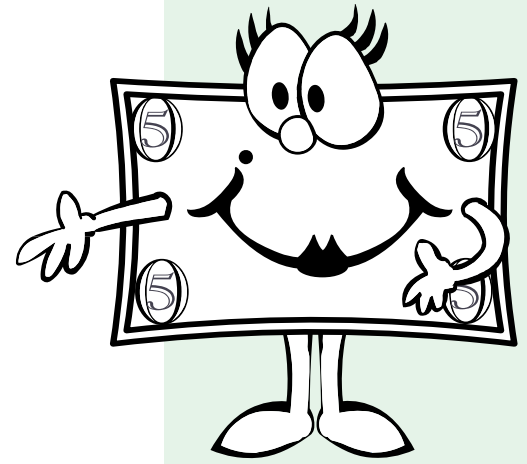


Grade Three

Labor, Choice, and Sales Tax



Overview

Students share the book *You Can't Buy a Dinosaur with a Dime*, by Harriet Ziefert, to learn about earning money through labor, making choices, and paying sales tax.

Prerequisite Skills

Students should be able to recognize and know the value of quarters, dimes, and nickels.

Lesson Objectives

Students will be able to:

- Define labor as work exchanged for money
- Understand that choice involves giving something up
- Count coins by grouping, up to five dollars
- Define taxes as the money the government collects to pay for goods and services it provides
- Complete addition problems involving adding sales tax to purchase amounts

Materials List

1. Book: *You Can't Buy a Dinosaur with a Dime*, by Harriet Ziefert (Blue Apple Books, 2003)
2. One sheet of 1-inch x 2-inch Post-It® or other type of self-adhering notepaper
3. Writing or notebook paper
4. Optional: drawing paper and crayons
5. Play money: quarters, dimes, and nickels
6. Chart paper or chalkboard
7. Handout:
 - **Snack Tax** 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

choice
goods
government
labor
services
taxes

Large-Group Activity

Materials

- Book: *You Can't Buy a Dinosaur with a Dime*
- Chart paper or chalkboard
- Writing or notebook paper
- Optional: drawing paper and crayons

1. Gather students to share the book *You Can't Buy a Dinosaur with a Dime*.

○ Say:

Today we're going to be talking about allowances—how you get them, how you save them, and how you spend them. How many of you receive an allowance? Students can simply raise their hands at this time. Allowances will be discussed more thoroughly later.

I'm going to read a rhyming book to you about a boy who has saved his allowance and has the chance to spend it. Once it's spent, he has to earn more. It's called *You Can't Buy a Dinosaur with a Dime*, and it was written by Harriet Ziefert. It was illustrated by Amanda Haley.

○ Read the book aloud to the class. Pause often to allow the entire class time to see each picture.

2. Briefly discuss the book with the class.

○ **Pete was both happy and sad after he bought the dinosaur. Why?**

He was happy because he liked the dinosaur, but he was sad because his bank was almost empty.

○ **In what ways did Pete get more money to put in his bank?**

He earned money for working in the yard, he got his allowance, he found a dime, and he sold some baseball cards.

○ **Why did Pete select the stegosaurus instead of the triceratops?**

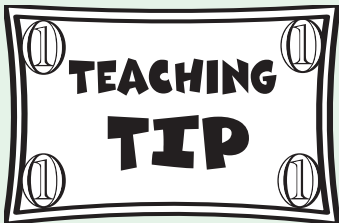
He bought the cheaper dinosaur because he didn't want to spend all of his savings.

3. Discuss today's economic concepts: labor, choice, and decision making.

○ ***Labor and Allowance***

Before I read the book, I asked how many of you received an allowance. Let's talk for a minute about those allowances. Today we're not going to talk about how much money you receive for an allowance. Instead, we're going to talk about earning and spending allowances. On the board write the following five headings: Allowance, Earn, Free Money, Save, and Spend on Anything.

First, I want everyone who gets an allowance to stand up. Count the number of students standing and write the total under the heading "Allowance."



You may need to return to the book to remind students of Pete's moneymaking efforts.

For those of you standing, how many of you have to do chores or jobs around the house to earn your allowance? Allow students to raise their hands. Count them and write the total under the heading “Earn.”

