

Lesson Description

In this lesson students first offer what they know about taxes. They then jigsaw an article on taxes written by a fellow fifth grader. Groups present the information that they feel is important to the class. After each presentation, students construct a flip book that gives the most important information about income tax, payroll tax, sales tax, and property tax. Students define gross income and net income, and then using information provided on gross income and various taxes, they calculate net income. At the conclusion of the lesson, students return to what they originally thought they knew about taxes to confirm and correct information.

Texas Essential Knowledge and Skills (Target standards)

- **PFL Math 5.10A:** define income tax, payroll tax, sales tax, and property tax
- **PFL Math 5.10B:** explain the difference between gross income and net income

Texas Essential Knowledge and Skills (Prerequisite standards)

- **Math 5.1:** Mathematical process standards
- **Math 5.3A:** add and subtract positive rational numbers with fluency

National Standards (Supporting standards)

- **CEE Earned Income 4.2:** People earn an income when they are hired by an employer to work at a job.
- **CCSS Math 5.NBT:** Perform operations with multi-digit whole numbers and with decimals to the hundredths

CEE - Council for Economic Education

CCSS - Common Core State Standards

PFL Terms

- Income tax
- Payroll tax
- Sales tax
- Property tax
- Gross pay
- Net income
- Employer
- Employee

Time Required

One 45-minute class period

Materials Required

- 4 sheets of chart paper
- Markers
- 1 copy of **Activity 5.1-1** for each student
- 1 copy of **Visual 5.1-1**
- 1 sheet of chart paper for each group
- 1 sheet of lined notebook paper for each student

- Scissors for each student

Procedure

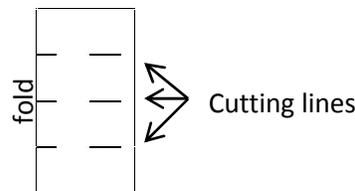
Before students enter the classroom, prepare for a word splash. A word splash is a collection of terms or concepts that students believe connect to the concept they are preparing to study. After the lesson, the predictions are checked against new learning. Label 4 sheets of chart paper with each of the following: Income Tax, Payroll Tax, Sales Tax, or Property Tax. Have markers accessible for students' responses.

Engage

1. Direct students to write any word or phrase or draw a picture on each chart paper to show what they already may know about each tax. Do not eliminate or correct anything that students write on the splashes at this time.
2. Say: *Whenever you buy gum, candy, or a new CD, you know that you pay more than the price marked on the item. You probably also know that it's called tax. Where does that money go? What is it used for?* Allow a brief time for students to share what they think they know.

Explore

3. Have students number off from 1 to 4. Assign an area of the room for each number 1-4. Direct students to move to the area that represents their number.
4. Display **Visual 5.1-1**. Have students create a flipbook by using the directions below. The teacher will model each step.
 - Fold a sheet of notebook paper along the longest line of symmetry.
 - Lay the flipbook on your desk so the fold faces left. Divide the paper into four equal sections by drawing 3 horizontal lines.



- In each of the four sections, write the following tax categories: Income Tax, Sales Tax, Payroll Tax, and Property Tax.
 - Cut the top flap of the paper to the fold along the drawn lines to produce a flipbook. Each tab should open right to left.
5. Distribute **Activity 5.1-1** to each student. Tell students you have an article for them to read written by a fifth grader named Yul Taxem. Yul reports information for his school newspaper. He does such a great job that his articles are often reproduced in student publications across the nation. You found this article in [The School Scoop](#).

Explore

6. Read and explain the group assignment below.
 - Each group will be assigned one tax category. Your group's assignment is to become experts on your assigned tax.
 - Group 1 will become experts on income tax.
 - Group 2 will become experts on payroll taxes.
 - Group 3 will become experts on sales tax.
 - Group 4 will become experts on property tax.
 - Each member of your group should carefully read the section about your tax category. The group will then discuss the important points about your tax category.
 - Each group will then create a visual on chart paper that communicates the important information about your assigned tax. Your visual may include short phrases. Be sure that your pictures and words are large enough for the class to see.
 - Next, plan your presentation. Think about how you will explain your tax category. Each person in the group should participate in the presentation.
 - You will have _____ minutes to read, create the visual, and plan the presentation. Be sure to read only the section of the article that explains your assigned tax category.

