The Traveling Deposit

Follow an oven purchase through three banks

GE.6.3 "Demonstrate how banks create money through the principle of fractional reserve banking."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline the sentences that show a loan leading to a new deposit, circle each amount a bank keeps as reserves, and number the three deposits listed at the end of paragraph 2 in the order they were created.

How One Deposit Leads to Others

1. Suppose a town's banks must keep at least 10 percent of their deposits as reserves, money available to meet withdrawals and payments. A customer deposits $1,000 at Bank A. Bank A keeps $100 in reserves to back that deposit. It approves a $900 loan for a baker buying an oven and credits the baker's account with $900. The loan creates a new bank deposit rather than replacing the first customer's deposit. When the baker pays the oven seller, the banks transfer funds to settle the payment. The first customer still has a $1,000 deposit.

2. The oven seller deposits the $900 payment at Bank B. Bank B keeps $90 of that deposit as reserves and makes an $810 loan to a driver. The driver pays a mechanic, who deposits the $810 at Bank C. The town now has three deposits from this chain: $1,000 at Bank A, $900 at Bank B, and $810 at Bank C. Those balances total $2,710, even though the chain started with one $1,000 deposit. Each loan added a deposit when someone spent borrowed money and the person receiving the payment put it in a bank.

3. Bank C would need to keep $81 of its $810 deposit as reserves, leaving room for a loan of up to $729 under the town's rule. This pattern is called fractional reserve banking: banks keep a fraction of deposits as reserves while lending helps expand deposit money. In this simplified example, each possible new loan is smaller because each receiving bank keeps 10 percent of its deposit. The chain is not unlimited. Someone might take cash instead of making another deposit, or a bank might find no qualified borrower. Banks must also manage the risk that loans will not be repaid.

2 ANSWER WITH EVIDENCE

Use the passage

1. How does Bank A's $900 loan add a deposit without removing the first customer's $1,000 deposit?

2. Trace how the $900 deposited at Bank B leads to the $810 deposit at Bank C. Include the reserve amount Bank B keeps.

3. Add the three deposits listed at the end of paragraph 2. How much larger is their total than the starting deposit, and what caused the difference?

4. If the mechanic took the $810 as cash instead of depositing it at Bank C, why could Bank C not make the $729 loan described in paragraph 3?

3 YOUR TURN

Your own words

In another town, banks must keep 20 percent of deposits as reserves. Starting with a new $2,000 deposit, describe two rounds of lending and redepositing, giving the reserves kept and the loan made in each round. Assume each bank lends the maximum allowed and each loan is fully spent and redeposited, then explain how deposits grow and give one reason the chain might stop.

ANSWER KEY

The Traveling Deposit

PART 1 · READ AND MARK

Underline the sentences that show a loan leading to a new deposit, circle each amount a bank keeps as reserves, and number the three deposits listed at the end of paragraph 2 in the order they were created. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	How does Bank A's $900 loan add a deposit without removing the first customer's $1,000 deposit?	**Bank A credits the baker's account with $900 when it makes the loan. The first customer's $1,000 remains in their account.**
2	Trace how the $900 deposited at Bank B leads to the $810 deposit at Bank C. Include the reserve amount Bank B keeps.	**Bank B keeps $90 in reserves and lends $810 to the driver. The driver pays the mechanic, who deposits $810 at Bank C.**
3	Add the three deposits listed at the end of paragraph 2. How much larger is their total than the starting deposit, and what caused the difference?	**The deposits total $2,710, which is $1,710 more than the starting $1,000. The $900 and $810 loans led to new deposits.**
4	If the mechanic took the $810 as cash instead of depositing it at Bank C, why could Bank C not make the $729 loan described in paragraph 3?	**Bank C would not receive the $810 deposit, so it would not have that deposit to support a loan of up to $729.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Bank A keeps $400 of the $2,000 deposit in reserves and makes a $1,600 loan. After that money is spent and deposited at Bank B, Bank B keeps $320 in reserves and makes a $1,280 loan. That money is spent and deposited at Bank C. The three deposits now total $4,880, while the loans added $2,880 in deposit money. The chain might stop if Bank C finds no qualified borrower.

Accept explanations that distinguish new deposit balances from newly printed cash. For Part 3, the required reserve and loan amounts are $400 and $1,600 in round one, then $320 and $1,280 in round two.