

UNDERSTANDING TAXES

RECOMMENDED GRADE LEVELS	AVERAGE TIME TO COMPLETE	ARIZONA STANDARDS
9-12	Anticipatory Set & Facilitation: 30-45 minutes Conclusion/Assessment Options: 5 minutes	<ul style="list-style-type: none"> ▪ BMAS 2.11: Examine common taxes and tax forms (e.g., state, federal, 1040, W2, and W4 ▪ HS.E1.2: Analyze the factors that influence how and why people make budgeting and saving choices. ▪ HS.E2.2: Analyze how incentives influence economic choices for individuals, institutions, and societies.

LESSON PLAN OBJECTIVES

Upon completion of this lesson, students will be able to:

- Explain why governments collect taxes and identify the public goods and services funded by tax revenue
- Distinguish between various types of taxes, including income, payroll, sales, and property taxes, and explain how each type is collected and used
- Describe the concept of voluntary compliance in the U.S. tax system.

MATERIALS

MATERIALS PROVIDED IN THIS LESSON PLAN	MATERIALS SPECIFIC TO THIS LESSON PLAN BUT AVAILABLE AS A SEPARATE DOWNLOAD	MATERIALS TO ACQUIRE SEPARATELY DEPENDING ON OPTIONS TAUGHT
<ul style="list-style-type: none"> ▪ Quiz Me Cards: Understanding Taxes ▪ Taxes Infographic Scavenger Hunt ▪ Match 'em Up Taxes worksheet ▪ Calculating Payroll Taxes 	<ul style="list-style-type: none"> ▪ None 	<ul style="list-style-type: none"> ▪ Blank paper ▪ Post-it Notes ▪ Tokens (beans, plastic chips, buttons, etc.)

RESOURCES

EXTERNAL RESOURCES

External resources referenced in this lesson plan:

- Federal Reserve Bank of St. Louis: Making Personal Finance Decisions, Lesson 4: <https://www.stlouisfed.org/-/media/project/frbstl/stlouisfed/education/curriculum/pdf/making-personal-finance-decisions-lesson-4a.pdf>
- U.S. Property Taxes by State: <https://www.visualcapitalist.com/cp/us-property-taxes-by-state/>
- Every State's Largest Source of Tax Revenue: <https://www.visualcapitalist.com/mapped-every-states-biggest-source-of-tax-revenue/>
- Gas Tax Rates by State (2024): <https://taxfoundation.org/data/all/state/state-gas-tax-rates-2024/>
- Atlanta Fed Infographic: How Much Do I Pay in Taxes? <https://www.atlantafed.org/-/media/documents/education/teach/infographic-posters/taxes-personal-finance.pdf>

LESSON FACILITATION

PREPARE

Visual indicators to help prepare the lesson

INSTRUCT

*Instructions to conduct the lesson
facilitation*

CUSTOMIZE

*Potential modifications to lesson
facilitation*

VOCABULARY ACTIVITY

Quiz Me Cards: Understanding Taxes

Approximate time: 15 minutes

Materials to prepare:

- 4 *Quiz Me Cards: Understanding Taxes* per group
- 1 *Understanding Taxes Vocabulary* per group

1. Put students in small groups (3-4 students per group).
2. Distribute 4 *Quiz Me Cards: Understanding Taxes* and 1 *Understanding Taxes Vocabulary* to each group.
 - a. Note: Instructor can let groups choose the four terms to use or assign specific terms to different groups.
3. Have groups decide who will be Partner #1, #2, #3, and #4.
4. Instruct groups to complete each card using the terms from the Vocabulary sheet.
 - a. Each student begins with one card. They are responsible for adding the definition in the designated box.
 - b. The cards are then passed to the left and the student completes the area on the card that matches their Partner number.
 - a. If there are only 3 students per group, each student will act as Partner #4 for an additional card or two.
 - c. This continues until the cards are all completed.

ANTICIPATORY SET

Why are Public Goods Necessary?

Approximate time: 10-15 minutes

Materials to prepare:

- 1 sheet of blank paper per student
- 1 Post-it note per student
- Tokens (beans, plastic chips, buttons, etc.)

