



FEDERAL RESERVE BANK
OF PHILADELPHIA

What Is Money?

By Bonnie T. Meszaros

*A lesson to accompany the
“Money in Motion” Exhibit*

Introduction

Throughout history man has traded or exchanged goods, services, and resources because he expects to be better off. Initially, trading was carried out through barter, the direct exchange of goods and services. Barter is an inefficient means of trading primarily because of the problems of divisibility and the need for each trader to have what the other wants. Commodity money was introduced by societies in order to fix some of these problems. Commodity money is a good that has value both as money and as a good. As with barter, commodity money was not a perfect medium of exchange. Depending on the commodity, there were problems with goods being portable, divisible, acceptable, durable, relatively scarce, and stable in value. Today, these problems are largely solved through the use of fiat money, money declared by government to be acceptable for the exchange of goods, services, and resources. U.S. currency and coins are examples of fiat money.

Grades

3-5

Concepts

Barter
Coincidence of Wants
Commodity Money
Money
Characteristics of Money

Content Standards

Voluntary National—Content Standard 11
Delaware—Economics Standards: Standard 2, grades K-3; Standard 3, grades 4-5
Pennsylvania—Academic Standards in Economics: 6.2.3.C
New Jersey—Social Studies Standards: Standard 6.5

Pre-Visit

Lesson Description

To experience problems with barter, students participate in a simulation in which they barter to obtain ingredients to make cookies. Repeating the simulation using money, they learn about the advantages of using money.

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Objectives

Students will be able to:

1. Define barter and money.
2. List the problems with barter.
3. Explain how money facilitates exchange.

Time Required

45-60 minutes

Materials

Activity 1, one per student, cut apart

Procedure

1. Ask students if they have ever made a trade and what they traded. (*Answers will vary. May include gum for candy, one video game for another, lunch sandwich for a dessert.*)
2. Tell students this type of trading is called bartering. Explain that **barter** is the direct exchange of goods and services among people. No money is used in the exchange. In colonial America, colonists frequently bartered to obtain the goods and services they wanted.
3. Tell students they are going to participate in a bartering activity. Explain that in colonial times children their age loved to eat cookies called hobnails. Today, hobnails are made with brown sugar, eggs, flour, cinnamon, raisins, shortening, baking soda, salt, and vanilla.
4. Be certain to have one of each of the hobnail ingredient trading cards, Activity 1 (sugar and flour; cinnamon, raisins, vanilla; shortening; and baking soda and salt) for each student in the class. Briefly shuffle the hobnail ingredient trading cards and give each student four cards randomly chosen from the stack. Reserve the shilling cards for use in procedure step 10.
5. Write the following on the board:

Card 1: sugar and flour
Card 2: cinnamon, raisins, vanilla
Card 3: shortening
Card 4: baking soda and salt
6. Tell students that the object of the activity is to trade until they have one of each of the ingredient cards listed on the board. Once they have all four cards, they should return to their seats.

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7. Instruct the students to begin trading. Time how long it takes for all the students to get a set of hobnail cards.
8. Discuss the following:
 - a. What problems did you have trading for all four hobnail cards? (*finding someone who had what the student wanted and who wanted what the student had*) Point out that this is called a **coincidence of wants**. Explain that a coincidence of wants occurs when each trade participant is willing to trade what they have in exchange for what the other participant is willing to give up.
 - b. Did anyone make a trade for an ingredient they didn't want? (*Some may trade for an ingredient they didn't want in hopes of trading it for something they did want.*)
 - c. What would have made trading easier? (*money*)
9. Tell students they are going to have an opportunity to trade for hobnail cards again, but this time they will use money.
10. Collect all the ingredient cards. Shuffle the cards well and give each student four cards. Make sure that the deck is well shuffled and that the students choose randomly from the deck. Distribute two colonial shillings from Activity 1 to each student. Instruct the students to trade, buying what they need using shillings. Emphasize to the students that the price of each ingredient card is one shilling and that shillings must be used to purchase ingredient cards. No one may charge more than one shilling for each ingredient card, and no one may barter for ingredients. Remind students to return to their seats once they have all four ingredient cards.
11. Time how long it takes for all the students to get a set of hobnail cards.
12. Discuss the following:
 - a. Which way was easier—bartering or using money? (*using money*) Why? (*Everyone was willing to take shillings.*)
 - b. Which was quicker? (*using money*) Point out how long it took for everyone to obtain all the ingredients through barter with the use of money.
13. Tell students that **money** is anything widely accepted as payment for goods and services. Today, we use currency, coins, checks, and electronic money (such as debit cards). However, money throughout our history did not look like it does today.

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14. Inform students that they will be visiting the “Money in Motion” exhibit at the Federal Reserve Bank of Philadelphia to learn about the money they use today and money from different periods in our history. Remind students to bring a quarter to exchange at the exhibit for the most recent state quarter.

