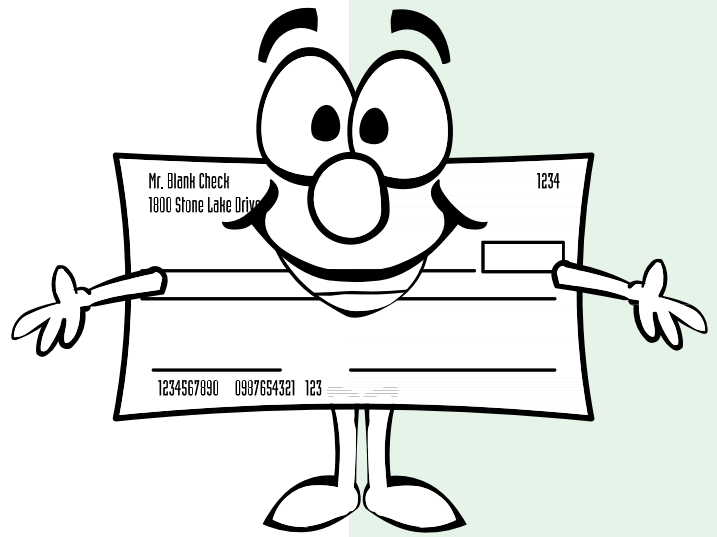


Grade Four

What's the Price?



Overview

Students share the book *Pigs Go to Market: Fun with Math and Shopping*, by Amy Axelrod, to learn about price and comparative shopping. Students complete a worksheet on price, analyze the unit price of several items, and compare prices at local grocery stores.

Prerequisite Skills

Students should have a good understanding of decimal numbers and be able to round decimals to the nearest hundredth.

Lesson Objectives

Students will be able to:

- Define the term *price*
- Explain how to determine the unit price of goods

Materials List

1. Book: *Pigs Go to Market: Fun with Math and Shopping*, by Amy Axelrod (Simon & Schuster Books for Young Readers, 1997)
2. Chalkboard or chart paper
3. Grocery store circulars from the local newspaper
4. Calculators (enough for each student in small groups to have one)
5. Handout: **Mrs. Pig's Shopping Spree** worksheet

Content Standards

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

Vocabulary

price
unit price

Large-Group Activity

Materials

- Book: *Pigs Go to Market: Fun With Math and Shopping*
- Chalkboard or chart paper
- Handout: **Mrs. Pig's Shopping Spree** worksheet

1. Gather students in the reading corner to share the book *Pigs Go to Market: Fun With Math and Shopping*.

- Say:

Have you ever gone to the supermarket with your family or friends? How do you choose what to buy?

Allow students to share their experiences with shopping at the supermarket.

I'm going to read you a book called *Pigs Go to Market: Fun with Math and Shopping*. It was written by Amy Axelrod and illustrated by Sharon McGinley-Nalley. This book is about a family that goes to the supermarket to buy some candy for a Halloween party.

Let's see what happens when the pigs go to the supermarket.

- Read the book aloud to students. Pause at the end of each two-page spread and allow students to view the pictures.

2. Discuss the book with the class.

- **Why did the pigs have to go to the supermarket?**

Grandma Pig and Grandpa Pig ate all of the candy. They needed more candy for their Halloween party.

- **Why did Mrs. Pig get a five-minute shopping spree?**

Mrs. Pig was the store's one millionth customer.

- **What did Mrs. Pig buy?**

Mrs. Pig bought soups and sauces, six packs of Ghouly Drops, three bags of Jelly Spiders, four buckets of Pound O' Pumpkins, two medium-sized boxes of Witches Brooms, one box of Red Hot Jumbos, broccoli, cantaloupes, pumpkins, and one economy-sized jar of Wiggly Worms.

- **Did the pigs have enough candy for the Halloween party?**

No. The pigs ate all of the candy before they got home.

3. Discuss this lesson's economic concepts: price and comparative shopping.

- **Price**

Imagine that you are at a store, and you have five dollars. How do you determine what you can buy?

Students may answer that they would look at the price of items.

Most people look at the **price of items in order to decide whether or not they can purchase any of the items. Price is the amount of money a person must pay to buy a good or service. In *Pigs Go to***

Market: Fun With Math and Shopping, the price of a bag of malt balls is 99 cents. What is the price of a can of soda from the vending machine?

Allow students to respond.

