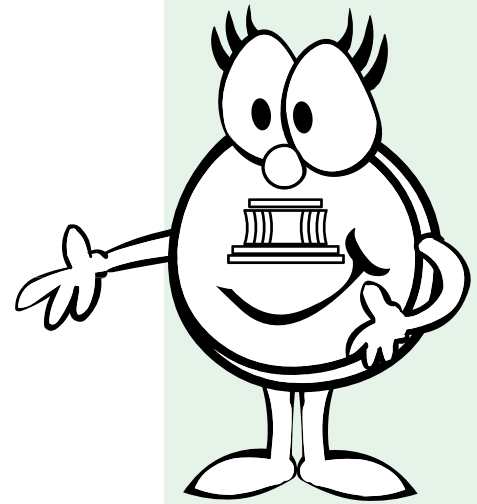


Price



Overview

Students share the book *A Dollar for Penny*, by Dr. Julie Glass, to learn about producers, consumers, and price. They complete worksheets on producers and consumers and figuring the total price of a group of items.

Prerequisite Skills

Students should be able to recognize pennies, nickels, dimes, and quarters.

Lesson Objectives

Students will be able to:

- Differentiate between producers and consumers
- Understand that a market exists when people exchange goods or services
- Define *price* as the amount of money used to buy or sell something
- Match coins to their monetary values and name different ways to make the same amount of money

Materials List

1. Book: *A Dollar for Penny*, by Dr. Julie Glass (*Step Into Reading + Math*, Random House, 2000)
2. Chart paper or chalkboard
3. Play money: at least 50 pennies, 10 nickels, 5 dimes, and 2 quarters for each pair of students in the small groups
4. 8 small envelopes (or folded and taped paper pouches)
5. Handouts:
 - **Who Does What?** worksheet
 - **Buy a Name** worksheet

Content Standards

The activities in this lesson correlate to national standards in economics, math, and language arts. See the end of this lesson for content standards information.

Vocabulary

cost
consumers
market
money
price
producers

Large-Group Activity

Materials

- Book: *A Dollar for Penny*
- Chart paper or chalkboard, divided into two sections by a line down the center of the writing area
- Handout: **Who Does What?** worksheet

1. Gather students in the reading corner to share the book *A Dollar for Penny*.

○ Say:

Have you ever needed money to buy something? What did you need money for? How did you get the money you needed?

Today we're going to be talking about a girl named Penny, who found her own way to make money. It's called *A Dollar for Penny*, and it was written by Dr. Julie Glass. Dr. Glass isn't the kind of doctor you go to when you're sick. She is an expert on math, and we call her "doctor" because she has studied math for a very long time. People who spend a long time studying one special thing are sometimes called "doctor."

This book was illustrated by Joy Allen. What does an illustrator do? When I show you the pictures, I want you to look carefully to see if you can guess where all of Penny's customers are going. You may be able to guess why Penny is trying to make money just by studying the pictures! Let's see what happens in the story.

○ Read the book aloud to the class. Be sure to allow the entire class time to see each picture (including the illustration on the title page showing Penny picking lemons from a tree).

2. Briefly discuss the book with the class.

○ **Why was Penny selling lemonade?**

She wanted to buy a birthday card for her mother.

○ **Were you able to guess that her customers were going to a birthday party? What made you guess that?**

The illustrations of Penny's customers showed some of them holding presents, cake mix, balloons, and musical instruments.

○ **What did Penny charge for her lemonade at first?**

She charged one cent, or a penny.

○ **Did she get a penny for every glass of lemonade she sold?**

No, she kept raising the price of her lemonade.

○ **Who bought the last glass of lemonade? How much money did he give?**

Penny's father bought the last glass for fifty cents, or two quarters.

○ **How much money did Penny need for the birthday card for her mother?**

Dr. Julie Glass is a professor of mathematics at California State University in Hayward, California.



First graders may have trouble remembering all of these steps from the story.

Penny needed one dollar to buy a card.

3. Discuss today's economic concepts: producers, consumers, and markets.

○ *Producers, Consumers, and Markets*

How did Penny get the lemonade?

Penny made her lemonade herself. If necessary, return to the title page and the first page of the story, and show students the illustrations of Penny picking lemons and grinding them into a keg or barrel.

