## Lemonade for Sale

## Lesson by

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## Lesson Description

This literature-based lesson incorporates the economic concepts of producer, consumer, and productive resources through active exploration. Students listen to a story about children who produce and sell lemonade to raise money for their clubhouse. They produce a product and classify the resources used in production as natural resources, capital resources (goods), or human resources. The extension activities integrate mathematics and language arts as students graph the lemonade sales and create an advertisement for lemonade.

## Age Level

Grades 2 - 3

## Content Standards

NCEE National Standards in Economics

- Standard 1: Scarcity
- Benchmark 8, Grade 4: People whose wants are satisfied by using goods and services are called consumers.
- 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 that are produced and used to make other goods and services.
- Benchmark 15, Grade 4: People who make goods and provide services are called producers


## Concepts

Consumers
Producers
Productive Resources
Natural Resources
Human Resources
Capital Resources (Goods)
Intermediate Goods

## Objectives

Students will be able to:

- Define and give examples of natural, human, and capital resources.
- Define and give examples of intermediate goods.
- Determine which productive resources (natural, human, and capital) and intermediate goods were used in the construction of a product.
- Describe in pictures and words the concepts of consumers and producers.
- Apply the concepts of consumer and producer to a real life situation.


## Time Required

1 hour (excluding extension activities)

## Materials

- Lemonade for Sale by Stuart J. Murphy ISBN: 0-06-446715-5
- Variety of resources easily available in your classroom or schoolyard, such as: construction paper, pipe cleaners, pom-poms, glue, popsicle sticks, glitter, plastic cups, crayons, scissors, flowers, leaves, sticks, yarn, newspapers, small rocks, etc. Enough for each student to produce a product.
- Stapler
- Hole Punch
- Handout 1: Lemonade for Sale Worksheet. Make one copy for each student.
- Handout 2: My Product. Make one copy for each student.
- Handout 3: Assessment. Make one copy for each student.
- Visual 1: Sugar, an Intermediate Good. Make one transparency.
- Visual 2: We've Been Working on Production Song. Make one transparency.


## For Extension Activities

- Crayons or markers. One box per student.
- Handout 4: Graph. Make one copy for each student.
- Visual 3: Producers and Consumers Song. Make one transparency.
- Handout 5: Advertising. Make one copy for each group of students.
- Handout 6: Clip Art for Advertising. Make one copy for each group of students.


## Procedures

1. Tell students you will read a story about kids who need to earn money.

- Ask, "What does it mean to "earn" money?" (You perform a service or make a good in exchange for money.)
- Explain that productive resources are the natural resources, human resources and capital resources (goods) available to make goods and services. In this story there are three kinds of productive resources.
- Describe human resources as the quantity and quality of human effort directed toward producing goods and services; the amount of labor/ work people put into making a product.
- Ask students to give an example of the human resources used when someone gets a hair cut. (The stylist, the barber, the cashier.)
- Define natural resources as "gifts of nature;" they are present without human intervention. Examples include land, water, and fruit.
- Ask students to give an example of a natural resource that we eat. (Answers will vary but should include things like fish, oranges, apples, etc.)
- Explain that capital resources (goods) are goods that are produced and used to make other goods and services. These can be used again and again. This includes tools, machinery, computers, and appliances.
- Ask students to give an example of a capital good in the classroom. (Answers will vary and include computers, chalkboard, scissors, etc.)
- Point out that intermediate goods are goods that were previously produced and are used up in the production of new goods and services. Examples include flour or sugar used in baking and lumber and nails in construction.
- Ask students to give an example of an intermediate good they use when drawing a picture. (Answers will vary and may include crayons, markers, paper.)

2. Tell students to think about these questions as you read:
a. Who is producing something to sell?
b. Who is buying that something?
c. What resources are they using to make it?
3. Distribute Handout 1: Lemonade for Sale Worksheet for students to complete as you read the story.
4. Read Lemonade for Sale by Stuart J. Murphy.
5. Review worksheet as a class and discuss the following.