Closure

1. What is barter? (*The direct exchange of goods and services without the use of money.*)
2. What are the problems with barter? (*Barter requires a coincidence of wants and is time consuming.*)
3. What is money? (*Anything widely accepted in exchange for goods and services.*)
4. How does money facilitate exchange? (*Everyone is willing to take money in exchange for goods and services. They know they can use it to buy other goods and services.*)

Assessment

Ask students to do the following:

Describe a day in your life without money. Include specific examples of problems that might occur.

At the Exhibit

Lesson Description

At the exhibit, students work in groups and locate information to answer a set of true/false questions.

Time Required

45-60 minutes

Materials

Activity 2, one per student

Pencils, one per student

“Money in Motion” Navigational Guide, one per student and one per chaperone (available at the exhibit and online at www.philadelphiafed.org/education/money-in-motion)

Procedure

1. Prior to entering the exhibit, assign the students to small groups. Distribute a copy of Activity 2 to each student. Tell the students they are to work with their group to determine if each statement is true or false. Review the directions for Activity 2, pointing out that students should circle “true” if the statement is true. If it is false,

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- they should circle “false” and explain, in the space beneath the statement, why it is false.
2. Assign each group 3 to 4 true or false statements to answer. If they complete this assignment, they can search for answers to other true or false statements. Back in the classroom, groups will share their answers.
 3. Point out that the information in parentheses at the end of each statement is a station title. Using the “Money in Motion” Navigational Guide, they can visit that exhibit station and find the information to determine if the statement is true or false.
 4. Remind students that they are to follow the rules below while in the exhibit. The Federal Reserve Bank reserves the right to ask individuals who are not behaving properly to leave.
 - a. Do not run.
 - b. Do not bring food into the exhibit
 - c. Do not take photographs or movies in the exhibit.
 - d. Use conversational voices.
 - e. Do not shove or push others.
 - f. Be respectful of the exhibit stations (for example, do not slam buttons, do not repeatedly push buttons at the various stations, and do not climb on the exhibit stations).
 5. Distribute a copy of the “Money in Motion” Navigational Guide to each student and chaperone. Assign a group to each chaperone. Have the chaperones walk the groups through the “Money in Motion” exhibit, pointing out the stations before students begin Activity 2. The chaperones may have to help the students read the panels and find the answers.
 6. Allow time for students to complete Activity 2.
 7. Collect all papers before leaving the exhibit.

Post-Visit

Lesson Description

Students learn about early money and money used today from information gathered during their field trip to the “Money in Motion” exhibit. Students then participate in a play about things used for money during the colonial period. From the play they identify types of money used and judge each against the characteristics of money. Students look for examples from the “Money in Motion” exhibit that show forms of money that meet or fail to meet these characteristics. (Note: Students can also refer back to some of the exhibit stations at https://www.philadelphiafed.org/education/money_in_motion.)

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Objectives

Students will be able to:

1. Define commodity money.
2. List the characteristics of money.
3. Give examples of things used as money.
4. Evaluate forms of money using the characteristics of money.
5. Explain how money facilitates exchange.

Time required

60-90 minutes

Materials

Activities 3 and 4, one per student

Visual of Activity 4

Visual 1

The New Color of Money pamphlet, one per student (pamphlets are available at the exhibit or at <http://www.moneyfactory.gov/newmoney/main.cfm/materials/10download>)

Procedure

1. Have students share their answers to Activity 2. (1, 2, 3, 4, 6, 7, and 10 are true. The remaining questions are false.

The correct answers for the statements that are false are:

5) Wampum was made from shells and used as a medium of exchange between Native Americans. The first colonists used wampum as money. It could be manufactured cheaply. Colonists produced large quantities of wampum and caused the first “inflation” in America. Wampum was so plentiful that it was no longer worth as much in trade. Colonists had to offer more wampum to buy corn and other goods.

8) The average \$1 note is in circulation for less than 2 years.

9) The Federal Reserve Bank of Philadelphia destroys about \$6 billion worth of unfit currency a year.

2. Many things, such as shells, nails, tobacco, and furs, have been used as money throughout history. These are examples of **commodity money**. Commodity money is a medium of exchange that has value as a commodity or good and as money.

