vary.) Have the students who have eaten a taco explain what the ingredients are in a taco and record those ingredients on the board. (Answers will vary but may include a flour tortilla, a hard corn tortilla, chicken, beef, seafood, cheese, taco sauce, lettuce, or 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 then cut it out.
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• 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 then cut it out.

• Show students the lettuce card. Explain that the lettuce will represent the shredded lettuce used in real tacos. Use the green crayon to color the lettuce and then 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.

4. Display Visual 1: Paper Taco Directions. 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 the 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 human resources, natural resources, and capital resources used to make goods and services.

6. Explain that natural resources, such as land, are things that occur naturally in and on the earth that are used to produce goods and services. Natural resources are present without human intervention. There are many different natural resources used by producers to make goods and services. Discuss the following:

• What are some examples of natural resources? (Answers will vary but may include land, water, oil, sunlight, or 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, or seeds.)

• What are some natural resources used in producing milk? (Answers will vary but may include cows, land, or grass [to feed the cows].)

• What are some natural resources used at school? (Answers will vary but may include land, sunlight, or water.)
7. Explain that **human resources** are the people who do the mental and physical work to produce goods and services. Discuss the following:
   - What are some examples of human resources? *(Answers will vary but may include doctors, barbers, sales clerks, or teachers.)*
   - What do we call the human resources who 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, or principals.)*

8. Explain that **capital resources** are goods that have been produced and are used to produce other goods and services. They are used over and over again in the production process. Examples include 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:
   - What are some examples of capital resources? *(Answers will vary but may include factories, computers, robots, hammers, desks, or chairs.)*
   - What are some capital resources used in baking a cake? *(Answers will vary but may include mixers, spoons, bowls, baking pans, ovens, or cooling racks.)*
   - What are some capital resources used at school? *(Answers will vary but may include school buildings, desks, chairs, rulers, textbooks, or computers.)*

9. Explain that **intermediate goods** are man-made goods that are used to produce other goods or services, becoming part of those goods or services. For example, flour is an intermediate good used for making cookies because the flour is used up when you make the cookies—the flour becomes part of the cookie.
   - What are some intermediate goods used to build houses? *(Answers will vary but may include lumber, nails, toilets, sinks, cabinets, or roofing materials.)*
   - What are some intermediate goods used to make books? *(Answers will vary but may include paper, ink, or cardboard.)*
   - What are some intermediate goods used at school? *(Answers will vary but may include paper, crayons, or pencils.)*

10. Tell students that you are going to read the book *The 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, and hot sun*)
- What additional natural resource is not mentioned in the story but would be needed 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 who 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? (*The workers push the dough, squeeze the dough, flatten the dough, and bake the dough.*)
- What type of resource are the tortilla factory workers? (*Human resources*)
- What other human resources were used in the production of tortillas? (*Farmers*)
- What type of resources are the factory itself and the machinery used to make the tortillas? (*Capital resources*)

12. Show the students the picture early in the book of the farmer using a hoe. Discuss the following:

- What kind of tool is the farmer using to work the black earth? (*A hoe*)
- What type of resource is the hoe? (*A capital resource*)
- What intermediate good is used in the production of dough? (*Flour*) Explain that the flour is an intermediate good because it is made from corn and used up in the production of the dough.
- What intermediate good is used in the production of tortillas? (*Dough*) Dough is an intermediate good because it is 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? (*The tortillas were filled with beans and eaten by the workers who grew the corn.*)

13. 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, and silos*)
- What natural resources appear on these pages? (*Earth, sunshine, and corn*)
- What human resources appear on these pages? (*Farmers*)
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14. 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, and the school building)
   • What human resources were used to produce the paper tacos? (Students and the teacher)
   • What natural resources were used to produce the paper tacos? (Sunlight through the windows and land under the building)
   • What intermediate goods were used to produce the paper tacos? (Paper plates, paper taco ingredient cards, crayons, paper clips, and glue)

Closure

15. Discuss the following:
   • What do we call the “gifts of nature” used to produce goods and services? (Natural resources)
   • What do we call the people who do the mental and physical work to produce goods and services? (Human resources)
   • What do we call the goods produced and 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)

16. 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 will be used to make the peanut butter and jelly sandwich? (Answers will vary but may include a knife, cutting board, or kitchen counter.)
   • What human resources will be used to make the peanut butter and jelly sandwich? (The people making the sandwich are the human resources.)
   • 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, and jelly)
Assessment

Distribute a copy of *Handout 2: Assessment* to each student. Ask them to read the directions and complete the handout.