1. Instruct students to draw two large boxes side-by-side on their papers and label them Box 1 and Box 2.
2. Provide each student with 10 tokens (beans, plastic chips, buttons, etc.)
3. Tell students that they can turn their 10 tokens into treats. They will each decide how many of their 10 tokens to place in each box.
 - a. For each token placed in Box 1, they will receive 1 treat. (So, if a student places 7 of the 10 tokens in Box 1, they will receive 7 treats.)
 - b. The number of treats each student receives from Box 2 will depend on the total number of tokens placed in Box 2 by the entire class.
 - i. The teacher will need to determine the numbers associated with Box 2 treats. Count the number of students in the class and divide by 2. This number will be used in the statement to students: *For every ___ tokens placed in Box 2 by the class, each student in the class will receive one treat.* (All students will receive 1 treat, regardless of whether or not they placed any tokens in Box 2.)
 - ii. For example, if the class has 24 students, then for every 12 tokens placed in Box 2, each student would receive 1 treat. If the sum of the tokens placed in Box 2 were 64, then each student would receive 5 treats ($64/12 = 5.33$, so 5 treats).
 - c. To clarify with the students, ask these questions:
 - i. *How many treats would you receive if you put all of your tokens in Box 1?* (10)
 - ii. *How many treats would you receive if you put all of your tokens in Box 2?* (If there were 24 students in the class, there would be 240 tokens in Box 2 divided by 12 (half of the class) = 20 treats for each student.)
4. Discuss different scenarios with the class:
 - a. One student puts all of their tokens in Box 1. The remaining students put theirs in Box 2.

This activity came from the St. Louis Federal Reserve, Making Personal Finance Decisions, Lesson 4. The link is included in the resources section.

- b. Ten students put 5 tokens in Box 1 and 5 tokens in Box 2. The remaining students put theirs in Box 2.
 - c. Let the students see how different their personal “reward” would vary.
5. Instruct students to decide where they will place their tokens. Each student should secretly write their name and the number of tokens for Box 1 and for Box 2 on their Post-it note and give the Post-it to the instructor.
 - a. The instructor will count up the number of tokens for Box 2 and determine how many treats each student will get in the class.
6. Compare the total treats generated by everyone in the class with what could have been generated (from Step 3c above) had everyone put all their tokens in Box 2. (The number is generally less, sometimes significantly less.)
7. Explain that the class did not do a very good job of turning tokens into treats. They could have had more treats had everyone placed their tokens in Box 2. If they think of the tokens as “dollars” and the treats as “goods and services,” then what just happened was not a very good deal—they could have gotten a lot more for their money.
8. Explain that the two boxes represent two different types of goods: Box 1 represents private goods, while Box 2 represents public goods.
 - a. Private goods are products or services purchased by an individual, so ownership belongs to that person which prevents others from consuming it.
 - i. Examples: a car, a basketball hoop, a steak dinner, a television set
 - b. Public goods are products or services that are available to everyone in society without diminishing their availability.
 - i. Examples: national defense, public television, national parks, fireworks displays, street lights
 - c. People often assume that other people will buy public goods so that they can spend their own money on private goods. For example, a person may watch public television and enjoy the programs but never pledge money to support public television. Others do contribute. The non-supporter is able to benefit from the public television programming.
9. Ask students to imagine how their life would be different if we had no public goods in our country.
10. The government is able to provide public goods because it collects taxes.

RECOMMENDED FACILITATION	
INFOGRAPHIC SCAVENGER HUNT	
<p style="text-align: center;"><u>Taxes Infographic Scavenger Hunt</u></p> <p><u>Approximate time:</u> 20-30 minutes</p> <p><u>Materials to prepare:</u></p> <ul style="list-style-type: none"> ▪ 1 per student <i>Understanding Taxes</i> Information Sheet ▪ 1 per partnership <i>Taxes Infographic Scavenger Hunt</i> <ol style="list-style-type: none"> 1. Distribute the <i>Understanding Taxes</i> Information Sheet to each student. Ask students to read through the information and annotate their understanding <ol style="list-style-type: none"> a. Circle information you are unfamiliar with and add a question mark in the margin b. Underline any vocabulary terms you are unfamiliar with. c. Put a square around ideas you are already familiar with. 2. Assign students to partnerships or allow students to choose one partner. Explain that students will work together to complete a scavenger hunt by reading material about taxes and reviewing several infographics. 3. Provide each partnership with a paper or digital copy of the <i>Taxes Infographic Scavenger Hunt</i> worksheet. 4. The goal is to learn about taxes while reviewing the written and visual materials. <p style="text-align: center;"><u>Calculating Payroll Taxes</u></p> <p><u>Approximate time:</u> 20-30 minutes</p> <p><u>Materials to prepare:</u></p> <ul style="list-style-type: none"> ▪ 1 per student <i>Understanding Taxes</i> Information Sheet ▪ 1 per partnership <i>Taxes Infographic Scavenger Hunt</i> <p>Distribute the <i>Understanding</i></p>	
CONCLUSION OPTION	
<p style="text-align: center;"><u>Match 'em Up Taxes</u></p> <p><u>Approximate time:</u> 5-10 minutes</p> <p><u>Materials to prepare for conclusion option 1:</u></p> <ul style="list-style-type: none"> ▪ 1 copy per students of <i>Match 'em Up Taxes</i> <ol style="list-style-type: none"> 1. Distribute the <i>Match 'em Up Taxes</i> worksheet per student. 	