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3. Distribute a copy of Activity 3 to each student. Select five students to play the roles of Announcer 1, Announcer 2, Farmer Black, Merchant Smith, and Madam Harris.
4. Tell students that as they read the play, they should underline all the things Madam Harris wanted to use to purchase her goods.
5. Discuss the following:
 - a. What is the type of trading Merchant Smith and Farmer Black used called? (*barter*)
 - b. Why was Merchant Smith willing to accept Farmer Black's goods? (*He knew he could sell them.*)
 - c. Why wouldn't Merchant Smith accept wampum from Madam Harris? (*The General Court declared it was not legal tender.*)
 - d. Why would he accept the coins? (*They were scarce. The coins were accepted in all the colonies.*)
 - e. Why didn't Merchant Smith want to accept Madam Harris's paper money from the Virginia Colony? (*He wasn't sure it would be accepted in Massachusetts.*)
 - f. Why was Madam Harris unwilling to use her goat? (*The items she wanted to buy were worth about half a goat. She didn't want to kill her goat.*)
 - g. Why was the tobacco unacceptable in Virginia but accepted by Merchant Smith? (*Too much tobacco had been produced, so it wasn't accepted by everyone as payment for goods and services. Tell students that tobacco was relatively scarce in Massachusetts and therefore was widely accepted as money in Massachusetts, but it was very abundant in Virginia and therefore wasn't widely accepted for payment.*)
 - h. What was wrong with using fish, corn, and grain? (*They spoiled and were difficult to carry.*)
 - i. Why would it be difficult to use nails as money? (*It was difficult to make change with nails. Nails are also difficult to carry.*)
 - j. What other problem did Madam Harris raise about exchanging cows for fish? (*How do you know how many fish equal a cow?*)

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- k. Why do you think Merchant Smith was willing to accept tobacco as payment? (*Tobacco was scarce in Massachusetts and would be accepted in exchange for goods and services.*)
6. Display Visual 1. Tell students that for anything to serve well as money it should be portable, divisible, acceptable, relatively scarce, durable, and stable in value.
7. Tell students these are called the characteristics of money. Explain each term as follows:
- Portable—Money must be easy to carry.
 - Durable—Money must be able to withstand the wear and tear of many people using it.
 - Divisible—Money must be easily divided into small parts so people can purchase goods and services of any price.
 - Stable in Value—Money must be stable in value. Its value must remain constant over long periods of time.
 - Relatively Scarce—Whatever is used as money must be scarce or hard for people to obtain.
 - Acceptable—Whatever is used as money must be accepted as a medium of exchange.
8. Display a visual of Activity 4 and distribute a copy of Activity 4 to each student.
9. Ask students what Madam Harris wanted to use to purchase her goods. Tell students to list these items on their handout as you list them on the visual. (*wampum, tobacco, paper money from the Virginia Colony, English and Spanish coins, and a goat*) What else was mentioned in the play? (*fish, nails, cows*)
10. Demonstrate how to complete the grid using one of the items listed. Compare the item to each of the characteristics listed. If the item meets the characteristic, place a plus (+) in the cell, and if it doesn't, place a minus (-). Allow time for students to complete the activity.
11. Have groups share their answers. Record their answers on the visual.
12. Draw an additional row at the bottom of the grid. Write in "U.S. currency and coins" and compare it against the characteristics.
13. Display Visual 1. Instruct students to look at their Activity 2. Ask students for an example from Activity 2 that demonstrates each of the characteristics of money or an example that created a problem because it didn't meet one of the characteristics. (*Portable, divisible, durable—coins and currency, encased stamps, Spanish Pillar dollars; stability—Series 2004 currency; acceptable—*

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coins, currency, Spanish Pillar dollars, encased stamps; scarceness—2004 Series currency, problem with lack of scarcity in Virginia with tobacco.)

Closure

1. What is commodity money? (*a medium of exchange that has value as a commodity or good and as money.*)
2. What are some problems with commodity money? (*Commodity money often is not divisible, portable, acceptable, durable, scarce, or stable.*)
3. What are the characteristics of money? (*divisible, portable, acceptable, scarce, durable, and stable*)

Assessment

Have students answer the following:

Suppose Congress proposed eliminating the one dollar note and using a one dollar coin. Do you think this would be a good idea? Explain your answer.

Visual 1

Characteristics of Money

- Portable
- Durable
- Divisible
- Stable in Value
- Relatively Scarce
- Acceptable

Activity 1
Barter Cards

sugar and flour	cinnamon, raisins, and vanilla
shortening	baking soda and salt
shilling	shilling

Activity 2

True or False

Read each statement below. If the statement is true, circle “true.” If it is false, circle “false.” The exhibit station where you can locate the information is in parentheses. Use the “Money in Motion” Navigational Guide to find the stations related to each question.