How many of you get an allowance every week no matter what—you don’t have to earn it? Allow students to raise their hands. Count them and write the total under the heading “Free Money.” If the totals under “Earn” and “Free Money” don’t equal, ask students who didn’t raise their hands for either to explain. They may not have understood the question.

When you do a chore or a job to earn money, we say you are doing labor. Write the word “labor” above “Earn” on the board. **Labor is any job a person does in order to earn something, like an allowance or a paycheck.**

How many of you have to save some of your allowance—you’re not allowed to spend all of it? Allow students to raise their hands. Count them and write the total under the heading “Save.”

Now I have one more question. For those students standing, the ones who receive an allowance, how many of you have to buy certain things you want with your money—things like paper or pencils you use at school, your school lunch money, or maybe certain clothes you want or need? If you have to spend your money on certain things, sit down. Count the number of students still standing and put that total under the heading “Spend on Anything.”

As you can see, there are lots of things to think about when talking about allowances, not just if you get one or how much you make. For instance:

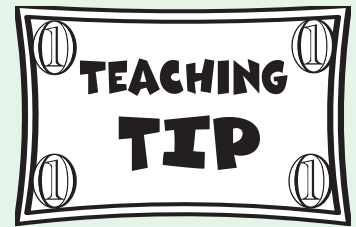
- **Some of you have to work to get your allowance, and some of you don’t.**
- **Some of you have to put some of your money aside in savings, and some of you don’t.**
- **Some of you have to spend your allowance on school supplies or other necessary things, and some of you get to spend it on anything you want.**

In our story, Pete made an allowance, but he also made extra money for chores around the house, like cleaning the yard. He got to spend his money on anything he wanted. He didn’t have to save money—his parents didn’t make him—but he liked having money in his bank, so he did save some.

○ *Choice and Decision Making*

Since Pete got to spend his money on anything he wanted, he had to decide what to spend it on. He had to make a choice. Write the word “choice” on a clean area on the board or chart paper.

Whenever we make a choice, we get one thing, but we also have to give something else up. What was one choice that Pete had to make? Allow students to volunteer ideas. They may say that Pete had to decide which dinosaur to buy.



If students don’t understand the term “earn,” explain that “earn” means getting payment in return for doing work.

When Pete decided to buy the stegosaurus, what did he give up? He gave up the triceratops.

Pete could only afford one dinosaur, so he had to choose between one that cost three dollars and one that cost two dollars. He gave up the three-dollar dinosaur because he also wanted to keep some money in his bank.

Pete also made other choices in this story. What about the yard work he did for his dad—did he *have* to do the work? No, his father let him choose to work or not.

Pete chose to work for his dad because he wanted to make more money. What did he give up? Pete gave up his free time to do the work.

We make choices every day, from what we're going to wear to school to what we eat at lunch, to whether we will watch TV or play outside. Every time we make a choice, we give up the thing we didn't choose.

4. Introduce the large-group activity: Allowance letter.

- Let's pretend that no one in this class gets an allowance. I want you to write an imaginary letter to your parents, trying to convince them to start giving you an allowance.

Think about some of the things we learned about allowances today. What would help convince your parents to give you one?

- Do you think they would be more likely to give you an allowance if you promised to do chores to earn it?
- Would they like it if you promised to save some of your allowance?
- Would they be happy to know you're going to spend some of your money on school supplies or to help pay for new shoes?

In your letter, convince your parents to give you an allowance by using as many arguments as you can think of. Tell them how much money you need each week, and give them a list of all the things you will do with the money.

You might wish to have students work on this activity while you work with small groups. Optional: You might ask students to draw pictures of themselves doing a chore to earn their allowance.

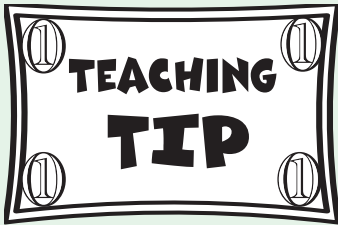
Small-Group Activity One: Counting Money

Concepts Taught

Counting Currency up to five dollars

Materials

- Book: *You Can't Buy a Dinosaur with a Dime*
- One sheet of 1-inch x 2-inch Post-It® or other type of self-adhering notepaper
- Play money, at least ten of each: quarters, dimes, and nickels



Another example: What did Pete give up when he chose to sell baseball cards to Kate? Answer: His baseball cards.

