PFL Academy

Teacher Guide: Chapter 5.1 — Understanding the Cost of Borrowing

OVERVIEW

TIME	MATERIALS	PREREQUISITES
45-50 Minutes	Student Activity Packet, Calculator	Basic multiplication/division

LESSON FLOW

5 min — **THE CHALLENGE**

- Read Julia's student loan scenario aloud or have students read silently.
- Discussion prompt: "Has anyone in your family ever had to choose between loan options? What did they consider?"

10 min — **CORE CONCEPTS**

- Review the 5 key terms. Emphasize the difference between interest rate and APR.
- Clarify secured vs. unsecured: "What can the lender take if you don't pay?"
- Read the Background paragraph together; highlight "total cost" concept.

25-30 min — **APPLY IT**

- **Part A (10 min):** Individual or pairs. Check that students justify answers beyond just "lower rate."
- **Part B (10 min):** Walk through first row calculation if needed. Emphasize credit card trap.
- **Part C (5-10 min):** Personal reflection. Encourage realistic future scenarios.

10 min — **CHECK YOUR UNDERSTANDING**

- Complete in class or assign as homework.
- Review Q3 (calculation) together to reinforce total cost concept.

DIFFERENTIATION

Support

- Pre-teach vocabulary (APR, collateral) before starting.
- Provide a formula card: Total Cost = Principal + Total Interest.
- Walk through Part B calculations on the board together.
- Pair struggling students with peer mentors.

Extension

- Research current auto loan and credit card rates online.
- Calculate how much extra payments would save on a loan.
- Compare two real student loan offers and present findings.

Part A: Loan Type Analysis

1. SECURED. Auto loans use the car as collateral, resulting in lower interest rates. Marcus can afford the payments and needs reliable transportation for work.

2. PERSONAL LOAN. At 12% vs. 18%, the personal loan saves significant interest. Fixed payments over 24 months provide structure for repayment.

3. FEDERAL. Lower rate (4.5% vs. 7.2%), no origination fee, and deferred payments provide better terms and flexibility.

Part B: Total Cost Comparison

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Total Cost = Principal + Total Interest
• Federal Student Loan: $10,000 + $2,480 = $12,480
• Credit Card: $10,000 + $15,432 = $25,432
• Auto Loan: $10,000 + $1,580 = $11,580
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4. $25,432 − $12,480 = **$12,952 more** with credit card.

5. Credit cards charge compound interest on unpaid balances, and minimum payments barely cover interest. The 18% rate applied over 28 years accumulates far more interest than the 4.5% rate over 10 years.

Part C: Personal Application

Responses will vary. Look for: identification of appreciating assets or income-generating purposes (education, home), consideration of ability to repay, and awareness of total cost vs. monthly payment.

Check Your Understanding

1. C (Annual Percentage Rate)

2. Secured loans carry less risk for lenders because they can repossess the collateral (car, house) if the borrower defaults. Lower risk = lower rates.

3. $157 × 36 months = **$5,652 total**. Interest = $5,652 − $5,000 = **$652**

4. At 4.5%, Julia pays approximately $2,480 in interest. At 6.8%, she would pay approximately $3,800. Savings: approximately **$1,320**.

5. *Reflection should include specific questions like: What is the APR? What is the total cost? Are there prepayment penalties? What happens if I miss a payment?*

COMMON MISCONCEPTIONS

Misconception	Clarification
"A lower monthly payment is always better."	Lower payments often mean longer terms and MORE total interest paid. Always compare total cost.
"Interest rate and APR are the same thing."	APR includes fees and other costs, making it higher than the base interest rate. APR is the true cost.
"All debt is bad debt."	Strategic borrowing for appreciating assets (education, home) or emergencies can be financially sound when managed responsibly.