

Building Block Barter Lesson for Third to Fifth Graders

Lesson Author

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Lesson Description

To understand barter and the problems that can arise when using barter to obtain goods and services, students will participate in a simulation in which they barter to obtain plastic building blocks to make a structure described by the teacher. A second round of trading is conducted using “money” to teach students about the advantages of using money versus barter. Students will watch a brief video on the characteristics of money and evaluate different types of commodity money on how well they meet the characteristics. As an assessment, students have two options that can be used jointly or independently: in the first, students play a free online barter trading game and complete a worksheet that includes short answer questions on their experience in the game and a brief written assignment; the second assessment directs students to the Federal Reserve Bank of St. Louis’s Econ Lowdown free online learning portal, where they can take an online multiple choice quiz on the video they have watched in class, with their scores reported to their teacher’s account. Teachers also have the ability to create their own written assessment for the video through the portal.

Grade Level

3–5

Concepts

Barter
Characteristics of money
Double coincidence of wants
Commodity money
Money

Objectives

Students will be able to:

- Define barter and money.
- Explain the problems with barter.
- Describe how money facilitates exchange.
- Define commodity money.
- List the characteristics of money.

Time required

30–45 minutes



Materials

Pencil

Plastic building blocks, with at least four different colors included and various specialty pieces such as animal or people blocks, vehicle bases on wheels, orange traffic cones, and so on

Handout 1: "Assessment," one for each student

Handout 1: "Assessment (Answer Key)"

Handout 2: "Money Cards," four cards for each student or student pair

Handout 3: "Does It Fit? Characteristics of Money"

Internet access to play video, projection capabilities

Internet access for students (assessment)

Activity 1: "Does It Fit? Characteristics of Money"

Activity 1: "Does It Fit? Characteristics of Money (Answer Key)"

Introduction

From the beginning of time people have engaged in barter, or the trading of goods and services for other goods and services. Before money, barter was the only option for obtaining goods and services that you could not produce yourself. The invention of money solved many of the problems associated with barter, chiefly the requirement that the parties involved in the transaction have what is known as a "double coincidence of wants." In order for a trade to take place, both parties in the trade must have something to barter that the other party wants. Deciding on the terms of the trade is also difficult without a standard unit of measure. Early forms of money, known as "commodity money," took the form of a commodity such as shells, fish, or salt, which could be used both as a good or commodity and as a medium of exchange. Commodity money, like the direct exchange of goods and services, also had its drawbacks because it did not meet the characteristics needed for something to function efficiently as money. Depending on the commodity, problems arose with goods that were not portable, divisible, acceptable, durable, relatively scarce, or uniform, all of which are necessary for an efficient medium of exchange. Today, these characteristics are met through our use of fiat money, which is money declared by the government as acceptable legal tender in exchange for goods and services. US currency and coins are examples of fiat money.

Procedures

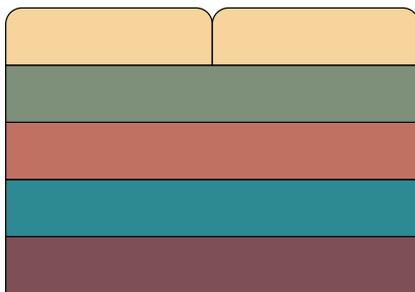
1. Hold up the pencil and ask if anyone in the class has anything they would like to trade for it. If any students answer yes, ask them why they would like to trade. (*They may say they like the pencil better than their item.*) Explain that people trade because they think the trade will make them better off. (*You may complete the trade if you wish, or let students know that they do not have anything you would like to trade for, so you are keeping the pencil.*) Ask students to share trades that they have made in the past. (*Answers will vary.*)
2. Tell students that when you trade a good or service for another good or service, the trading is called bartering. Explain that **barter** is the direct exchange of goods and services for other goods and services without using money.



- Tell students they are going to participate in a bartering activity. Each student (or pair of students, depending on class size and building block supply) will build a tower to certain specifications set by the teacher. (*Teacher note: Be certain to have enough building blocks for each student or student pair to build a tower. You may want to build the towers beforehand and then deconstruct them to ensure that you have enough pieces for everyone to build a complete tower. For example, 16 towers for 16 students or eight pairs of students working together.*) Make sure to have a couple of “specialty” pieces such as animals, rounded pieces for the top, and vehicle bases, as well as enough blocks for each student to use four colors. Shuffle the pieces once deconstructed and place them in bags or in piles that can be distributed to students, with each student or student pair given enough to build one tower. Make sure that no student (or pair) has the pieces for a complete tower. (For instance, one student could have all green pieces, another student could have only blue and yellow pieces, a third student only top pieces and red pieces, and so forth.) Reserve the money cards for use in procedure step 9.
- Read the following tower building instructions to students, *emphasizing they may not begin to build their towers until you have said so*. You may also write the instructions on the board or display on an overhead projector interactive whiteboard.

