Lesson 7 Activity—Competition: Who wins and who loses?

Written by Jamie Wagner

In this economics lesson, students will participate in variations of [In the Chips—A market in Computer Chips](https://fte.org/teachers/teacher-resources/lesson-plans/efllessons/in-the-chips-a-market-in-computer-chips/)[[1]](#footnote-1) to show how competition affects prices and who wins and who loses.

Description of the lesson

Students will participate in a hands-on activity where there are varying levels of competition. Students will explore for themselves how competition affects prices and explore the winners and losers when markets compete.

Economics

Economics is the study of choices. Competition is something that alters the choices of consumers. When there is less competition there are less options of goods and services and also higher prices. Competition and open markets are an important economic indicator for consumers and when competition is present it leads to better outcomes for individuals. However, with all policies there are winners and losers. Consumers win with competition, but sellers might lose out through lower profits.

Objectives:

After completing this lesson students will be able to:

* understand the importance of competition in a market for buyers.
* explain how changes in competition lead to changes in prices.
* evaluate how economic institutions in a country can impact the level of competition

National Content Standards in Economics

* Standard 9: The Role of Competition
  + Competition among sellers lowers costs and prices, and encourages producers to produce more of what consumers are willing and able to buy. Competition among buyers increases prices and allocates goods and services to those people who are willing and able to pay the most for them.
  + Competition takes place when there are many buyers and sellers of similar products.
  + Competition among sellers results in lower costs and prices, higher product quality, and better customer service.
  + Competition among buyers of a product results in higher product prices.
  + The level of competition in a market is influenced by the number of buyers and sellers.

Concepts

Competition, Demand, Supply

Time Required

60 minutes

Materials Needed

* Slide presentation prepared for this activity
* 10-15 Copies of Activity 7.1 Seller Score Sheet (or enough for about half of the students) printed on yellow paper
* Copies of Activity 7.2: Buyer Score Sheet, one per student (minus one) printed on blue paper
* Copies of Activity 7.3: Seller Cards for 32 cards, cut and write in prices (see Teacher preparation) on yellow paper or cardstock
* Copies of Activity 7.4: Buyer Cards for 32 cards, cut and write in prices (see Teacher preparation) on blue paper or cardstock
* 2 Prizes for most profitable buyer and seller (candy, extra credit, money, etc.)
* Spreadsheet displayed for students to see price information.

Teacher Preparation

This activity is going to follow the procedure and steps from FTE’s [In the Chips—A market in Computer Chips](https://fte.org/teachers/teacher-resources/lesson-plans/efllessons/in-the-chips-a-market-in-computer-chips/)[[2]](#footnote-2). So be sure to read through the procedures to familiarize yourself with the process. It’s not imperative that you do that activity before this as these can be done independently. Additionally, it does not affect this activity if students have done that activity already.

The goal of this lesson is to show how price changes and who wins and loses as there is more competition in a market. Each round you will add more and more sellers until you are split fairly equally among buyers and sellers. Here is an estimate of sellers for each round.

* Round 1—1 seller
* Round 2—3-4 sellers
* Round 3—10-15 sellers (or about half of the class)

Make 32 buyer and 32 seller cards according to the following distribution:

|  |  |  |  |
| --- | --- | --- | --- |
| Buyer Cards | | Seller Cards | |
| Buy Price | No. | Sell Price | No. |
| $3.50 | 2 | $3.50 | 4 |
| 3.70 | 2 | 3.70 | 6 |
| 3.90 | 2 | 3.90 | 6 |
| 4.10 | 2 | 4.10 | 4 |
| 4.30 | 4 | 4.30 | 4 |
| 4.50 | 4 | 4.50 | 2 |
| 4.70 | 6 | 4.70 | 2 |
| 4.90 | 6 | 4.90 | 2 |
| 5.10 | 4 | 5.10 | 2 |

Note: This breakdown is for classes of around 25 students. If you have a larger class, you can add more cards, print and write the prices keeping a similar pattern/ratio of prices in the table.