- In the story, who was making something? (the kids) We call them producers because they made a product.
- What did they make? (lemonade) Lemonade was their product.
- Who were the consumers? (The neighbors and the children.) The people in the neighborhood were the consumers because they bought lemonade, but the children were consumers too because they bought the supplies they used to make the lemonade.
- What did they use to make the lemonade? (lemons, sugar, water, ice, pitcher, spoons, table, lemon juicer, the kids) These are productive resources and intermediate goods.
- Which resources are natural resources or nature made? (lemons, water, ice)
- Which resources are capital resources or man made and able to be re-used? (pitcher, spoons, table, lemon juicer)
- Who are the human resources or the people producing the product? (the children)
- What is the intermediate good, the thing that was produced previously but used up in the production of the lemonade? (the sugar)
- Show students Visual 1: Sugar, an Intermediate Good. Explain that the sugar the kids used is processed from either sugar cane or sugar beets which are natural resources. Unlike the lemons which can be picked from the trees and used immediately, sugar must be processed and refined at a factory before it can be used.

6. Show students Visual 1: Sugar: Natural Resource or Intermediate Good? Explain that the sugar the kids used (and that we use) is processed sugar cane or sugar beets which are natural resources. Unlike the lemons which can be picked from the trees and used immediately, sugar is usually processed and refined at a factory before it can be used.

Tell students sugar would be classified as an intermediate good used to produce the final good, lemonade.
7. Sing We've Been Working on Production Song (Visual 2).
8. Tell students that they are now going to become producers by producing a product using various productive resources.
9. Place a variety of productive resources on each table, including: construction paper, pipe cleaners, pom-poms, glue, popsicle sticks, glitter, plastic cups, crayons, scissors, flowers, leaves, sticks, yarn, newspapers, small rocks, etc.
10. Inform the students they have $10-15$ minutes to independently construct a product using the available materials (resources). Tell students they may also use your stapler or hole punch. Their product can be used for real or imaginary purposes, but they must be able to:

- Describe their product and its purpose.
- List the productive resources used in the production of the product.
- Identify the possible consumers of their product.

11. Distribute Handout 2: My Product. Instruct students to complete it after their product is finished. Students may complete the drawing portion of the handout as class work or homework as time permits.

## Closure

12. Once products and Handout 2 are complete, have students share with the class. Students may use Handout 2: My Product, to guide their description. Listen to ensure students:

- Verbally describe their product and its purpose.
- Name the productive resources (human, natural, capital) used in the production of the product.
- Identify the possible consumers of their product.


## Assessment

13. Have students complete Handout 3: Assessment. Review as a class.

## Extension Activities

Teacher's Note: If extension activities are completed on a subsequent day, it may be necessary to re-read the book prior to completing the following activities. Approximate time for each extension activity is 20 minutes.

## Graphing Fun with Calculations

1. Discuss with the students:

- Who were the producers and consumers from the story? (The children were the producers and the neighbors were the consumers.)
- What product did the children produce? (Lemonade)
- The children from the story produced and sold lemonade. The children kept track of their lemonade sales with a graph.

2. Inform students they are going to graph the lemonade sales from the book. Give students Handout 4: Graph and ask them to use crayons or markers to fill in the sales for Monday (30), Tuesday (40), Wednesday (50). Ask students what happened to the lemonade sales when the juggler came to town? (The sales decreased.)
3. Graph sales for Thursday (24). Ask students what happened to sales when the club members used the juggler to bring people to their lemonade stand? (It went off the chart!)
4. Graph sales for Friday. (Off the chart.)
5. Discuss the following questions with the students:

- How many more glasses of lemonade were sold on Tuesday than on Monday? $(40-30=10)$
- Which day were the fewest glasses of lemonade sold and how many were sold on that day? (Thursday, 24 glasses)
- Were the lemonade sales on Monday greater than, less than, or equal to the lemonade sales on Thursday? (Monday sales (30) were greater than Thursday sales (24).)
- How many total glasses of lemonade were sold Monday through Thursday? $(30+40+56+24=150)$
- Let's assume the lemonade sold for 20 cents per glass. If the club members made a total of $\$ 54$ for the week, how much money did they make on Friday? (step 1. 150 glasses x. $20=\$ 30$ for Monday through Thursday sales step 2. $\$ 54$ total $-\$ 30$ Mon through Thurs sales $=\$ 24$ in sales for Friday)
- If the club members made $\$ 54$ for the week while charging 20 cents per glass, how many glasses of lemonade were sold on Friday?
(From the above problem we know Friday sales $=\$ 24$, so $\$ 24$ / .20 per glass $=120$ glasses)

6. Ask students to think about how the story would change if no one wanted to buy lemonade. Could the children sell other items instead? Ask students if they have ever sold anything for such groups as: girl scouts, boy scouts, or sports/school related fundraisers. Ask students to name products they have sold or could sell. (Cookies, cakes, candy bars, popcorn, etc.)
7. Ask students what is their favorite thing to buy? (toys, ice cream) Tell students to think about what it would be like if stores stopped selling those items.
8. Tell students consumers and producers need each other so that items can be sold and bought.
9. Sing Consumers and Producers Song (Visual 3)