Understanding Taxes Vocabulary

	TERM	DEFINITION
1	Estate tax	A tax on the total value of someone's property after they pass away, before it gets passed on to their family or other people. This tax only applies if the estate is worth more than a certain amount.
2	Excise tax	A tax on specific goods or services, such as a gas tax, often designed to influence behavior or fund specific programs.
3	Income tax	A tax on the money earned by individuals or businesses, collected by federal, state, and sometimes local governments.
4	Luxury tax	A tax on expensive, non-essential items, typically paid by wealthier individuals.
5	Payroll tax	Taxes collected from an employee's wages to fund Social Security and Medicare programs.
6	Property tax	A tax on the value of property, such as real estate, vehicles, and boats.
7	Sales tax	A tax on the sale of goods and services, typically collected by state and local governments.
8	Sin tax	A type of excise tax imposed on products deemed harmful, such as cigarettes or alcohol, to discourage their use.
9	Tariff	A tax on goods imported from other countries, designed to make imported products more expensive.
10	Tax credit	A dollar-for-dollar reduction in the amount of tax owed, which can sometimes result in an income tax refund.
11	Tax deduction	An expense that reduces the amount of income that is subject to tax.
12	Tax evasion	The illegal act of not reporting or underreporting income to avoid paying taxes.
13	Voluntary compliance	The idea that individuals are responsible for reporting their income, filing tax returns, and paying the taxes they owe.

Quiz Me Cards: Understanding Taxes

Directions: With your partners, complete the Quiz Me Cards. Use the designation on each card to determine who will complete which section.

Term:

<p>Definition</p> <p style="text-align: right;">Partner 1</p>	<p>Personal Finance Context (Why is this important for you to understand?)</p> <p style="text-align: right;">Partner 3</p>
<p>2 Connecting Thoughts (2 details to help you remember this term)</p> <p style="text-align: right;">Partner 4</p>	<p>Picture or graphic (What image will help you remember this term?)</p> <p style="text-align: right;">Partner 2</p>

Term:

<p>Definition</p> <p style="text-align: right;">Partner 4</p>	<p>Personal Finance Context (Why is this important for you to understand?)</p> <p style="text-align: right;">Partner 2</p>
<p>2 Connecting Thoughts (2 details to help you remember this term)</p> <p style="text-align: right;">Partner 1</p>	<p>Picture or graphic (What image will help you remember this term?)</p> <p style="text-align: right;">Partner 3</p>

Term:

<p>Definition</p> <p style="text-align: right;">Partner 3</p>	<p>Personal Finance Context (Why is this important for you to understand?)</p> <p style="text-align: right;">Partner 1</p>
<p>2 Connecting Thoughts (2 details to help you remember this term)</p> <p style="text-align: right;">Partner 2</p>	<p>Picture or graphic (What image will help you remember this term?)</p> <p style="text-align: right;">Partner 4</p>

Term:

<p>Definition</p> <p style="text-align: right;">Partner 2</p>	<p>Personal Finance Context (Why is this important for you to understand?)</p> <p style="text-align: right;">Partner 4</p>
<p>2 Connecting Thoughts (2 details to help you remember this term)</p> <p style="text-align: right;">Partner 3</p>	<p>Picture or graphic (What image will help you remember this term?)</p> <p style="text-align: right;">Partner 1</p>

Taxes Infographic Scavenger Hunt

	Total Points Earned
30	Total Points Possible
	Percentage

Name _____

Date _____

Class _____

Directions: Use the Infographics to help you learn about taxes and the role they play in the United States.

How Much Do I Pay in Taxes? Infographic from Atlanta Federal Reserve

<https://www.atlantafed.org/-/media/documents/education/teach/infographic-posters/taxes-personal-finance.pdf>


Give two examples of taxes on something you buy.