We have a special word for people who make things for other people to use. We call them **producers. Penny was a producer because she made lemonade and served it to people who gave her money.**

We also have a special name for the people who buy and use the things producers make. They are called **consumers.** Hold up the book so students can see pages six and seven (with the text "My Aunt Jenny pays one penny."). **Look on this page. Who is the producer?** Penny is the producer—she made and sells the lemonade. **Who is the consumer?** Aunt Jenny is the consumer. She is buying the lemonade from Penny.

Continue paging through the book, stopping on pages that show a transaction, and allowing volunteers from the class to name the producer (always Penny) and consumers (Penny's various relatives), but stop at the page when Penny goes to the store.

Now think carefully, because this is a trick question: who is the **consumer on this page?** Penny has been the producer on all the other pages, but she becomes the consumer on this page.

Everybody is a consumer sometimes. Even producers like Penny sometimes have to buy things from other producers. On this page the producer is the shop owner.

Can you think of other **producers? Who can you name that produces things for people to buy?** Allow students to freely list producers. List some of them on the chalkboard or chart paper. They may mention grocery stores, gas stations, the school cafeteria, and other retail businesses in the area. Each time a producer is named, ask the class: Who are the consumers for this producer?

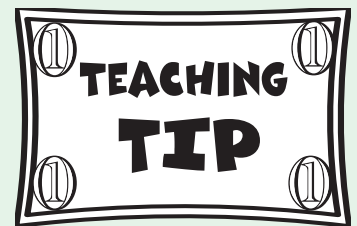
Whenever a producer and a consumer get together, they make something called a **market. Penny and her relatives made, or created, a market. She made pink lemonade, and her relatives gave her money to drink it. So she created a market for pink lemonade.**

The school cafeteria is also a market—the cooks make food (they are producers)—and students pay them money to eat it (they are the consumers).

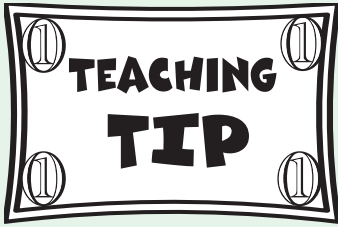
4. Introduce the large-group activity: **Who Does What?** worksheet.

Now you're going to get a chance to show what you know about producers and consumers. On this worksheet you will see four pictures of people doing things in everyday life.

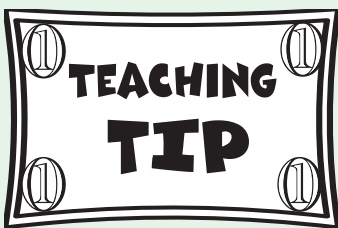
Sometimes the people are busy producing things for others. In those pictures, circle the word "producer." What letter does *producer* start



For example: **Who are the consumers at the school cafeteria?** Answer: Students who eat school cafeteria food.



If students guess that the word begins with a “k,” ask what letter is used in the word “cat.”



Turn to page 26 to show how Penny lined up all of her coins to find her total another way.

with? Stress the beginning letter “p” when you say the word, and point out the word on the worksheet.

Sometimes the people are consuming things other people have made. In those pictures circle the word “consumer.” What letter does *consumer* start with? Stress the beginning letter “c” when you say the word, and point out the word on the worksheet.

Pass out the worksheets and have students work on them while you work with small groups, below. You might want them to color the pictures when they’re through.

Small-Group Activity One: Buy a Name

Concepts Taught

Price and Cost

Materials

- Book: *A Dollar for Penny*
- Chart paper or chalkboard
- Play money: pennies and nickels
- Handout: **Buy a Name** worksheet

1. Discuss price and cost in *A Dollar for Penny*.

○ Say:

Let’s talk about two words that go with our story: **cost and **price**. In this story the word “cost” means the same as price. These words mean the amount of money used to buy or sell something. In the story, Penny decides on the price she wants her customers to pay for her lemonade. Each time she sells some, the price, or the cost, goes up.**

What was the price of the lemonade at the beginning of the story? Write “1¢” on the chart paper or chalkboard, leaving room to add the other prices from the book below it. If necessary, return to the book to help students remember the price changes throughout the story.

After Aunt Jenny bought lemonade, the price went up. What was the new price? The new price was two cents a cup. **Uncle Pete bought two cups, so how much money did he give Penny?** Uncle Pete paid four cents. Write “2¢” on the chart paper twice, then ask for a volunteer to add the three numbers so far: $1 + 2 + 2 = 5¢$. **How much money has Penny made so far?** Penny has five cents.