○ **Comparative Shopping**

Suppose that the price of a DVD at the local video store is \$19.99, but the price of the same DVD is \$25.00 at the general store. Where would you buy the DVD? Why would you buy it there?

Most students will say that they would buy the DVD from the local video store because it has a lower price.

People often compare prices before they buy a good. Most people want to pay the lowest price possible for a good.

It is easy to compare the prices of single items such as DVDs, but suppose you want to compare the prices of two different-sized bags of candy. How would you determine which is the better deal?

Have students share their ideas.

In order to determine which bag of candy is a better deal, you need to look at the **unit price**. The unit price is the cost per unit of measure—the price of each malt ball in a bag.

Suppose that the price for a small bag with 16 malt balls is 80 cents. The price for a large bag with 40 malt balls is \$1.60. To determine the unit price for each bag of candy, you need to divide the price by the number of units. In this example, you would divide 0.80 by 16 to determine the unit price for the small bag of candy and divide 1.60 by 40 to determine the unit price for the large bag of candy.

Write the following equations on the chalkboard or chart paper.

$$\$0.80 \div 16 = \$0.05$$

$$\$1.60 \div 40 = \$0.04$$

The unit price for the small bag of candy is 5 cents and the unit price for the large bag of candy is 4 cents. So, the large bag of candy is the better deal.

2. Have students complete the **Mrs. Pig's Shopping Spree** worksheet.

○ Hold up a copy of the **Mrs. Pig's Shopping Spree** worksheet.

Mrs. Pig got a lot of candy on her shopping spree. This worksheet shows how much candy Mrs. Pig got and the price of each type of candy. If she had to pay for all of the candy, how much would it cost?

Allow students to work on this worksheet while you work with individual groups in the following small-group activities. After small-group work you might want to discuss the answer to this worksheet.

Small-Group Activity One: What's the Unit Price?

Concept Taught

Unit Price

Materials

- *Pigs Go to Market: Fun with Math and Shopping*, by Amy Axelrod
- Chalkboard or chart paper
- Calculators (enough for each student to have one)

1. Begin Activity One: What's the Unit Price?

- Show students pages 13 and 14 in *Pigs Go to Market: Fun with Math and Shopping*. (This page shows a picture of the candy aisle at the supermarket.)
- Say:

These two pages show all the Halloween candy that is available at the supermarket. If we wanted to figure out the unit price of these items, how would we do it?

Allow students to respond. Students should understand that you can figure out the unit price by dividing the price by the number of units.

You can determine the unit price by dividing the price by the number of units. For example, four ounces of licorice sharks cost 49 cents. To determine the unit price, divide 0.49 by 4.

Write the following equation on the chalkboard or chart paper.

$$\$0.49 \div 4 \approx \$0.12$$

The unit price for licorice sharks is 12 cents per ounce.

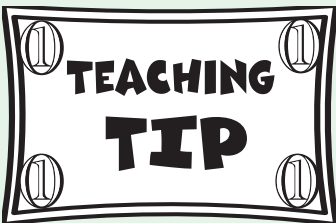
2. Have students determine the unit prices for the candy shown on pages 13 and 14.

- Give each student a calculator. Then say:

Now let's determine the unit prices for the rest of the items on these pages.

- Have students tell you the equations that can be used to determine the unit prices for each item. Write these items on the chalkboard or chart paper. Then have students use their calculators to find the answer to the equations. The equations and unit prices for each item are shown below.

Red Hots	$\$0.39 \div 3.5 \approx \0.11
Peanut Balls	$\$0.99 \div 5.5 = \0.18
Mini Pops	$\$1.59 \div 24 \approx \0.07
Super Pops	$\$1.39 \div 7.5 \approx \0.19
Red Hot Jumbos	$\$0.89 \div 12 \approx \0.07
Large Witches Brooms	$\$1.33 \div 40 \approx \0.03



Remind students that each problem involves money, so answers should be rounded to the nearest hundredth.

