

PFL Academy

Teacher Guide: Chapter 1.3 — Income and Taxes

OVERVIEW

| TIME | MATERIALS | PREREQUISITES |
|---------------|--|-------------------|
| 45-50 Minutes | Student Activity Packet, Calculator | Basic Percentages |

LESSON FLOW

5 min THE CHALLENGE

- Read Maria's paycheck scenario aloud.
- Discussion: "Have you or anyone you know been surprised by how much smaller their paycheck was than expected?"

10 min CORE CONCEPTS

- Review 5 key terms. Emphasize gross vs. net distinction.
- Create two columns on board: Mandatory vs. Voluntary deductions.
- Quick check: Students sort common deductions into correct categories.

25-30 min APPLY IT

- **Part A (5 min):** Classification activity. Check understanding of mandatory vs. voluntary.
- **Part B (15 min):** Paycheck calculations. Walk through first calculation ($\$4,000 \times 0.12$) if needed.
- **Part C (5-10 min):** Jordan's scenario. Connect to students' part-time job experiences.

10 min CHECK YOUR UNDERSTANDING

- Complete in class or assign as homework.
- Review Q4 (Alex/Jamie comparison) to reinforce compound growth concept.

DIFFERENTIATION

Support

- Provide a percentage-to-decimal conversion chart.
- Work through Part B line-by-line on the board as a class.
- Use a visual "paycheck pie chart" showing where money goes.
- Pair students for calculation practice.

Extension

- Research current FICA rates and income tax brackets.
- Calculate the 40-year impact of different 401(k) contribution levels.
- Compare net income across different states (varying state tax rates).

ANSWER KEY

Part A: Deduction Classification

- 1. Social Security:** MANDATORY. Required by federal law (FICA); funds retirement benefits.
- 2. 401(k):** VOLUNTARY. Employee chooses to participate; can opt out or change contribution amount.
- 3. Federal Income Tax:** MANDATORY. Required by law; amount varies based on income and W-4 elections.

Part B: Paycheck Calculation

Gross Monthly Income: \$4,000

Deductions:

- Federal Income Tax: $\$4,000 \times 0.12 = \480
- State Income Tax: $\$4,000 \times 0.05 = \200
- Social Security: $\$4,000 \times 0.062 = \248
- Medicare: $\$4,000 \times 0.0145 = \58
- Health Insurance: \$200 (flat)
- 401(k): $\$4,000 \times 0.06 = \240

Total Deductions: \$1,426

Net Monthly Income: $\$4,000 - \$1,426 = \$2,574$

- 4.** Percentage to deductions: $\$1,426 \div \$4,000 \times 100 = 35.65\%$
- 5.** Without 401(k): \$240 more per month. **Not a good trade-off** because: (1) loses employer match (free money), (2) loses tax-deferred growth, (3) loses compound growth over time—as shown by Alex/Jamie example.

Part C: Personal Application

Jordan's Calculation:

$\$15/\text{hour} \times 15 \text{ hours/week} \times 4 \text{ weeks} = \900 gross monthly

$\$900 \times 0.18 = \162 deductions

Net monthly income: $\$900 - \$162 = \$738$

- 6.** Gross Monthly Income: **\$900**
- 7.** Net Monthly Income: **\$738**

Check Your Understanding

- 1.** B (Social Security and Medicare)
- 2.** Gross income doesn't reflect actual take-home pay. Deductions (taxes, insurance, retirement) reduce the amount available for spending. Budgeting with gross income leads to overspending.
- 3.** Total deductions: $22\% + 8\% = 30\%$. $\$3,000 \times 0.30 = \900 . Net income: $\$3,000 - \$900 = \mathbf{\$2,100}$
- 4.** Early voluntary deductions (like 401(k) contributions) benefit from compound growth. Starting 8 years earlier nearly doubled Alex's retirement savings. Time is the most powerful factor in building wealth through investments.
- 5.** *Should include: using net income for realistic budgeting, understanding that "more" in voluntary deductions (401k) can mean "more" later, balancing immediate needs with long-term savings.*

COMMON MISCONCEPTIONS

Misconception

Clarification

| | |
|---|--|
| "My employer is taking my money." | Mandatory deductions are required by law and fund programs you'll use (Social Security, Medicare). Voluntary deductions are your choice and often provide valuable benefits. |
| "I should skip 401(k) to get more money now." | Skipping retirement contributions means losing employer matching (free money) and tax-deferred compound growth. The Alex/Jamie example shows this costs hundreds of thousands over time. |
| "Getting a big tax refund is great." | A large refund means you over-withheld throughout the year—giving the government an interest-free loan. Better W-4 adjustments mean more money in each paycheck. |