Building Block Tower Instructions

- You must use *four different colors* in building your tower. Each floor of the tower should be made of one block or two half blocks of the same color (large size blocks).
 - The top of your tower must be made of two blocks, either rounded half blocks, an animal piece, or an orange cone piece. Regular rectangular pieces cannot be used on top of the tower. (*Note: Mention all specialty pieces that you have; sets may vary.*)
 - If you have a vehicle base with wheels, make that at the bottom of your tower; you do not have to put a top on your tower if you have a vehicle base with wheels.
 - Completed towers will have five “stories.”
- Show students an example of a completed tower.



- Tell students that the object of the activity is to trade until they have gathered all of the pieces to complete their tower. They may also build their tower while trading. Once they have completed their tower, they should return to their seats. Distribute the blocks and instruct the students to begin trading. As students complete their towers, make sure that the towers meet all specifications. Time how long it takes for the students to gather all the pieces they need and build their towers.



7. Discuss the following:
 - a. Did anyone have problems building their towers? (*Answers will vary, but some groups or individuals are likely to say yes.*) Ask what problem they may have had. (*Answers will vary, but students are likely to say that they had trouble collecting all of the blocks they needed, or finding someone who was willing to trade.*) Explain to students that in order for a trade to take place, each trader must have something that the other trader wants. Point out that this is called a double coincidence of wants. The double coincidence of wants that is required in barter makes it more difficult and time-consuming.
 - b. Ask students if anyone traded for a piece they did not need. Ask why they may have done this. (*Some pupils may explain that they traded for a block they didn't want in hopes of trading it for a block they did want.*)
 - c. If you had used money instead of bartering, would this have made trading easier? (*Most students will answer yes, because then they could buy what they need.*)
8. Tell students they are going to have an opportunity to test this theory that money would make trading easier. In a second round of trading, students will trade for building block pieces again, but this time they will use “money.”
9. Ask students to deconstruct their towers and collect all of the building block pieces. Mix up the pieces and again give students a random assortment to make their towers, being careful that no student or student pair is given all the pieces needed to build a full tower. Distribute four money cards from the money card sheet to each student (or student pair). Instruct the students that a second round of trading will be conducted for them to gather the blocks needed to build a tower. In this round, they will buy what they need using their money cards. Emphasize to the students that the price of each block is one money card and that money cards must be used to purchase building blocks. Two half blocks sell for one money card. No one may charge more than one money card for each block or set of two half blocks, and no one may barter for blocks. Remind students to return to their seats once they have their towers completed, and make sure that all completed towers meet the required specifications. Once students begin, time how long it takes for all the students to gather their building block pieces and build their towers. (*This should be a much shorter time than the first round.*)
10. Discuss the following:
 - a. Which round of trading was easier? (*The round using money cards.*) Why? (*Everyone was willing to take money; you didn't have to find someone who had the block you needed and who also wanted one of your blocks.*)
 - b. Which was quicker? (*The round using money.*) Point out how long it took for everyone to complete their towers when blocks were traded using money versus the barter-only round.
11. Explain to students that **money** is anything that is widely accepted as payment for goods and services. Today, we use not only currency and coins but also checks and electronic forms of payment such as debit cards. (If students mention credit cards, let them know that while accepted for payment for goods and services, credit cards are not money; they constitute a loan to you until the bill comes due and is paid with money from a bank account. Checks, debit cards, and electronic payments are payments that access funds in checking or savings accounts, which are considered money.) Let students know that money throughout our history did not look like it does today.