1. Prepare for the activity ahead of time.
 - Before group time begins, use a sticky note on the first page of the book to cover the green circle that tells how much Pete has at the beginning of the story
2. Examine money counting in *You Can't Buy a Dinosaur with a Dime*.

○ Say:

We're going to spend some time looking at Pete's savings and counting his money. When you save money like Pete does, you end up with a lot of coins. Look at all the coins Pete had at the beginning of the story. Open the book to the first page that shows all of Pete's money laid out in neat rows. (Make sure the sticky note hides the total in the green circle.)

Pete had a lot of quarters, dimes, and nickels. Let's lay out some play money in the same way Pete laid them out. Have a volunteer lay out the quarters, another student can lay out the dimes, and a third can lay out the nickels.

Who knows where you should start when you want to count money? Allow students to guess. Some might suggest that it's easier to count money if you start with the largest currency and work down. Others might guess that it's easiest to divide the coins in groups of a dollar.

Today we're going to practice money counting by grouping the coins. How many quarters are in a dollar? There are four quarters in a dollar. Allow a volunteer to make two groups of four out of the quarters. Move the two extra quarters to one side.

How many dimes are in a dollar? Can we make a dollar from Pete's dimes?

There are ten dimes in a dollar, but Pete only has seven.

Is there any other way we can make another dollar group? Can we combine our two leftover quarters with some dimes to make a dollar? Students should suggest that two quarters and five of the dimes combine to make a dollar. If not, suggest it yourself. Move the extra two dimes to one side.

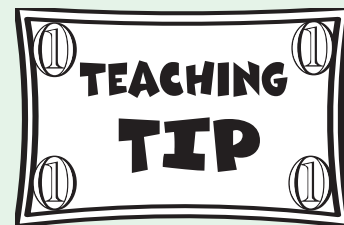
How many nickels are in a dollar? Can we make a dollar from Pete's nickels? There are 20 nickels in a dollar, but Pete only has six.

If we combine all of Pete's nickels with his leftover dimes, how much is that worth? Allow volunteers to count the money. Watch carefully to make sure they skip count the dimes by tens and then switch to skip counting by fives with the nickels. They should count 50 cents in the leftover dimes and nickels.

We have three groups of one dollar each, and 50 cents left over. How much money does Pete have altogether? Pete has \$3.50. Remove the sticky note to show the final total.

Remove the coins and replace with another group of quarters, dimes, and nickels. Allow students to practice counting the amounts by grouping the coins into dollars and adding on the leftover coins.

Repeat the activity as often as needed.



Watch to make sure students group each coin type correctly, or that they don't make mistakes skip counting the money.

Small-Group Activity Two: Sales Tax

Concepts Taught

Taxes and the Government

Materials

- Book: *You Can't Buy a Dinosaur with a Dime*
- Chart paper or chalkboard
- Play money: one-dollar bills and nickels
- Handout: **Snack Tax** worksheet

1. Prepare for the activity ahead of time.
 - On the chart paper or chalkboard, list several occupations that are funded by the government (local, state, or federal), such as:
 - firefighters
 - police officers
 - military personnel (soldiers, sailors, etc)
 - teachers
 - mail carriers
 - trash collectors
 - street cleaners
2. Discuss government, services, goods, and taxes.
 - **These are all jobs done by people in our community. As you know, people work to earn money. All of these are jobs that people do to earn money. Do you know anyone with one of these jobs?** Allow students to share experiences.

Who do you think pays these people for their work? Allow students to speculate.

All of these jobs are paid for by the **government.** Write the word “government” on the board. **The government takes care of a country or a state or a town. The government makes sure the roads are safe to drive on, it hires police officers and soldiers to protect the people, and it even provides schools so everybody living here can have a good education.**

We call all of these jobs **services.** Write “services” on the board. **Services are things that are done for you. Sometimes you have to pay for services yourself, like when you pay the dentist to fix your teeth or you pay someone else to mow your lawn.**

Who can tell me what a **good is? A good is a thing that you buy because you want or need it. Can you give me some examples of **goods**?** Students might suggest food items, clothing, groceries, or other goods. Prompt them with questions if they have trouble. **Just like services, some goods we buy for ourselves, like food or clothes or toys.**

But there are other goods that the government buys for us, just like it pays for the services I listed on the board. For example, the government pays for the street signs and traffic lights that help keep us safe on the roads. It pays for the equipment used by fire fighters, the military, and police officers.

