Choose a Bank, Build an Emergency Fund — Teacher Guide

Financial Algebra · Unit 3: Banking & Saving

2–3 class periods | Individual or pairs | Skills: Skill 1, Skill 2, Skill 3, Skill 4

Overview

Nearly every financial plan starts with a safe place for money and a cushion for emergencies. You will compare three fictional institutions, estimate fees and interest, reconcile a statement, and build a 3-year emergency-fund plan for Kofi.

Skills covered

- Understand account fees (banking-skill-01)
- Calculate simple interest (banking-skill-02)
- Compare savings products (banking-skill-03)
- Interpret bank statements (banking-skill-04)

Required materials

- Student packet
- Spreadsheet software recommended

Suggested pacing

Session	Focus
Day 1	Tasks 1–2
Day 2	Tasks 3–4
Day 3 (optional)	Share plans

Implementation guidance

- Model one month of the savings simulation before students start.
- Discuss that online APYs are variable.
- Pair with the Decision Lab “Choose a Bank & Build an Emergency Fund.”

Worked calculations

Task 1 (fees, one year)

1. Metro: savings fee applies until $2,500 — see Task 2; checking free with direct deposit; overdrafts 2 × $35 = $70.
2. Clearwater: 3 ATM uses × 12 × about $3 = $108 in ATM fees; no overdraft fees.
3. Credit union: free network ATMs; overdrafts 2 × $25 = $50; $5 membership once.

Task 2 (36 months)

1. Metro: balance $5,025.82, interest $0.82, fees $75.00; reaches $4,500 in month 32.
2. Clearwater: balance $5,433.79, interest $333.79; reaches $4,500 in month 30.
3. Credit union: balance $5,306.81, interest $211.81, membership $5; reaches $4,500 in month 31.

Task 3

1. 412.30 + 1,104.62 × 2 − 750 − 55 − 3 − 146.18 − 125 = $1,542.36.
2. Available after the $60 outstanding check: $1,482.36.

Sample student responses

> “I chose the credit union for checking because its network ATMs eliminate my $108 in ATM fees, and Clearwater for savings because it reaches $4,500 two months sooner than Metro. The 1–2 day transfer delay is fine because I keep $300 in checking for instant needs.”

Common misconceptions

- Treating APY as a guarantee.
- Ignoring transfer delays for emergency money.
- Forgetting outstanding checks when reconciling.

Differentiation

Support

- Provide a pre-built spreadsheet template.

Extend

- Add a 12-month CD for part of the fund and compare.

Extension opportunities

- Compare two real banks' published fee schedules.

100-point rubric

Category (points)	Exemplary (100%)	Proficient (~80%)	Developing (~60%)	Beginning (~30%)
Financial understanding (20)	Uses vocabulary precisely and explains every financial concept involved, including assumptions.	Mostly accurate explanations with minor vocabulary gaps.	Partial understanding; some concepts misapplied.	Little evidence of understanding.
Mathematical accuracy (25)	Fee estimates, 36-month simulations, and reconciliation are correct.	1–2 minor errors that do not change conclusions.	Several errors or missing work.	Calculations largely missing or incorrect.
Analysis & comparison (20)	Compares every option on the same basis and tests at least one changed assumption.	Compares options with small gaps.	Comparison superficial or uneven.	Little analysis.
Justification (15)	Recommendation is supported by specific numbers and weighs non-financial factors and risks.	Mostly supported.	Mostly opinion.	No justification.
Communication & presentation (10)	Clear, organized, well-labeled tables, charts, and writing.	Minor clarity issues.	Hard to follow in places.	Disorganized.
Completion (10)	Every checklist item complete.	One item missing.	Two or three items missing.	Most items missing.

Total: 100 points. Alternative recommendations earn full credit when supported by accurate evidence.

Student documents (reference)

Account options (fictional)

	Metro National	Clearwater Online	Riverton Teachers CU
Savings APY	0.01%	3.90% (variable)	2.50%
Monthly fee	$5 if balance < $2,500	None	None ($5 one-time membership)
Checking	Free with direct deposit	Free; no ATMs (fees not refunded)	Free; 300 network ATMs
Overdraft	$35 per item	Declines transaction	$25 per item
Transfers	Instant	1–2 business days	Instant
Insurance	FDIC	FDIC	NCUA

Kofi's habits

Habit	Detail
ATM use	About 3 cash withdrawals per month
Overdrafts last year	2
Direct deposit	Yes, biweekly
Checking balance	Usually $200–$700

Kofi's March checking statement (excerpt)

Date	Description	Amount
03/01	Beginning balance	$412.30
03/05	Payroll deposit	$1,104.62
03/06	Rent share	−$750.00
03/12	Phone	−$55.00
03/15	Non-network ATM fee	−$3.00
03/19	Payroll deposit	$1,104.62
03/21	Groceries	−$146.18
03/27	Transfer to savings	−$125.00
03/31	Ending balance	?