

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: $\$3,000 - \$900 = \$2,100$
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
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"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.