Give two examples of taxes on your earnings.

Give two examples of taxes on things you own.

When the amount of taxes withheld from your earnings is greater than what you owe, what occurs?

What is the difference between gross and net income?




Gas Tax Rates by State (2024)

<https://taxfoundation.org/data/all/state/state-gas-tax-rates-2024/>

List the three states with the highest gas tax and the amount of their tax	List the three states with the lowest gas tax and the amount of their tax
1.	1.
2.	2.
3.	3.

Which of Arizona's neighboring states has the lowest gas tax?



Every State's Largest Source of Tax Revenue

<https://www.visualcapitalist.com/mapped-every-states-biggest-source-of-tax-revenue/>



List 3 states whose top revenue source is personal income	List 3 states whose top revenue source is sales tax	List 3 states whose top revenue source is other tax
1.	1.	1.
2.	2.	2.
3.	3.	3.

U.S. Property Taxes by State

<https://www.visualcapitalist.com/cp/us-property-taxes-by-state/>



What percent of income do people pay for property taxes in . . .

Maine	
Texas	
Alabama	
Arizona	
Montana	



Scroll down the page to find *The Highest Property Taxes per Person* data. What is the per capita (per person) property tax revenue in . . .

New Jersey	
Alaska	
Arizona	
Kentucky	
Wisconsin	

The majority of public education funding comes from local property tax revenue. What does the data tell you about school funding in Arizona?

Calculating Payroll Taxes

Directions: Read the following scenarios and use the payroll tax percentages to calculate payroll taxes.

<p>Scenario 1: Matti has started a new job and she wants to estimate how much her first paycheck will be. She will be working approximately twenty hours a week and is paid \$14.50 per hour.</p> <ol style="list-style-type: none"> 1. Calculate her weekly pay 2. Calculate how much her Social Security deduction will be based on 6.2%. 3. Calculate how much her Medicare deduction will be based on 1.45%. 	<ol style="list-style-type: none"> 1. Weekly pay 2. Social Security tax deduction 3. Medicare tax deduction
<p>Scenario 2: Joelle is self-employed and is responsible for paying both the employer and the employee portion of Social Security and Medicare taxes. If her paycheck is \$450, calculate her payroll tax deductions.</p>	<ol style="list-style-type: none"> 1. Social security tax deduction 2. Medicare tax deduction

<i>Wood & Nails, Inc.</i>		Pay Period: 2/1/20xx - 2/28/20xx			
Employee Larese, Stephan	SSN/Employee Identification Number 999-88-4444	Check # 1234	Check Amount		
Employee Address		2110 House St., Any City, USA 78676			
Pay Type	Gross Pay	Year-to-date Gross Pay	Deductions	Current	Year-to-date
Regular	\$12,541.67	\$25,083.33	Federal Withholding State Withholding Social Security Medicare 401K Medical Additional Withholding	\$3,010.00 \$832.77 \$777.58 \$181.85 \$440.68 \$124.67	\$6,020.00 \$1,665.53 \$1,555.17 \$363.71 \$881.36 \$249.34
Totals					\$10,735.11

Review this paycheck stub for Stephan Larese. Calculate his total deductions for the current pay period. Then subtract that number from his gross pay to determine his check amount.

Total Current Deductions

Check Amount

Match 'em Up Taxes

	Total Points Earned
10	Total Points Possible
	Percentage

Name _____

Date _____

Class _____

Directions: Fill in the blank to complete each sentence with the type of tax involved.

Word Bank		
Estate tax	Luxury tax	Sales tax
Excise tax	Payroll tax	Sin tax
Income tax	Property tax	Tariff

1. When I earn money from a job, I will pay _____.
2. When I have a job, my employer will pay _____ to fund Social Security and Medicare.
3. When I buy clothes or electronics, I will pay _____.
4. If I own a house or a car, I will have to pay _____.
5. If I inherit a large estate, it might be subject to _____.
6. When a foreign product is imported to the U.S., a _____ may be added to its price.
7. When I buy gas for my car, part of the price includes an _____.
8. When someone buys an expensive yacht or car, they may have to pay a _____.
9. If someone buys vape or tobacco products, they will pay a _____.

Understanding Taxes

Why We Pay Taxes

The government uses taxes to pay for public services that benefit everyone, such as schools, roads, police, and hospitals. Some services benefit everyone equally, like national defense, while others, like job training or health programs, benefit specific groups of people. Without taxes, the government wouldn't have money to pay for these services.