Explain

7. Have each group display their visual and make their presentation. Allow other groups to ask questions.
8. After each presentation, allow time for students to work in their assigned groups to capture at least three main points about the tax. These points are to be written under the flap for that tax category in their flipbook. (See **Key 5.1-2**)
9. Pose this question to students. *Now that you know more about taxes, where does the money come from that one uses to pay taxes? (**Money to pay taxes comes from earned income.**)*
10. Instruct students to read the last section of **Activity 5.1-1**, The Case of the Disappearing Paycheck by Yul Taxem.
11. Ask students to explain gross pay and net income. (**Gross pay is how much an individual makes before taxes or deductions are taken out. Net income is what is left after taxes and deductions are subtracted from your gross pay. This is the amount the employee actually receives.**)
12. Direct students to turn their flipbook over to the back and write the definitions for gross pay and net income in their own words on the upper portion of the paper.
13. Instruct students to read the scenario on **Activity 5.1-1** in the box at the bottom of the third page. Have students write the information and complete the calculations on the

lower portion of the back of the flip book. (See **Key 5.1-2**)

Here's what Mr. Cash made in a one week period. He worked 40 hours and made \$14.50 per hour. This means that he earned \$580.00 that week. His federal withholding tax was \$47.00, Social Security tax paid was \$35.96, and his Medicare tax contribution was \$8.41

14. *How much did Mr. Cash pay in taxes that week?* **\$91.37**
What was his final net income? **\$488.63**
How did you determine his net income? **Gross income – taxes = net income**

Evaluate/End

15. Have students summarize the lesson by explaining the role taxes play in gross pay and net income.
16. Direct students' attention back to the paper splashes done earlier and note which information is correct, which information needs minor tweaking, and which information should be deleted.

Activity 5.1-1

Name _____

Class Period _____

The Case of the Disappearing Paycheck

By Yul Taxem

Have you ever wondered why you have to pay more for items than what is listed on the tag? If Mom makes \$10 an hour and she works 40 hours a week, why is her weekly check less than \$400? Why do people have to pay money to the government on or before April 15th of every year?

I learned a great deal when my parents were working on their taxes. What is a tax? A tax is money sent to our government. This money is used to support programs in our country. They pay for such things as our military, helping people in need, and providing money for education, along with many other government programs. Let me share with you what I learned.

Income Tax

Income tax is money paid to the federal government based on your income, how much money you earn. Individuals who earn less money pay less in income taxes than someone who earns much more money. Everyone who makes a certain amount of money is required to pay income taxes or face penalties. There are ways that people can reduce the amount of money they must pay. Subtracting these expenses is called deductions. Some examples of deductions include the interest paid on your home loan, certain medical expenses, and charitable donations. Another way income taxes are reduced is by the number of people supported by your household income. The more people who are in the family and receive their housing, food, and other necessary expenses from the family, the higher deduction the family can take. A small family gets a much smaller deduction than a large family. Federal income tax is due every year by April 15th.

In addition to federal income taxes, many states have a state income tax. Texas is not one of these states. Texans pay only federal income tax.

Payroll Tax

There are two types of payroll taxes: Social Security tax and Medicare tax. Both of these taxes are taken out of your paycheck and paid to the federal government.

Social Security is money that one gets back when one retires or becomes disabled. Medicare helps pay for many medical services for people 65 years or older.

Half the payroll tax is paid by the employer and the other half by the employee as money withheld from earnings. The employer matches, or pays the same amount, that is withheld from the employee's paycheck for Social Security and for Medicare.

In addition, the employer also pays for unemployment insurance. If one loses his/her job, he or she may collect unemployment insurance to help pay his bills for a reasonable time.