**Handout 2: Assessment—Answer Key**

<table>
<thead>
<tr>
<th>Type</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural</td>
<td>Natural resources: <em>Sunlight, land under the house</em></td>
</tr>
<tr>
<td>Human</td>
<td>Human resources: <em>Eva</em></td>
</tr>
<tr>
<td>Capital</td>
<td>Capital resources: <em>Knitting needles, pattern, chair, house</em></td>
</tr>
<tr>
<td>Intermediate</td>
<td>Intermediate goods: <em>Yarn</em></td>
</tr>
<tr>
<td>Productive</td>
<td></td>
</tr>
</tbody>
</table>
Visual 1: Paper Taco Directions

1. Fold the paper plate in half.

2. Color the cheese wedge yellow.

3. Cut out the cheese wedge.

4. Color the tomato red.

5. Cut out the tomato.

6. Color the lettuce green.

7. Cut out the lettuce.

8. Color the chicken brown.

9. Cut out the chicken.

10. Unfold the paper plate.

11. Glue the cheese wedge, tomato, lettuce, and chicken to the inside of the paper plate.

12. Refold the paper plate in half.

13. Paper clip the paper plate along the edge to keep it closed.
Handout 1: Taco Ingredient Cards

Lettuce
Tomato
Cheese
Chicken
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 people who do the mental and physical work to produce goods and services.

3. ____________ resources are the goods produced and 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 provided.

Eva decided to knit a new sweater. Eva went to the craft store and bought some yarn, knitting needs, 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.

Eva decided to knit a new sweater. Eva went to the craft store and bought some yarn, knitting needs, 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.

<table>
<thead>
<tr>
<th>Natural resource(s)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Human resource(s)</td>
<td></td>
</tr>
<tr>
<td>Capital resource(s)</td>
<td></td>
</tr>
<tr>
<td>Intermediate good(s)</td>
<td></td>
</tr>
</tbody>
</table>
Standards and Benchmarks

National Standards in Economics

Standard 1: 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 6, Grade 4: Productive resources are the natural resources, human resources, and capital goods available to make goods and services.
- Benchmark 7, Grade 4: Natural resources, such as land, are “gifts of nature”; they are present without human intervention.
- Benchmark 8, Grade 4: Human resources are the people who do the mental and physical work to produce goods and services.
- Benchmark 12, Grade 4: Capital goods are goods produced and used to make other goods and services.

Common Core State Standards: English Language Arts, Grade 3

Reading: Literature

- Key Ideas and Details
  CCSS.ELA-Literacy.RL.3.1: Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.

- Craft and Structure
  CCSS.ELA-Literacy.RL.3.5: Refer to parts of stories, dramas, and poems when writing or speaking about a text, using terms such as chapter, scene, and stanza; describe how each successive part builds on earlier sections.

- Range of Reading and Complexity of Text
  CCSS.ELA-Literacy.RL.3.10: By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 2–3 text complexity band independently and proficiently.

Speaking and Listening

- Comprehension and Collaboration
  CCSS.ELA-Literacy.SL.3.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3 topics and texts, building on others’ ideas and expressing their own clearly.

  CCSS.ELA-Literacy.SL.3.1a: Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.

  CCSS.ELA-Literacy.SL.3.1b: Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).
CCSS.ELA-Literacy.SL.3.1c: Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others.

CCSS.ELA-Literacy.SL.3.1d: Explain their own ideas and understanding in light of the discussion.

CCSS.ELA-Literacy.SL.3.2: Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.

CCSS.ELA-Literacy.SL.3.4: Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.

CCSS.ELA-Literacy.SL.3.6: Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification.