



# **Taxed and Confused**

## **Understanding Taxes**



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**Grade Level** 11th – 12th Grade **Time Frame** 110 Minutes

**Subject** Mathematics **Duration** 2 - 3 Periods

**Course** Math of Finance

### **Essential Question**

Why do we pay taxes, and what do we get in return?

### **Summary**

In this interactive lesson, students explore the purpose, types, and effects of taxes at the local, state, and federal levels. Through group research, real-world scenarios, and math-based problem solving, they learn how taxes fund public services and impact individuals and businesses. The lesson wraps up with a reflective journal to help students connect their learning to civic life.

### **Snapshot**

#### **Engage**

Students participate in an ABC Graffiti activity, rotating around posters to brainstorm and respond to questions to activate prior knowledge and spark curiosity about the role of taxes in everyday life.

#### **Explore**

Partner groups investigate various types of taxes using a guided handout and present their findings through an Elevator Speech.

#### **Explain**

Students engage in discussions, visuals, and partner work to define taxes, categorize them by government level, and understand how tax dollars fund public services. They analyze where tax money comes from, how it impacts take-home pay, and how businesses are taxed, using both visual aids and a class-modeled scenario.

#### **Extend**

In small groups, students rotate through realistic taxation scenario task cards, solving problems that include math applications. As an optional extension, groups may present one scenario to the class, explaining their solution and reasoning.

#### **Evaluate**

Students complete a reflective journal using a modified S-I-T (Surprising, Interesting, Troubling) strategy to assess their learning, personal reactions, and perspectives on taxation.

#### **Attachments**

- ABC Graffiti—Taxed and Confused.docx
- ABC Graffiti—Taxed and Confused.pdf
- ABC Grafitti Poster 8.5x11—Template.pdf
- Comic Strip—Taxed and Confused.docx
- Comic Strip—Taxed and Confused.pdf
- Lesson Slides Taxed and Confused.pptx
- <u>Tax Investigator—Taxed and Confused.docx</u>
- Tax Investigator—Taxed and Confused.pdf
- <u>Tax Knowledge Questions—Taxed and Confused.docx</u>
- Tax Knowledge Questions—Taxed and Confused.pdf
- Tax Scenario Task Cards—Taxed and Confused.docx
- Tax Scenario Task Cards—Taxed and Confused.pdf

### **Materials**

- Lesson Slides (attached)
- ABC Graffiti Posters (attached; optional)
- ABC Graffiti handout (attached; one per group)
- Tax Investigator handout (attached; one half-sheet per group)
- Tax Knowledge questions (optional, attached; one copy for instructor)
- Tax Scenario Task Cards (attached; one card per group)
- Comic Strip (attached, optional; one per student)
- Notebook paper (one per student)
- Chart paper
- Markers
- Sticky notes

## **Engage**

#### Teacher's Note - Preparing the lesson

Before the lesson, print the attached **ABC Graffiti posters or handouts**. Print four copies, one for each prompt. Attach one of the prompts to the top of each ABC Graffiti poster for students to reference throughout the activity.

#### Prompts:

- 1. Why do we pay taxes?
- 2. What do we pay taxes on?
- 3. Who do we pay taxes to?
- 4. What type of taxes do we pay?

Begin by opening the attached Lesson Slides and transition through **slides 2-4** to review the essential questions and lesson objectives with your students in as much detail as you feel necessary.

Display **slide 5**. Explain to your students that they will complete an <u>ABC Graffiti</u> activity in which they will respond to each of four prompts about paying taxes. Divide the class into four (or more) groups, set a <u>two-minute timer</u>, provide each group a different-colored marker, and have them rotate around chart paper and prompts posted around the room.

- 1. Why do we pay taxes?
- 2. What do we pay taxes on?
- 3. Who do we pay taxes to?
- 4. What type of taxes do we pay?

When the allotted time expires, have student groups rotate to the next station. Remind students to pick up where the last group left off and reset the timer. For the final rotation, you may choose to allow students to use an external resource or add to letters that were previously used. Then have groups move to their original poster to construct a summary statement that synthesizes the poster's information which they will share with the class.