The price went up again. How much does the lemonade **cost now?** The lemonade is now five cents a cup. **Penny’s cousins bought two cups.** Write “5¢” twice on the chart paper below your previous total and ask a volunteer to add the numbers so far: $5 + 5 + 5 = 15¢$. **Penny has now made Fifteen cents.**

Continue with this process, telling how the price went up, and adding Penny’s earnings, until you reach \$1.00. You may need to do the adding yourself toward the end of the activity, depending on the ability levels of the students in the group.

Penny's prices kept going up until she had enough for a birthday card for her mother. What did the card **cost**? One dollar.

4. Prepare students to complete the **Buy a Name** worksheet.

- **Let's have some fun shopping at the Name Store. We'll pretend we have to buy our names. The price we pay will depend on how many letters we have in our names, and what kind of letters they are.**

Everybody's name contains two kinds of letters: consonants and . . .
Students should provide the answer, "vowels."

Demonstrate the activity on the chart paper or chalkboard as you talk it through. Hold up one worksheet and point to the sale signs. **At the Name Store, every consonant costs a penny, and every vowel costs a nickel.**

Pretend you have to buy the name "Pam." Print the name on the chart paper. (If you or one of the students in the group is actually named Pam, select another name to use as an example.)

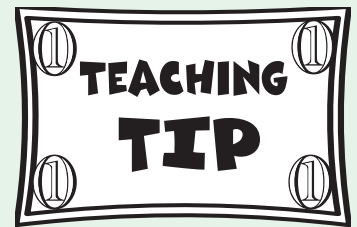
How many consonants are in this name? How many vowels? As the students respond, write the money amounts below each letter: "P=1¢, m=1¢," and "a=5¢." **If I add up the cost of the letters, I find the price for the name "Pam": seven cents.** Add aloud to demonstrate: "one plus one plus five equals seven."

Use your own first name as another example. Make sure all students understand how to find the price of their names.

- Pass out the **Buy a Name** worksheets. Have students print their names, one letter on a blank, in the spaces provided. (If a student's name is longer than fourteen letters you may need to add more spaces or use the back of the paper to make it fit.)

Under each letter of the name students should write a 1 if the letter is a consonant, and a 5 if it's a vowel. Have students add up the 1s and 5s to find the total cost of their names.

Provide help to any students who seem to be struggling.



You might want to pass out play money pennies and nickels to have students count the cost in coins.

Small-Group Activity Two: What's Another Way?

Concepts Taught

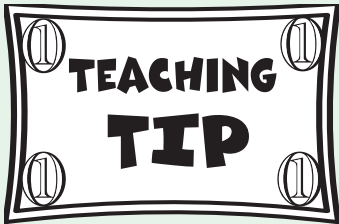
Counting Money and Equivalent Sums of Money to 50 Cents

Materials

- 8 small envelopes (or folded and taped paper pouches)
- Play money: at least 50 pennies, 10 nickels, 5 dimes, and 2 quarters for each pair of students

1. Prepare for the group activity ahead of time.

- Write one of the following amounts on the outside of each envelope:
 1. 7¢
 2. 10¢



Help students become familiar with money-related terms like “worth,” “buy,” “charge,” and “spend” by using them often in your discussions.

3. 15¢
4. 25¢
5. 38¢
6. 43¢
7. 50¢

- Set the envelopes aside until later.
2. Discuss coins and their values.
 - Hold up a penny and say:

Let’s talk about coins and what they mean. What do we call this?

This is a penny.

How much money is a penny worth?

A penny is worth one cent.

Repeat with the nickel, dime, and quarter. Then say:

A nickel is worth five cents. What’s another way to show five cents, without using a nickel? If no one suggests anything, ask how many pennies would equal five cents. Lay one nickel and five pennies next to each other on the table.

OK, I can have five pennies or a nickel. They are both equal to five cents. Now let’s think about a dime. I know that a dime is worth ten cents. What’s another way to show ten cents, without using a dime?

Continue with this process, making sure students suggest all the ways of making ten cents:

- one dime
- two nickels
- ten pennies
- five pennies and one nickel

Now we’ll do the same thing with a quarter. I know that a quarter is worth Allow students to volunteer answers. Lay the quarter on the table. **What’s another way to show 25 cents?** If no one responds, prompt by asking how many pennies would equal 25 cents. Lay 25 pennies on the table with the quarter (place the pennies in a neat array—five rows of five pennies).