Medium Witches Brooms	$\$1.19 \div 36 \approx \0.03
Ghouly Drops	$\$0.97 \div 20 \approx \0.05
Economy Wiggly Worms	$\$3.59 \div 80 \approx \0.041
Medium Wiggly Worms	$\$2.49 \div 60 \approx \0.04
Pound O' Pumpkins	$\$2.59 \div 16 \approx \0.16
Jelly Spiders	$\$0.97 \div 24 \approx \0.04
Monster Bar	$\$1.39 \div 4 \approx \0.35
Mama Monster Bar	$\$1.59 \div 7 \approx \0.23
Papa Monster Bar	$\$4.29 \div 16 \approx \0.27
Candy Corn	$\$1.13 \div 9 \approx \0.13
Jelly Moons	$\$1.25 \div 9 \approx \0.14
Lemon Stars	$\$1.39 \div 9.5 \approx \0.15
Malt Balls	$\$0.99 \div 30 \approx \0.03

Small-Group Activity Two: Comparing Prices

Concept Taught

Comparative Shopping

Materials

- Book: *Pigs Go to Market: Fun with Math and Shopping*
- Chalkboard or chart paper
- Grocery store circulars from the local newspaper
- Calculators (enough for each student in small groups to have one)

1. Begin Activity Two: Comparing Prices.

○ Say:

When you go to the grocery store, how do you determine which products to buy?

Allow students to respond. Students may say that they look at the price or brand, or they may say they buy items that are on sale or items they have coupons for.

When people go grocery shopping, they often compare the price of products. Most people like to purchase items with the lowest price.

2. Have students compare prices at local grocery stores.

○ Distribute copies of local grocery store circulars to students.

Now let's compare prices at local grocery stores.

○ Have students look at the grocery store circulars from the local stores and find like items at different stores. As a group, compare the prices for these items and determine which store has the better deal.

Assessment

Check students' understanding by listening carefully to the responses they give during group discussions and on the **Mrs. Pig's Shopping Spree** worksheet. Give students a blank piece of notebook paper. Have them write a paragraph that defines price and explains how to determine unit price.

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.

Clipping Coupons

Visit the National Council on Economic Education EconEdLink Web site at www.econedlink.org/lessons/index.cfm?lesson=EM382&page=teacher to view a lesson about saving money with coupons. This lesson also includes an online activity in which students calculate savings for different products when using coupons.

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 Economic Education, found at: www.ncee.net/ea/standards.

Standard 7: Markets—Price and Quantity Determination

Students will understand that: Markets exist when buyers and sellers interact. This interaction determines market prices and thereby allocates scarce goods and services.

K-4 Grade 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.

Standard 8: Role of Price in Market System

Prices send signals and provide incentives to buyers and sellers. When supply or demand changes, market prices adjust, affecting incentives.

K-4 Grade Benchmarks:

- High prices for a good or service provide incentives for buyers to purchase less of that good or service, and for producers to make or sell more of it. Lower prices for a good or service provide incentives for buyers to purchase more of that good or service, and for producers to make or sell less of it.

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

3-5 Grade Benchmarks:

- Develop fluency in adding, subtracting, multiplying, and dividing whole numbers.

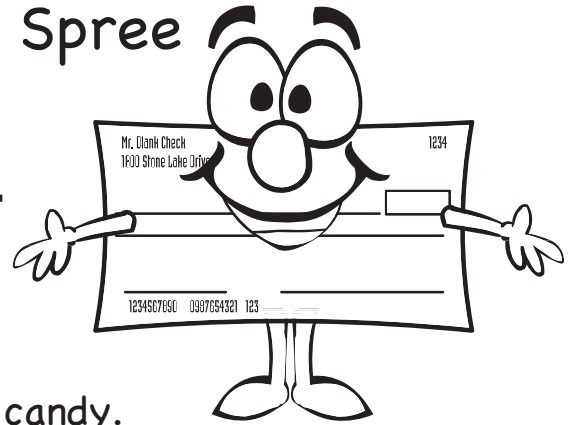
Language Arts

This lesson, based on the children's book *Pigs Go to Market: Fun with Math and Shopping*, by Amy Axelrod, 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).

Mrs. Pig's Shopping Spree

Name _____



Directions: Mrs. Pig got a lot of candy on her shopping spree. Below is a list of candy Mrs. Pig got and the price of each type of candy.

If she had to pay for all of the candy, how much would it cost? Write your answer at the bottom of the page.

Item Purchased	Amount Purchased	Price
Ghouly Drops	six packs	97¢ per pack
Jelly Spiders	three bags	97¢ per bag
Pound O' Pumpkins	four buckets	\$2.59 per bucket
Witches Brooms	two medium-sized boxes	\$1.19 per medium-sized box
Red Hot Jumbos	one box	89¢ per box
Wiggly Worms	one jar	\$3.59 per jar