PFL Academy

Teacher Guide: Chapter 5.6 — Planning for Retirement

OVERVIEW

TIME	MATERIALS	PREREQUISITES
45-50 Minutes	Student Activity Packet, Calculator	Chapters 5.1-5.5 (Saving, Investing, Risk)

LESSON FLOW

5 min — **THE CHALLENGE**

- Present the 50/30/20 calculation challenge. Ask: "What salary would you need?"
- Let students estimate before revealing the math—most will underestimate.
- Preview that today connects all previous concepts to real retirement planning.

8 min — **CORE CONCEPTS**

- Review saving vs. investing with the comparison table. Emphasize time horizon.
- Introduce the 50/30/20 rule as a budgeting framework.
- Discuss why starting early matters—connect to compounding lessons from Chapter 5.2.

27-30 min — **APPLY IT**

- **Part A (6 min):** Financial products comparison. Focus on matching products to time horizons.
- **Part B (8 min):** Retirement accounts. Emphasize Traditional vs. Roth tax treatment.
- **Part C (4 min):** 50/30/20 rule explanation—foundation for the calculation.
- **Part D (7 min):** Solve the challenge. Walk through calculation together.
- **Part E (5 min):** Personal strategy—have students think about their own future.

10 min — **CHECK YOUR UNDERSTANDING**

- Focus on Q2 (employer match logic) and Q3 (25-year-old vs. 35-year-old comparison).
- Reinforce: Time is the most powerful factor in retirement planning.

DIFFERENTIATION

Support

- Walk through the calculation step-by-step on the board.
- Provide a simplified account comparison chart with just 3 options.
- Use concrete examples: "If you earn $40,000, 20% is $8,000/year or $667/month."
- Pair students for the retirement strategy planning.

Extension

- Calculate how much they'd have at 65 if they started at different ages.
- Research employer 401(k) plans from companies they might work for.
- Create a detailed 40-year retirement projection with varying contribution rates.
- Analyze the impact of Social Security changes on retirement planning.

ANSWER KEY

Part A: Financial Products

1. Emergency fund recommendation: High-yield savings account. Because: immediate liquidity (can access instantly), FDIC insured (safe from loss), still earns some interest (3-5%). Emergency funds need to be accessible immediately without risking principal.

2. Index funds vs. individual stocks for retirement: Index funds provide built-in diversification across many companies, reducing risk. Individual stocks concentrate risk in one company—if that company fails, you could lose everything. Over 40+ years, diversified index funds historically match market returns with lower risk.

Part B: Retirement Accounts

3. Higher tax bracket in retirement → Roth is better. With Roth, you pay taxes now (at your current lower rate) and withdraw tax-free in retirement (when rates would be higher). With Traditional, you'd pay the higher rate when you withdraw.

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Employer Match Calculation (Q4):
Salary: $50,000
Your contribution: 6% = $3,000/year
Employer match: 50% of your contribution = $1,500/year
Total going into 401(k): $4,500/year
The employer match is essentially a 50% return on your contribution!
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Part D: The Challenge Calculation

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Step 1: Total Maximum Contributions
401(k): $23,000
Traditional IRA: $7,000
Roth IRA: $7,000
Total: $37,000

Step 2: Apply 20% Rule
$37,000 ÷ 0.20 = $185,000

Required Annual Income: $185,000
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5. Target annual income: **$185,000**

6. Realistic for entry-level? No—this is well above typical starting salaries. Alternatives: Start with a smaller percentage (10-15%), focus on getting employer match first, increase contributions as salary grows, prioritize one account at a time (401(k) match → Roth IRA → additional 401(k)).

Part E & Check Your Understanding

> *Personal retirement strategy responses will vary. Look for realistic salary expectations, appropriate allocation between accounts, and understanding of employer match priority.*

1. B (Tax-free withdrawals in retirement)

2. Employer match = free money: If your employer matches 50%, that's an immediate 50% return on your contribution before any investment growth. No other investment offers guaranteed 50% returns. You should always contribute at least enough to get the full match.

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25-year-old vs. 35-year-old Comparison:
25-year-old: $500/month × 40 years @ 7% ≈ $1,200,000
35-year-old: $750/month × 30 years @ 7% ≈ $900,000

Despite contributing $90,000 MORE ($750×12×30 = $270,000 vs $500×12×40 = $240,000), the 35-year-old
ends up with $300,000 LESS!
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3. The 25-year-old will have more (~$1.2M vs ~$900K) despite lower monthly contributions. The extra 10 years of compounding is more valuable than the extra $250/month. Time beats amount.

COMMON MISCONCEPTIONS

Misconception	Clarification
"I can't afford to save for retirement yet."	Even small amounts matter enormously due to compounding. $50/month starting at 22 can grow to $150,000+ by 65. Waiting 10 years to "afford" more actually costs you money.
"Social Security will take care of my retirement."	Social Security replaces only about 40% of pre-retirement income for average earners. It's a supplement, not a full retirement plan. You need personal savings.
"I should max out my IRA before my 401(k)."	If your employer offers a match, ALWAYS contribute enough to get the full match first. That's a guaranteed 50-100% return. Then consider IRA. Only then consider additional 401(k) beyond the match.