Continue with the process, making sure students suggest several ways of making 25 cents, including:

- one quarter
- 25 pennies
- two dimes and one nickel
- one dime and three nickels

Note: Don't attempt to include all combinations of pennies with dimes and nickels to make 25 cents, but do show one or two examples.

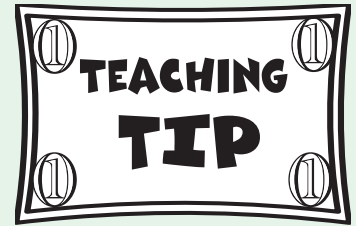
3. Conduct money equivalent activities.

Divide the group into pairs of students. Provide each pair with play money (50 pennies, 10 nickels, 5 dimes, and 2 quarters), and give one of the students an envelope on which you've written a money amount.

Have the first student count out an amount of money to equal that listed on the envelope before handing it to his or her partner. The partner checks the money in the envelope to make sure it is correct. If it's wrong, the students work together to correct the amount.

Then the partner's task is to show *another way* to make the same amount. For example, if a pair has the 7¢ envelope, the first student may put in one nickel and two pennies. The partner checks the amount, and then replaces it with seven pennies.

Have partners pass the empty envelope to another pair of students and repeat the activity with their next one. Make sure each pair of students has a chance to work with several of the envelopes.



Start off with the envelopes showing amounts under 25 cents. Add more difficult amounts after students have practiced the activity.

Assessment

Check students' understanding by listening carefully to the responses they give during group discussions and in the two small-group activities. Create a bulletin board that has been divided into two areas. Label the areas "Producers" and "Consumers." Have students search old magazines and catalogs to find pictures of people producing or consuming, and add them to the correct area on the board.

Suggested Online Activity

NOTE: Teachers should preview all sites to ensure they are age-appropriate for their students. At the time of publication, all URLs listed here were valid. In addition, some Web sites provide lessons via pop-up screens, so you may have to disable your computer's pop-up blocker software to access them.

Fifty State Quarters

The U.S. Mint has introduced more than half of the new state quarters. Check this site to see if your state is one of them. Either way, allow students to select a state from the list and download a coloring page of the state quarter. Found at: www.usmint.gov/kids/index.cfm?FileContents=/kids/coinnews/50sq.cfm

National Standards Correlations

Economics

The activities in this lesson correlate to the following Voluntary National Content Standards in Economics, as determined by the National Council on Economics Education, found at: www.ncee.net/ea/standards.

Standard 1: Scarcity

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.

K–4 Grade Benchmarks:

- People whose wants are satisfied by using goods and services are called consumers.
- People who make goods and provide services are called producers.

Standard 7: Markets–Price and Quantity Determination

Markets exist when buyers and sellers interact. This interaction determines market prices and thereby allocates scarce goods and services.

K–4 Benchmarks

- A price is what people pay when they buy a good or service, and what they receive when they sell a good or service.
- A market exists whenever buyers and sellers exchange goods and services.

Standard 11: The Role of Money

Money makes it easier to trade, borrow, save, invest, and compare the value of goods and services.

K–4 Benchmarks

- Money is anything widely accepted as final payment for goods and services.

Mathematics

In addition to economics, the activities in this lesson also correlate to the following *Principles and Standards for School Mathematics*, from the National Council of Teachers of Mathematics, found at: standards.nctm.org/document/index.htm.

Numbers and Operations Standards

Understand numbers, ways of representing numbers, relationships among numbers, and number systems

PreK–2 Benchmarks:

- Count with understanding and recognize “how many” in sets of objects
- Develop a sense of whole numbers and represent and use them in flexible ways, including relating, composing, and decomposing numbers
- Connect number words and numerals to the quantities they represent, using various physical models and representations

Compute fluently and make reasonable estimates

- Use a variety of methods and tools to compute, including objects, mental computation, estimation, paper and pencil, and calculators

Algebra Standards

Understand patterns, relations, and functions

- Sort, classify, and order objects by size, number, and other properties
- Represent and analyze mathematical situations and structures using algebraic symbols
- Use concrete, pictorial, and verbal representations to develop an understanding of invented and conventional symbolic notations.

- Use mathematical models to represent and understand quantitative relationships.