So if the government has to pay for these goods and services, where do you think they get the money? Allow student to speculate again before providing the explanation.

The government gets enough money to pay for these goods and services by collecting **taxes**. Write the word “taxes” on the board.

3. Discuss the collection and use of taxes.

- A tax is an amount of money people give to the government. There are many kinds of taxes, but let’s just talk about one kind: **sales tax**.

Have you ever noticed that sometimes you have to pay more for something than it says on the price tag? Open the book to the fifth page, showing Pete paying for his first dinosaur. Read the clerk’s sentence from the speech balloon.

In this picture, Pete bought a dinosaur for three dollars, but how much did it cost him after the tax was added? The final cost was \$3.20.

Let’s say you wanted to buy a comic book. The price on the book says \$1.25, but when you took it to the clerk at the checkout counter, she might say you owe \$1.31. Write the two amounts on the board.

How much more did the comic book cost than it said on the price tag? Six cents.

That extra six cents, and the extra 20 cents Pete had to pay for his dinosaur, is called **sales tax**. Six cents doesn’t sound like very much money, does it? But your six cents, added to Pete’s 20 cents, combined with everybody else’s sales tax, really adds up.

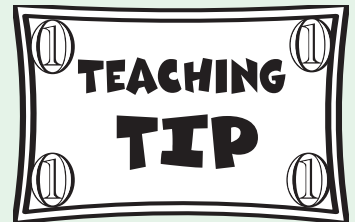
The owner of the toy store doesn’t get to keep the extra six cents you paid him. Instead, he takes your six cents and all of the other sales tax he collects for the toys he sells, and then he sends all of it to the government.

The government then takes all the sales tax collected by all the storeowners and uses it. And what does the government use the tax money for? The government uses tax money to pay for goods and services.

The government of each state decides how much it will collect. If you travel to another state you might find that a different amount of tax is added onto the same comic book that cost you an extra six cents at home.

4. Practice adding sales tax to a purchase price.

- Let’s practice adding sales tax onto some items. We’ll pretend that we live in a state that collects five cents for every dollar spent on goods. Lay one dollar bill on the table, with one nickel next to it.



If your state doesn’t have a sales tax, you may need to explain that this refers to other states.

How much sales tax would be added if we bought something that cost two dollars? Ten cents. Lay another dollar bill below the first one, with another nickel next to it.

Can you tell me how much sales tax will be added for something that cost five dollars? Allow students to guess before laying down five dollar bills and five nickels. The tax on five dollars would be 25 cents.

5. Introduce the **Snack Tax** worksheet.

- **Now you're going to get a chance to add some sales tax to goods bought in a snack shop.** Hold up one worksheet so students can see the Snack Shack sign.

This snack shop is in a state that charges five cents for every dollar sold. The three kids on this worksheet have gone to the snack shop for some treats. Your job is to figure out how much their snacks cost and add on the correct amount of tax. Let's do the first one together.

Read item one aloud, then use the play money to demonstrate the activity:

- **Suzy wants a hotdog . . .** Lay out four dollar bills in a row.
- **. . . some French fries . . .** Put two more dollars in the row.
- **. . . and a soda pop.** Add two more dollars.

How much did Suzy spend? She spent eight dollars. Have the students write \$8.00 on their worksheets under Number One. They should leave room to add on sales tax.

Lay a nickel next to each dollar as you say: **Remember, in this state you must pay five cents in sales tax for every dollar you spend. How much sales tax is this altogether?** Give students a chance to skip count the nickels. The tax is 40 cents. Show students where to write \$0.40 below the \$8.00, and insert the plus sign and the underline to make the addition problem:

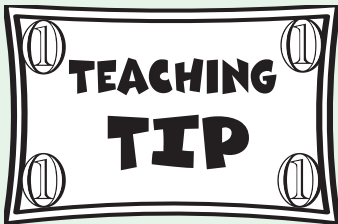
$$\begin{array}{r} \$8.00 \\ + .40 \\ \hline \end{array}$$

Now all I have to do is add the numbers together. Eight dollars for the snacks plus 40 cents for sales tax equals how much? Students should write \$8.40 as their total.