12. Show the brief video “What Makes Something Useful as Money?” from the Federal Reserve Bank of St. Louis’s Explore Economics Video Series for Grade 3–5. <https://bit.ly/what-makes-something-useful-as-money>. As students watch the video, have them write down or keep track of things that have been used as money in the past.
13. Tell students that in order for something to be used as money, it must have certain characteristics, as mentioned in the video. Write each of the characteristics on the board, explaining each term.
 - **Relatively scarce**—Whatever is used as money must be scarce or hard for people to obtain.
 - **Durable**—Money must be able to withstand the wear and tear of many people using it.
 - **Easily divided**—Money must be easily divided into small parts so people can purchase goods and services of any price.
 - **Portable**—Money must be easy to carry.
 - **Accepted**—Whatever is used as money must be accepted as a medium of exchange, or item that buyers give sellers in exchange for goods and services.
 - **Uniform**—Whatever is used as money must have a standard shape and size.
14. In the video, Tyrone had trouble trying to use shells as money. Ask students if building blocks could be used as money. (*No.*) Which characteristics of money do building blocks meet and not meet? (*Building blocks are not relatively scarce, because you could always produce more or buy more at the store. Building blocks are relatively durable. Building blocks are divisible into smaller pieces, but the individual blocks are hard to cut. Building blocks are portable, but if you needed a lot, they would be hard to carry. Building blocks are somewhat uniform, but there are sets with different shapes and sizes, with some made by a brand name company and others made under other brands. The main reason building blocks could not be used as money is that they are not accepted as a medium of exchange.*)
15. Give each student a copy of Activity 1. Ask students to write in each of the six items that the video mentions in addition to shells from the list they have made (beads, cows, grain, cubes of salt, dried fish, and copper) and determine if they meet the characteristics of money. *They will leave the last box blank.* Any characteristic that an item does not meet should be crossed off the list. Explain to students that all of the items named in the video are **commodity money**, which is a commodity (or good) used for money that has value in and of itself (intrinsic value), or value as something other than money.
16. Demonstrate how to complete the activity, using shells as an example. Compare shells to each of the characteristics listed. If shells meet the characteristic, go on to the next characteristic. If shells do not meet a characteristic, cross it off before moving on to the next characteristic or item. (*Shells are not relatively scarce, they break easily, so they are not durable, they are not easily divided, they are not accepted as payment for goods and services, and they are not uniform. The only characteristic they meet is being portable, although even this would not apply if they were being used for large transactions. To show these qualities, you may want to bring in a shell to demonstrate.*) Allow time for students to complete the activity with the remaining six items.
17. Have students check their answers with a partner, then share together as a class. Allow students to correct any errors they have made on their sheets.
18. In the empty box on the last row of the handout, have students write “US currency and coins” and compare it against the characteristics (US currency and coins will meet all characteristics).



Closure

Ask students the following questions:

1. When you directly exchange goods and services without using money, what is that called? *Barter.*
2. What is meant by the term **double coincidence of wants**? *This means that each trader must have something that the other trader wants in order to trade.*
3. Is the double coincidence of wants a problem with money or barter? (*Barter.*) What are some other problems with barter? (*Barter is time-consuming, exchange rates are hard to figure out, not everyone will barter.*)
4. What is money? (*Anything widely accepted in exchange for goods and services.*)
5. How does money make getting goods and services easier? (*Everyone is willing to accept money in exchange for goods and services.*)
6. What is commodity money? *Commodity money is a commodity (or good) used for money that has value in and of itself, or value as something other than money.*
7. What are the characteristics of money? (*It is relatively scarce, durable, easily divided, portable, generally acceptable, uniform.*)
8. Do the forms of commodity money you learned about meet all of the characteristics of money? (No.) What meets all the characteristics of money? (*US currency and coin.*)

Assessment Options

Have students access the Federal Reserve Bank of Cleveland’s Escape from Barrier Island app at the [Apple Store](#) or [Google Play store](#) and answer the questions and writing assignment on Handout 1: “Assessment.” (Instruct students to be sure to see the introduction to the game.)

You may also assess students on the contents of the “What Makes Something Useful as Money?” video by creating a class and enrolling your students through the free Instructor Management Panel at [econlowdown.org](#). Students can be assigned to watch the video again and take a multiple choice quiz on the material; the scores will be sent through the instructor’s online portal. Teachers may also create their own written assessment for the video.



Handout 1: Assessment

After playing the game Escape from Barter Island, answer the following questions:

Orange Island to Little Barter Island

1. What did Robbie need to get home?
2. Did Little Barter Island have what Robbie needed? What did he have to do to try to get what he needed?
3. When do all trades end on Little Barter Island? Was it easy to help Robbie to make all of his trades successfully on Little Barter Island by the deadline?

Big Barter Island

1. Did Big Barter Island have what Robbie needed to get home? What did he have to do to try to get what he needed?
2. Did it take more trades on Big Barter Island for Robbie to get the item he needed to go to the next island?
3. Was it easy to help Robbie to make all of his trades successfully on Big Barter Island by the deadline?