Language Arts

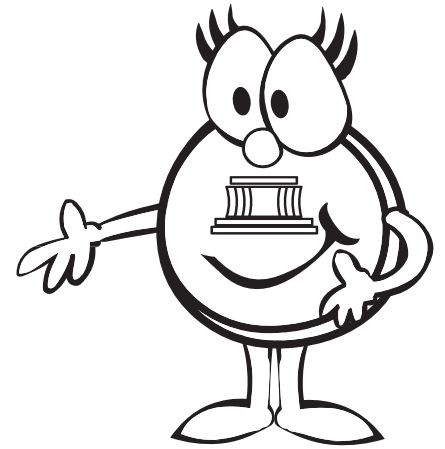
This lesson, based on the children's book *A Dollar for Penny*, by Dr. Julie Glass, also correlates to the following *Standards for the English Language Arts*, from the National Council of Teachers of English, found at:

www.ncte.org/print.asp?id=110846&node=204.

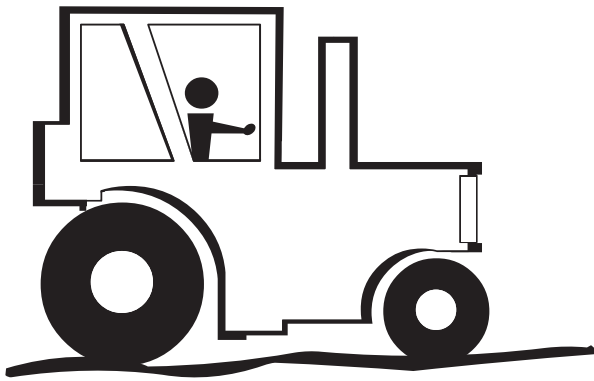
1. Students read a wide range of print and non-print texts to build an understanding of texts, of themselves, and of the cultures of the United States and the world; to acquire new information; to respond to the needs and demands of society and the workplace; and for personal fulfillment. Among these texts are fiction and nonfiction, classic and contemporary works.
3. Students apply a wide range of strategies to comprehend, interpret, evaluate, and appreciate texts. They draw on their prior experience, their interactions with other readers and writers, their knowledge of word meaning and of other texts, their word identification strategies, and their understanding of textual features (e.g., sound-letter correspondence, sentence structure, context, graphics).

Who Does What?

Name _____



Circle the word that tells if each of these people is a consumer or a producer in the picture. Color the pictures.



Producer

Consumer



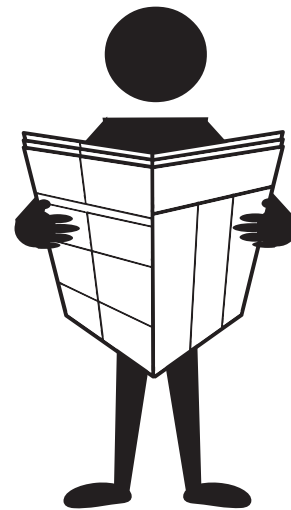
Producer

Consumer



Producer

Consumer

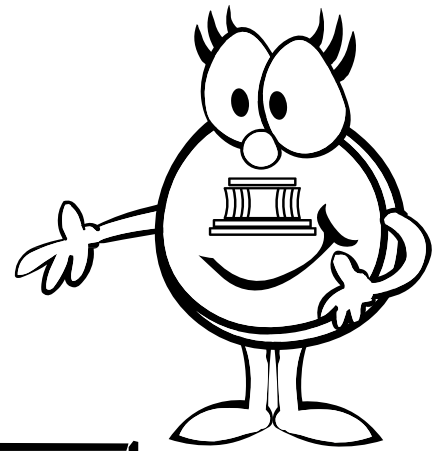


Producer

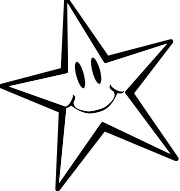
Consumer

Buy a Name

Name _____

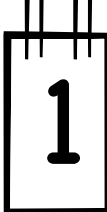
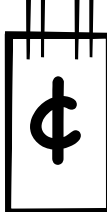


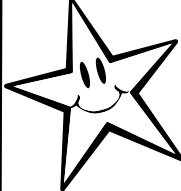
NAME ★ MART

 **NAME ★ MART**
Low Prices

On Sale Today



Consonants
BCDFGHJKLMNPQRSTVWXYZ

  **each**

 **NAME ★ MART**
Low Prices

On Sale Today

Vowels
AEIOU

  **each**

What does your name cost? Print your name on the lines and write the cost of the letters below them. Add them up to find the price!

My name:

Total cost of my name: _____