Sales Tax

Sales tax is a tax paid by consumers on purchased goods and on some services. Most states require consumers to pay sales tax when they buy or rent goods. The rate that must be paid can vary from as little as paying 5 cents to 10 cents for every dollar spent. So, for a \$10.00 shirt, you may have to pay as little as 50¢ in sales tax to as much as \$1.00, depending on where you live. Although a state sets a specific percentage of the purchase price as the sales tax, local governments may add an additional amount to this rate. In 2013, the sales tax rate in Texas was 6.25%, but some areas paid as much as 8.25% in sales tax because of additional local taxes.

In most states, items that are considered essential to basic survival are exempt from sales tax. Some of these items that are exempt from sales tax are unprepared food and medical prescriptions. Most of the money collected from sales taxes is used for transportation (roads and bridges), public education, and aid to local governments for services they provide the citizens.

Property tax

Property tax is tax that is paid to the local government on real estate. Buildings, homes and land are considered real estate. The local government decides on the value of the real estate and then bills the owner for a percentage of that value. If improvements are made to the real estate, then the taxes on that property will most likely increase. Improvements would be things such as building an in-ground swimming pool in your yard, adding an addition to your house, or putting in a new garage. Anything that makes the property more valuable and/or better is an improvement. On the other hand, if the value of the property decreases due to poor maintenance or the age of the building, then property taxes may go down.

Property taxes are mainly used to support local education, police and fire protection, the work of the local government, and some free medical services.

Gross Pay and Net Income

Your gross pay is how much you make before taxes and deductions are taken out. It is the figure people are looking for when they ask how much you make in a month or in a year.

Net income is calculated by starting with the gross income amount on a paycheck and then subtracting all the taxes paid to the government. These taxes include Social Security tax, Medicare tax and income tax. The result is the amount of money you can actually take home to spend, save, and share.

Your teacher will give you directions how to calculate net income using the following information:

Here's what Mr. Cash made in a one week period. He worked 40 hours and made \$14.50 per hour. This means that he earned \$580.00 that week. His federal income tax was \$47.00, Social Security tax paid was \$35.96, and his Medicare tax was \$8.41. What was his gross pay and net income?

Visual 5.1-1

On front of flap

<i>Income Tax</i>	
<i>Payroll Tax</i>	
<i>Sales Tax</i>	
<i>Property Tax</i>	

On back of flip book

Gross Pay: (student's definition)

Net Income: (student's definition)

Key 5.1-1

On front of flap

On back of flip book

<i>Income Tax</i>	<ul style="list-style-type: none"> • Paid to the federal government based on your income • Citizens do not pay taxes, or they pay reduced taxes, on deductions such as medical expenses, interest on home payments, charitable donations • Due April 15th 	<p>Gross Pay: The amount you earn before taxes are paid.</p> <p>Net Income: The amount you receive after taxes are paid.</p> <p>Gross Pay: \$580.00</p> <p>Income tax: \$47.00</p> <p>Social Security tax: \$35.96</p> <p>Medicare tax: \$8.41</p> <hr/> <p>Total payroll taxes: \$91.37</p> <p>Gross Income: \$580.00</p> <p>Payroll taxes: > \$91.37</p> <hr/> <p>Net Income: \$488.63</p>
<i>Payroll Tax</i>	<ul style="list-style-type: none"> • Paid to federal government • Deductions from pay for income tax, Social Security tax, and Medicare tax • Employer pays matching amount into Social Security and Medicare, plus pays for unemployment insurance 	
<i>Sales Tax</i>	<ul style="list-style-type: none"> • Paid on goods and some services • Items essential for basic survival are exempt • Used for transportation (roads and bridges), public education, and aid to local governments for their citizens 	
<i>Property Tax</i>	<ul style="list-style-type: none"> • Paid to local government based on value of real estate • Can increase or decrease • Used to support local education, fire and police protection, the work of the local government, and some free medical services 	