## Advertising Adventures

1. Ask students if they can think of ways producers increase demand for a product.
2. Define advertising as the ways in which a company markets products and/or services to customers. Tell students advertising helps bring in customers and increases demand for products/services. Examples include commercials, newspaper and magazine ads, web page banners, etc.
3. Define logos as an easily recognizable symbol for a particular company or product. Ask students what logos/characters the club members might use in an advertisement since their customers already associate them with the product?
(Petey the parrot or Jed the juggler.)
4. Ask students to think of a logo that reminds them of a certain product. (Arches for McDonald's, Nike Swoosh, Mouse Ears for Disney.)
5. Inform students that advertising slogans are short, memorable phrases used to draw attention to products and usually:

- Make a simple, direct, concise, crisp statement
- Are witty
- Adopt a personality of their own
- Give a credible impression of a brand or product
- Make the consumer feel good
- Get stuck in one's head

6. Read the following slogans to the class and have them guess what company they represent.

- Make a run for the border (Taco Bell)
- Where a kid can be a kid (Chuck E. Cheese)
- Respect the pouch (CapriSun)
- Can you hear me now (Verizon)
- They're Gr-Gr-Gr-reat! (Frosted Flakes)
- Taste the rainbow (Skittles)
- Silly Rabbit, (blank) are for kids! (Trix)
- Da dad a dad a, I'm loving it (McDonalds)

7. Divide students into small groups of three or four and give each group Handout 5: Advertising and Handout 6: Clip Art for Advertising. Have groups either write a slogan or create an advertisement for the Elm Street Kid's Club from Lemonade for Sale. Students may choose to draw or use the Clip Art provided. Have each group share their advertisement with the class.

## Answers

## Handout 1: Lemonade for Sale Worksheet Answers:

List the productive resources used to make lemonade:

| Natural <br> Resources | Capital <br> Resources | Human <br> Resources | Intermediate <br> Good |
| :---: | :---: | :---: | :---: |
| Lemons | Pitcher | Children | Sugar |
| Water | Spoons |  |  |
| Ice | Table |  |  |
|  | Lemon Juicer |  |  |
|  |  |  |  |
|  |  |  |  |

Underline your answer to question 1 and fill in the blank for question 2 .

1. The children were: CONSUMERS PRODUCERS BOTH
2. What product did the children produce? LEMONADE

## Handout 2 My Product Sample Answers:



Name $\qquad$

1. My product is a hat.
2. My product can be used to keep the rain off your head, the sun out of your eyes, and keep your head nice and warm.

## 3. Resources I used:

Natural
Flowers, leaves

## Capital

Stapler, glue, paper, beads

## Human

Me
4. Possible consumers of my product would be people who want to keep their head dry or warm.
5. I think these people would buy my product because I made a quality hat that serves many purposes and it's very pretty also.
6. Draw a picture of your product in the frame below.


## Handout 3 Assessment Answers:

1. Define natural resources and give an example.

Natural resources are things from nature that can be sold or used to make a product, such as fruit.
2. Define capital resources and give an example.

Capital resources are man-made goods that are produced and used to make other goods and services. These can be used over and over. A computer is an example of a capital resource.
3. Define human resources and give an example.

Human resources are the quantity and quality of human effort, the amount of labor/ work people put into making a product. A farmer is a human resource.
4. Classify these items as natural, capital, or human resources:

Oranges Natural Resource Blender Capital Resource
Teacher Human Resource Chef Human Resource
Computer Capital Resource Hammer Capital Resource
Flowers Natural Resource Corn Natural Resource
Doctor Human Resource Juggler Human Resource
5. Describe a time when you were either a producer or a consumer. Include words and pictures.
Consumers are people who buy goods and services to satisfy their wants. Producers are people who make goods or provide services.

When I got a haircut I was the consumer and the barber was the producer.


## Handout 4 Graph Answer Key:

Graph the lemonade sales by day


## Handout 5 Advertising Answer Key:

 ADVERTISING helps bring in customers/consumers and increase demand for products. Pretend you are in charge of advertising for the Elm Street Kid's Club. In the space below write a short radio or T.V. ad or use the clip art and draw a billboard ad or poster for the lemonade. Think about what would make you ask your mom to go to the lemonade stand if you heard the ad or saw the billboard or poster while driving to the grocery store.