The power to collect taxes is given to the government by the U.S. Constitution (Article 1). Congress passes tax laws, and the IRS (Internal Revenue Service) makes sure that people follow them. Taxes reduce the amount of money you have to spend or save for yourself, but they allow the government to provide services that people couldn't easily provide on their own.

Income Tax

The federal government collects income tax on money you earn, such as salaries, wages, tips, and even money you make from investments like interest and dividends. States and cities may also collect income taxes, but not all do.

Income taxes help pay for things like national defense and social services.

Types of Taxes

Payroll Tax (FICA)

This tax is used to fund Social Security and Medicare, programs that support people when they retire or need medical care. Payroll taxes are taken from your paycheck by your employer. If you're self-employed, you pay the entire amount yourself, rather than splitting it with an employer.

Sales Tax

You pay sales tax when you buy goods or services. The amount is based on a percentage of the price and can vary by state or city.

Sales taxes are usually used to fund local programs, like schools and public transportation.

Estate Tax

This tax is on the value of property someone leaves behind when they pass away. Only estates worth over a certain amount pay this tax.

Tariffs

Tariffs are taxes on goods imported from other countries. They make foreign products more expensive, which can protect local businesses.

Excise Tax

This tax is on the value of property someone leaves behind when they pass away. Only estates worth over a certain amount pay this tax.

Tax Deductions and Credits

A deduction reduces the amount of income that is taxed. For example, if you spend money on something like business expenses or student loan interest, you can subtract that amount from your taxable income.

A tax credit directly reduces the amount of tax you owe. For example, you might get a credit if you're caring for children or other dependents, lowering the total taxes you have to pay. Some credits can even increase your refund if you don't owe any taxes.

How Taxes are Collected

Most people have taxes automatically taken from their paycheck by their employer. This is called withholding. When you start a job, you fill out a W-4 form. The more allowances you claim, the less tax is withheld, but you could end up owing taxes at the end of the year.

Self-employed people don't have taxes withheld, so they must pay estimated taxes every few months to avoid a large bill at the end of the year.

Voluntary Compliance and Filing Taxes

The U.S. tax system is based on voluntary compliance, meaning it's up to individuals to report their own income, file tax returns, and pay what they owe. Most people comply with this system by following tax laws, filling out forms, and paying on time. If people don't report all of their income (called tax evasion), they're breaking the law. However, using legal ways to reduce taxes (like deductions and credits) is called tax avoidance and is perfectly legal.

Underground Economy

The underground economy refers to income that is earned but not reported to the IRS, often from informal jobs like babysitting or lawn care. Since this income isn't reported, taxes aren't paid on it, which can hurt government revenue. If enough people do this, there's less money for public services, or the government might have to increase taxes on those who do report their income.

Excise taxes are often used to influence behavior or fund specific services. They are added directly to the price of certain products.

Sin taxes

These are added to products like cigarettes and alcohol to discourage unhealthy behavior.

Gasoline Tax

A tax on gasoline helps fund road maintenance and environmental programs.

Luxury Taxes

These taxes are applied to expensive, non-essential items like luxury cars. The revenue is used to benefit everyone.

Calculating Payroll Taxes

Answer Key

Scenario 1: Matti

1. Weekly pay: \$290.00
2. Social Security deduction: \$17.98
3. Medicare deduction: \$4.21

Scenario 2: Joelle

1. Weekly pay: \$55.80
2. Social Security deduction: \$13.05

Stephen Larese

1. Total deductions: \$5,367.55
2. Check amount: \$7,174.12

Match 'em Up Taxes

Answer Key

1. Income Tax – When I earn money from a job, I will pay income tax.
2. Payroll Tax – When I have a job, my employer will pay payroll tax to fund Social Security and Medicare.
3. Sales Tax – When I buy clothes or electronics, I will pay sales tax.
4. Property Tax – If I own a house or a car, I will have to pay property tax.
5. Estate Tax – If I inherit a large estate, it might be subject to estate tax.
6. Tariff – When a foreign product is imported to the U.S., a tariff may be added to its price.
7. Excise Tax – When I buy gas for my car, part of the price includes an excise tax.
8. Luxury Tax – When someone buys an expensive yacht or car, they may have to pay a luxury tax.
9. Sin Tax – If someone buys cigarettes or alcohol, they will pay a sin tax.