- | | | |
|------|-------|--|
| TRUE | FALSE | 1. In the 1600s American merchants and traders bartered furs, salted fish, grain, and tobacco for rifles, shoes, and cloth. (Early Money in America) |
| TRUE | FALSE | 2. In order to make change, the colonists cut Spanish milled dollars into pieces. (Early Money in America) |
| TRUE | FALSE | 3. Congress adopted a decimal system to make U.S. coins different from British pounds, shillings, and pence. (Early Money in America) |
| TRUE | FALSE | 4. The nickname for U.S. currency, greenbacks, came from the green ink used to print the backs of these notes. (America’s Ever-Changing Money) |
| TRUE | FALSE | 5. Wampum was made of wood and was difficult to make. (Early Money in America) |
| TRUE | FALSE | 6. Because of the shortage of coins during the Civil War, people used postage stamps to make change. (America’s Ever-Changing Money) |
| TRUE | FALSE | 7. During the Revolutionary War, each colony produced its own currency. (Early Money in America) |
| TRUE | FALSE | 8. The average \$1 note is in circulation for about four years. (In & Out) |
| TRUE | FALSE | 9. The Federal Reserve Bank of Philadelphia destroys about \$6 billion worth of unfit currency a year. (In & Out) |
| TRUE | FALSE | 10. The 2004 Series currency uses colors other than green and black. (The New Color of Money) |

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Activity 3

Time Travelers' Theater

Announcer 1: Welcome to the Time Travelers' Theater. Follow us back in time to learn about an invention you and your families use every day. What is this invention? Money!

Announcer 2: Believe it or not, money is an invention. Today we use Federal Reserve notes, coins, checks, and electronic money, such as debit cards, for spending, but it wasn't always this way.

Announcer 1: Let's travel back in time to colonial America to get the inside scoop on the first types of money used in our country.

Announcer 2: It's 1704 and here we are in the Massachusetts Bay Colony in Merchant Smith's mercantile store. Looking around I can see that he sells just about everything: candy, seeds for planting crops, and even clothing.

Announcer 1: Merchant Smith is chatting with Farmer Black, one of his customers. Madam Harris, a new schoolteacher from the Virginia Colony, has just walked into Merchant Smith's store.

Farmer Black: I need to take out a loan for seeds to plant crops. As payment, I can give you part of my harvest next year to sell in your store.

Merchant Smith: I'm sorry Farmer Black. I can't give you credit this year to buy seeds for planting. I've already given credit to many farmers and businesses in the colony. You will have to go to another merchant.

Farmer Black: How can my farm and other businesses in the colony grow without a source of credit? I would like to buy some other things even if I can't get credit. I would like to trade a basket of eggs and three chickens for cloth, sugar, and a pound of cheese.

Merchant Smith: I'll give you everything you need. I can sell the goods I get from you to other customers who visit my store. I think I have a new customer in the store now. Welcome to Smith's mercantile. How can I help you?

Madam Harris: I am Madam Harris. I've just arrived from the Virginia Colony to take a new job as a schoolteacher and need to buy many things for my home—two pounds of flour, a pound of sugar, some seeds to begin planting my garden, coffee, and cloth for a new dress. I have a few English and Spanish coins, some paper money from the Virginia Colony, some tobacco, some wampum that I acquired on my trip, and a goat.

Activity 3 (continued)

Time Travelers' Theater

Merchant Smith: English coins and other foreign coins are scarce. Everyone wants them because they are the only kind of money accepted in all of the colonies.

Madam Harris: I was hoping to be able to use the wampum, the Virginia paper currency, and the tobacco I brought with me to pay for my goods.

Farmer Black: The General Court has declared that wampum, the Indian beads used for making change, is no longer accepted as legal tender, so I'm afraid it's worthless.

Merchant Smith: And I'm afraid I cannot accept your paper money printed in the Virginia Colony. I'm not sure I would be able to spend it here in Massachusetts.

Madam Harris: My goat is worth more than the goods I want to buy, but I can't cut my goat in half to pay for the things I need.

Merchant Smith: Since you are a new customer, we will work something out. The lack of sound money is quite a problem here in Massachusetts, as it is in all of the colonies.

Madam Harris: The General Court of the Virginia Colony has the same problems. They declared tobacco as legal currency for the colony, but there was too much tobacco, so it wasn't accepted by everyone as payment.

Farmer Black: Many of the other crops and goods used as money, such as fish, corn, and grain, spoil and are difficult to carry around. Using nails for making change is also difficult, and they are very heavy to carry around.

Madam Harris: And how do you figure out how many fish are equal to one cow?

Farmer Black: The colonies are growing so fast. We need a good money and credit system so citizens and businesses can prosper and grow.

Merchant Smith: Madam Harris, here are your goods. I will accept an English sixpence and your tobacco as payment.

Madam Harris: Thank you, Merchant Smith. Good day to both of you.

Source: *Money Connection* curriculum, Federal Reserve Bank of San Francisco

Activity 4

Evaluating Money

Rate each form of money mentioned in the play using the characteristics of money. If the form meets a characteristic, place a plus (+) in the space. If it does not meet a characteristic, place a minus (-) in the space.

Form of Money	Characteristics of Money					
	Portable	Durable	Divisible	Stable in Value	Relatively Scarce	Acceptable

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