Handout 1: Lemonade for Sale Worksheet
Name $\qquad$

## Lemonade for Sale Worksheet

List the productive resources used to make lemonade.

| Natural <br> Resources | Capital <br> Resources | Human <br> Resources | Intermediate <br> Good |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
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|  |  |  |  |
|  |  |  |  |

Underline your answer to question 1 and fill in the blank for question 2.

1. The children were CONSUMERS PRODUCERS BOTH
2. What product did the children produce?

## Handout 2: My Product



## Name

$\qquad$

1. My product is a $\qquad$ .

## 2. My product can be used to

$\qquad$
$\qquad$

## 3. Resources I used:



## Natural

$\qquad$
$\qquad$

## Capital

$\qquad$
$\qquad$

## Human

4. Possible consumers of my product would be $\qquad$
$\qquad$ .
5. I think these people would buy my product because $\qquad$
$\qquad$
6. Draw a picture of your product in the frame below.


## Handout 3: Assessment

Name $\qquad$

1. Define natural resources and give an example.
$\qquad$
$\qquad$
2. Define capital resources and give an example.
3. Define human resources and give an example.
4. Classify these items as natural resources, capital, or human resources.

## Oranges

Teacher
Computer $\qquad$

Flowers $\qquad$
Doctor $\qquad$

Blender
Chef
Hammer $\qquad$
Corn
Juggler $\qquad$

## 5. Describe a time that you were either a producer or a consumer. Include words and pictures.

Visual 1: Sugar: Natural Resource or Intermediate Good?
Sugar is processed from either the natural resources sugar cane or sugar beets.


## SUGAR CANE

Sugar cane looks like bamboo and grows in tropical regions such as Brazil, Australia, Cuba, and Ecuador. In the United States you can find sugarcane growing in Florida, Louisiana, Texas, and Hawaii.

## SUGARBETS



A sugar beet looks like a carrot and grows underground like the beets you eat. Sugar beets are grown in more temperate regions of the world such as France, Germany, United States, Russia, and Ukraine. In the United States sugar beets are grown in Michigan, Minnesota, Colorado, California, Washington, and North Dakota.

Visual 2: They've Been Working on Production Song They've Been Working on Production Song (Tune: I've Been Working on the Railroad)

The Elm Street Kid's Club - they're producers, all the livelong day. The Elm Street Kid's Club - they're producers, making lemonade hooray.

They used natural resources - water and lemons.


They use capital resources - juicer, pitcher and spoons.


Just watch them work! Just watch them work!
They are human resources.
Just watch them work! Just watch them work!
They are human resources.

The Elm Street Kid's Club - they're consumers, all the livelong day. The Elm Street Kid's Club - they're consumers, making lemonade hooray.

They bought natural resources, capital resources too.
They bought intermediate goods- sugar from a beet or cane.


Watch them produce! Watch them produce!
The product's lemonade.
Watch them produce! Watch them produce!
The product's lemonade.
*adapted from Hopkins, M. (1997). We've been working on production In The Econ Song Book: Harrisonburg, VA: James Madison University Center for Economics.

Handout 4: Graph
Name $\qquad$

## Lemonade Sales



Monday $=30$ cups $\quad$ Tuesday $=40$ cups Wednesday $=56$ cups $\quad$ Thursday $=24$ cups $\quad$ Friday $=$ off the chart.

## Visual 5: Producers and Consumers Song

## Consumers and Producers Song*

(Tune: The More We Get Together)

1
Consumers need producers, Producers, producers Consumers need producers, To make products they want.


3
Producers need consumers, Consumers, consumers.
Producers need consumers
To buy products they make.


## 5

The more they get together Do buying and selling The more they get together The better off they'll be.

2
Consumers shop for bargains
For bargains, for bargains
Consumers shop for bargains
To get the best price.


## 4

Producers hope to make money
To make money, to make money
Producers hope to make money
That is their goal.


Handout 5: Advertising
ADVERTISING helps bring in consumers and increases demand for products. Pretend you are in charge of advertising for the Elm Street Kid's Club. In the space below write a short radio or T.V. ad or use the clip art and draw a billboard ad or poster for the lemonade. Think about what would make you ask your mom to go to the lemonade stand if you heard the ad or saw the billboard or poster while driving to the grocery store.

Handout 6: Clip Art for Advertisement