## **Explore**

Display **slide 6** to begin a conversation about the typical kinds of taxes people pay. Pair up your students and distribute the attached **Tax Investigator** handout. Each partner group will investigate different types of taxes (federal payroll, state income, property, sales, estate/inheritance, custom/tariff, capital gains, corporate income, vehicle registration, and hotel/lodging taxes). Tell students they will present their findings to the class. Allow an adequate amount of time for research.

#### **Teacher's Note - Presentation options**

Consider using one of the following strategies for students to present their tax research. Choose the format that best fits your time and classroom setup.

#### **Small Group: Speed Dating**

- 1. Assign each student in the partner groups as **Partner A** or **Partner B**.
- 2. Have all A's lineup shoulder-to-shoulder on one side of the room, and all B's lineup facing them on the other side.
- 3. Set a 1-minute timer. Partner A will explain their research to Partner B.
- 4. When the timer ends, reset it, and Partner B now shares their information with Partner A.
- 5. After both partners have presented, have **one line rotate** (e.g., all A's move one spot to the right) so that everyone gets a new partner.
- 6. Repeat the process until students have rotated through and shared with multiple classmates in their group.

#### **Whole Group: Rapid Presentation**

- 1. Set a **1-minute timer per group**.
- 2. Have each partner group stand at their desks and briefly present their findings to the class.
- 3. Encourage students to cover:
  - What kind of tax it is.
  - What it pays for.
  - Who pays it and how,

Move to **slide 7** and explain the <u>Elevator Speech</u> strategy. If partner groups have researched the same tax, allow time for them to work together to hone their presentations. Explain that they may use their handouts to guide their short presentations, but they shouldn't read from them. Each pair will then quickly present their findings to the class related to their research:

- What kind of tax is it?
- What does the tax pay for?
- Who pays for the tax and how?
- What are some examples of when a tax is added and who benefits from it?

### **Teacher's Note - Guiding the Lesson**

During a traditional 45-minute class period, this lesson will naturally need to be paused and resumed the next day. A smooth transition could be to pause the lesson after completing the presentations.

Depending on the time left in class, consider using the attached **Tax Knowledge Questions** to review content with the class at the end of Day 1 of the lesson or to re-engage the class at the beginning of Day 2.

30 minutes

## **Explain**

Present **slide 8** to present and discuss the comic "A Day without Taxes." Alternatively, share the attached **Comic Strip** with students to view digitally on their own devices.

Move on to **slide 9** and ask each student to get out a blank sheet of paper to address the <u>Think-Pair-Share</u> prompt, "Which public service would you miss the most without taxes? Why?" Allow time for thinking and partner conversations, then pass out a sticky note to each student. Have them write their responses on the sticky note. Explain the <u>Sticky Bars</u> strategy to students and have them organize a sticky note bar chart on the board. Conduct a whole-class discussion using the information shown by the bar graph made up of the sticky notes.

Solicit ideas from the class defining what a tax is, then present **slide 10**. Do the same for the prompt, "Why do we pay taxes?" then, after discussion, move on to **slide 11** and discuss.

#### **Teacher's Note: Optional enrichment video**

If time allows, consider unhiding **slide 12** and showing the class Understanding Taxes, Cash Course, by PraegerU Kids. This 5:40 minute video provides a brief overview of taxes, what they are, and who pays them.

https://www.youtube.com/watch?v=P1D9zvd04eM

Ask students to make a three-column chart headed *Local, State,* and *Federal* on a blank sheet of paper. Present **slide 13** and have them work with an <u>Elbow Partner</u> to sort the taxes and services on the slide. When sufficient time has passed, reveal **slide 14** and discuss the correct answers.