Coconut Island

1. Did Coconut Island have what Robbie needed to get home?
2. Do they use barter on Coconut Island? How did Robbie get what he needed on Coconut Island?
3. What did the chief tell Robbie about coconuts on his island?
4. Was it easy to help Robbie to make all of his trades successfully on Coconut Island by the deadline?

Short writing assignment

Imagine that you rake your neighbor's yard and that he pays you for the job with a crate of oranges. Write a short paragraph explaining what you would do with the oranges so that you could buy a new backpack you need for school.



Handout 1: Assessment (Answer Key)

After playing the game Escape from Barter Island, answer the following questions:

Orange Island to Little Barter Island

1. What did Robbie need to get home? *He needed a sail.*
2. Did Little Barter Island have what Robbie needed? What did he have to do to try to get what he needed?
No. He had to trade his oranges to get an oar to go to Big Barter Island
3. When do all trades end on Little Barter Island? Was it easy to help Robbie to make all of his trades successfully on Little Barter Island by the deadline? *All trades end by sundown. Answers may vary, but most students will say yes.*

Big Barter Island

1. Did Big Barter Island have what Robbie needed to get home? What did he have to do to try to get what he needed? *No. He had to trade his oranges to get a compass.*
2. Did it take more trades on Big Barter Island for Robbie to get the item he needed to go to the next island? Was it easy to help Robbie to make all of his trades successfully on Big Barter Island by the deadline?
Yes. (It takes 10 trades for Robbie to get the compass to get to Coconut Island.) Answers will vary, but most students will say no since so many trades had to be made.

Coconut Island

1. Did Coconut Island have what Robbie needed to get home? *Yes.*
2. Do they use barter on Coconut Island? How did Robbie get what he needed on Coconut Island?
No, they do not use barter on Coconut Island. Robbie sold his oranges for coconuts, which are used as money. He used the coconut money to buy a sail.
3. What did the chief tell Robbie about coconuts on his island? *They are used as money.*
4. Was it easy to help Robbie to make all of his trades successfully on Coconut Island by the deadline?
Answers will vary, but most students will say yes.

Short writing assignment

Imagine that you rake your neighbor's yard and that he pays you for the job with a crate of oranges. Write a short paragraph explaining what you would do with the oranges so that you could buy a new backpack you need for school. *(Answers will vary. Some students may say they would sell the oranges to get money to buy the backpack, or make orange juice to sell for money. Other may say they will use barter, such as trading the oranges for a backpack from a friend who likes oranges, or trading oranges for something that could be traded or sold to buy a backpack.)*

Handout 2: Money Cards

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\$ Money \$	\$ Money \$
\$ Money \$	\$ Money \$
\$ Money \$	\$ Money \$
\$ Money \$	\$ Money \$



Activity 1: Does It Fit? Characteristics of Money

In each of the boxes below, write the forms of money mentioned in the video at the top and cross off any characteristic of money it does not meet in the list below. Leave the last block blank until you receive further instructions from your teacher.

Shells

- Relatively scarce
- Durable
- Easily divided
- Portable
- Acceptable
- Uniform

- Relatively scarce
- Durable
- Easily divided
- Portable
- Acceptable
- Uniform

- Relatively scarce
- Durable
- Easily divided
- Portable
- Acceptable
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Activity 1: Does It Fit? Characteristics of Money (Answer Key)

In each of the boxes below, write the forms of money mentioned in the video at the top and cross off any characteristic of money it does not meet in the list below. Leave the last block blank until you receive further instructions from your teacher.

Shells

- Relatively scarce
- Durable
- Easily divided
- Portable
- Acceptable
- Uniform

Beads

- Relatively scarce
- Durable
- Easily divided
- Portable
- Acceptable
- Uniform

Cows

- Relatively scarce
- Durable
- Easily divided
- Portable
- Acceptable
- Uniform

Grain

- Relatively scarce
- Durable
- Easily divided
- Portable
- Acceptable
- Uniform

Cubes of Salt

- Relatively scarce
- Durable
- Easily divided
- Portable
- Acceptable
- Uniform

Dried Fish

- Relatively scarce
- Durable
- Easily divided
- Portable
- Acceptable
- Uniform

Copper

- Relatively scarce
- Durable
- Easily divided
- Portable
- Acceptable
- Uniform

US Currency and Coin

- Relatively scarce
- Durable
- Easily divided
- Portable
- Acceptable
- Uniform