Allow students to complete the worksheet independently or in pairs. Let them use the play money if needed.

Assessment

Check students' understanding by listening carefully to the responses they give during group discussions and on the **Snack Tax** worksheet. For an additional assessment ask individual students to name three goods and three services paid for by the government.



You may need to remind students that 40 cents can be written two ways: 40¢ and \$0.40.

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.

An Ordinary Day

The Center on Congress at Indiana University offers a virtual town for students to explore. Pop-up messages provide information on the role government plays in things we all take for granted, from our water supply to the health codes that protect us in restaurants. From the following link, select the e-learning module *An Ordinary Day: The Impact of Congress/Government*, and then launch the activity from the new window. Found at:

congress.indiana.edu/learn_about/Subject_Area/impact_of_congress.php.

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

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.

K– 4 Benchmarks:

- Goods are objects that can satisfy people's wants.
- Services are actions that can satisfy people's wants.

Standard 2: Marginal Cost/Benefit

Effective decision making requires comparing the additional costs of alternatives with the additional benefits. Most choices involve doing a little more or a little less of something; few choices are "all-or-nothing" decisions.

K– 4 Benchmarks:

- Few choices are all-or-nothing decisions; they usually involve getting a little more of one thing by giving up a little of something else.

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.

Standard 13: Role of Resources in Determining Income

Income for most people is determined by the market value of the productive resources they sell. What workers earn depends, primarily, on the market value of what they produce and how productive they are.

K– 4 Benchmarks:

- Labor is a human resource that is used to produce goods and services.

Standard 16: Role of Government

There is an economic role for government in a market economy whenever the benefits of a government policy outweigh its costs. Governments often provide for national defense, address environmental concerns, define and protect property rights, and attempt to make markets more competitive. Most government policies also redistribute income.

K– 4 Benchmarks:

- Governments provide certain kinds of goods and services in a market economy.
- Governments pay for the goods and services they use or provide by taxing or borrowing from people.

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 Benchmarks:

- Understand the place-value structure of the base-ten number system and be able to represent and compare whole numbers and decimals.

Compute fluently and make reasonable estimates.

- Develop and use strategies to estimate computations involving fractions and decimals in situations relevant to students' experience.
- Use visual models, benchmarks, and equivalent forms to add and subtract commonly used fractions and decimals.

Algebra Standards

Use mathematical models to represent and understand quantitative relationships.

3–5 Benchmarks:

- Model problem situations with objects and use representations such as graphs, tables, and equations to draw conclusions.

Analyze change in various contexts.

- Identify and describe situations with constant or varying rates of change and compare them.

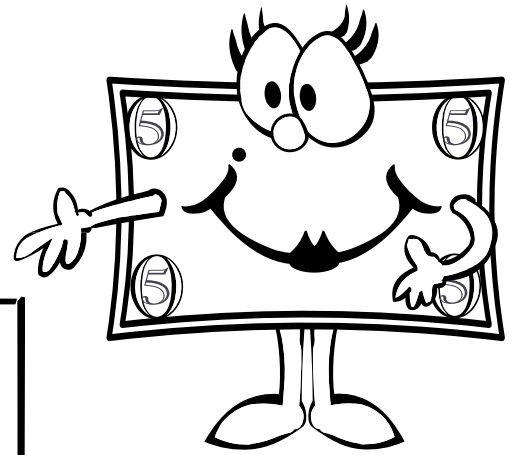
Language Arts



This lesson, based on the children's book *You Can't Buy a Dinosaur with a Dime*, by Harriet Ziefert, 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).
5. Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes.

Snack Tax

Name _____



 THE SNACK SHACK 			
Hot Dog	\$4.00	Soda pop	\$2.00
Hamburger	\$5.00	Popcorn	\$1.00
French fries	\$2.00	Candy bar	\$1.00
Sales Tax: Add 5¢ to every \$1.00			

What is the total for each of these snacks? Add up the snacks and then add the amount of sales tax owed.

1. Suzy bought a hot dog, French fries, and a soda pop.
2. Kip wanted two candy bars and a bag of popcorn.
3. Nick ordered a hamburger and a soda pop.
4. What would you owe if you bought one of everything?