#### Teacher's Note: Optional enrichment video

If time allows, consider unhiding **slide 15** and showing the class *Taxes: What do They Pay for?* This 7:36 minute video provides a brief overview of services provided by the government that are funded by tax dollars.

https://www.youtube.com/watch?v=HJV7SbkeC60

Continue to **slide 16** to synthesize the information that the class has been exploring throughout the lesson. Explain that the table shows different types of taxes, what they are used for, and most importantly, who pays them. As you look across the chart, you'll notice something important: taxes are collected at every level of government, and from nearly everyone, so one single dollar can actually be taxed multiple times as it moves through the economy.

Use **slide 17** to support this point, showing students that an individual will pay Paycheck, Income, and Sales tax on their paycheck, resulting in their only receiving about 70% of their earnings to spend.

Show **slide 18** to describe the impact on taxes on businesses, explaining that before an individual receives a paycheck, the business will pay taxes on the profits of their business and even a portion of their employees' income. Model a tax scenario with the class and advance to **slide 19** to show the answer to the scenario.

Transition to **slide 20** and ask students to take a moment to respond to the prompt on a sheet of paper before turning to their Elbow Partner and sharing their response. If time allows, ask individuals to share their writing with the whole class.

### **Extend**

Form partner groups and present **slide 21**. Distribute a **Tax Scenario task card** to each group station and ask each group to use one sheet of paper to record their work. Explain to the class that each card presents a short, realistic taxation scenario. Set a <u>three-minute timer</u> and instruct the groups to record their reasoning and solution on their group paper.

After the timer ends, ask the groups to keep the task cards at its station and prompt groups to rotate to the next card, bringing their paper with them. Reset the timer and ask them to solve the next scenario on their sheet of paper. This process continues until each group has completed all scenarios.

#### **Teacher's Note: Optional discussion**

After rotations:

- Choose **one scenario** as a class to discuss or work through together on the board.
- OR assign each group a specific scenario to **revisit and master**. Give them a few minutes to finalize their solution and prepare a 30-Second <u>Expert Stay and Stray</u> Presentation to:
  - Summarize the scenario
  - o Explain the math
  - Share their reasoning

10 minutes

## **Evaluate**

Display **slide 22**. Ask students to complete a reflective journal entry using a modified <u>S-I-T (Surprising, Interesting, Troubling)</u> strategy, addressing the following questions:

- What is one thing you learned about taxes that surprised you?
- Why do you think understanding taxes is important for citizens?
- How do you feel about the current tax system?

Collect student journals, address concerns, and conduct a final discussion.

#### Resources

- Gemini. (2025, June 13). Who pays taxes? [Al-generated digital art]. Google. https://gemini.google.com
- Gemini. (2025, June 13). Work hats [Al-generated digital art]. Google. <a href="https://gemini.google.com">https://gemini.google.com</a>
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- K20 Center. (n.d.). Elbow partners. Strategies. https://learn.k20center.ou.edu/strategy/116
- K20 Center. (n.d.). Elevator speech. Strategies. https://learn.k20center.ou.edu/strategy/57
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- K20 Center. (n.d.). One Minute Timer. YouTube. <a href="https://www.youtube.com/watch?v=6ilD5550">https://www.youtube.com/watch?v=6ilD5550</a> RE&ab channel=K20Center
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- K20 Center. (2021, September 21). Three Minute Timer. YouTube. <a href="https://www.youtube.com/watch?v=ilSP02KPau0&list=PL-aUhEQeaZXLMF3fltNDxiuSkEr0pq0c2&index=5&t=13s">https://www.youtube.com/watch?v=ilSP02KPau0&list=PL-aUhEQeaZXLMF3fltNDxiuSkEr0pq0c2&index=5&t=13s</a>
- Miacademy Learning Channel. (n.d.). Taxes: What do they pay for? Government services and spending [Video]. YouTube. <a href="https://www.youtube.com/watch?v=HJV7SbkeC60">https://www.youtube.com/watch?v=HJV7SbkeC60</a>
- Pixabay. (2015, March 1). Puzzle missing particle last piece [Photograph]. Pixabay. <a href="https://pixabay.com/photos/puzzle-missing-particle-last-piece-654963/">https://pixabay.com/photos/puzzle-missing-particle-last-piece-654963/</a>
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