Procedure

1. Begin the lesson by asking for a single student to volunteer to sell computer chips. Give this student Activity 7.1 Seller Score Sheet. All other students will be buyers in round 1. Hand out Activity 7.2 Buyer Score Sheet to all remaining students.
2. Use slides 2-5 to explain the game. Explain to students that they are going to be participating in a market buying and selling computer chips. Your goal is to make as much profit as you can in the game. Follow procedure 1-10 from [In the Chips—A market in Computer Chips](https://fte.org/teachers/teacher-resources/lesson-plans/efllessons/in-the-chips-a-market-in-computer-chips/) to help students understand the roles. *Teacher note: skip step 4 dividing the classroom into equal groups—this is where we are going to adjust the number of sellers to see what happens to price when there is more competition.* 
   1. In the designated market space put yellow seller cards and blue buyer cards in places that are easily accessible.
   2. Make sure students understand how to calculate profit. For buyers they earn “profit” by buying at lower than the stated price on the card and for sellers they earn “profit” by selling at a higher price than stated on their card. In between rounds the students will have time to calculate profit so they can focus only on buying and selling during the round.
   3. Note that each card for buyers and sellers authorizes them to buy or sell ONE computer chip and that after they make a transaction, they must get a new card.
3. Display slide 6 and begin round 1. Remind the seller that they are to report numbers to the teacher for reporting. Record the prices from that round on the spreadsheet that is displayed for the class to see. *Teacher note: When there is only 1 seller you should see students bidding up prices to get the computer chip. Some students will lose out because they do not value it that much. The seller should have no problem selling any of the chips.*
4. After 5 minutes, students return their card and go back to their seats to calculate profit. Ask the students who was able to buy/sell in that round. *Teacher note: there should be a lot of students who were not able to buy anything. That is what you want to see. It should be frustrating to the students.*
5. Remind students that their goal is to make as much profit as possible and the most profitable buyer and seller will receive a prize. Ask the seller about their profit—did they make a lot of profit? (question is on slide 7) The a*nswer should be yes.* Next ask the class if anyone wants to switch from being a buyer to a seller. Select 2-3 more students to join the seller from round 1. Give the new sellers Activity 7.1 Seller Score Sheet and take their blue Buyer Score Sheets as they are no longer buyers. If they were a seller last round they will remain a seller.
6. Display slide 8 and begin Round 2. Remind sellers that they are to report numbers to the teacher for reporting. Record the prices from that round on the spreadsheet that is displayed for the class to see. *Teacher note: As with round 1 you should see students bidding up prices to get the computer chip. Some students will lose out because they do not value it that much. The sellers should have no problem selling any of the chips. More buyers will get the chips and you should see prices start to come down a bit.*
7. After 5 minutes, have students return their card and go back to their seats to calculate profit.
8. Using slide 9, have students raise their hand if they did NOT buy a computer chip. Ask them why? *Answers will vary but may include: The prices were too high, the sellers did not have enough, someone out bid them.* Follow up by telling them that this must be frustrating that they did not get to buy the computer chips. Ask the sellers if they are frustrated with the market. *Answers will vary but likely no as they are able to sell their chips easily and for relatively high prices.*
9. Ask if there are any volunteers to be a seller. Select up to about half of the class in total to be a seller (i.e. in a class of 25 there should be about 12-14 sellers). Give the new sellers Activity 7.1 Seller Score Sheet and take their blue Buyer Score Sheets as they are no longer buyers. If they were a seller last round they will remain a seller.
10. Display slide 10 and begin Round 3. Remind sellers that they are to report numbers to the teacher for reporting. Record the prices from that round on the spreadsheet that is displayed for the class to see. *Teacher note: Unlike rounds 1 and 2 you should see many more transactions. There might be people bidding up but it is more likely a buyer or seller will move on to someone else. Prices should decrease in this round.*
11. After 5 minutes, have students return their card and go back to their seats to calculate profit. Award the prize to the current buyer and seller with the most profit.

Closure

1. Close the activity by asking the students the following questions on slides 11-13 and using the spreadsheet. If you cannot display both at the same time have students look at the spreadsheet and data from the activity.
   1. What do you notice about the information from the spreadsheet? *Answers may vary but include there were more chips being sold in rounds 2 and 3. The prices had more variation and were lower in general in rounds 2 and 3.*
   2. What was going on with the market in round 1? *Answers may vary but include: there was only one seller and they could set whatever price they want.*
   3. Follow up by asking the seller from round 1 if they were able to set ANY price they wanted. *Answer: no.* Why not? *Answers may vary but include that at higher prices there were fewer buyers able to pay that price. They wanted to charge a high price but one that people would actually pay.*
   4. Follow this up by explaining that round 1 was much like a monopoly or a market where there is a single buyer. We often think that monopolists can charge whatever price they want but they face the willingness of buyers to pay for the good or service. However, monopolists do tend to have more power when it comes to prices.
   5. What happened in the market between rounds 1, 2, and 3? *Answers may vary but include: there were more transactions as there were more sellers, prices in general were lower, it was easier to buy, etc.*
   6. In Rounds 2 and 3 there was increased competition. Who was better off because of that competition? *Answer: buyers because more were able to buy more computer chips—there were fewer people in each round that did not get a chip. Buyers also won because the prices were lower.*
   7. Was anyone not happy about having more sellers? *Answer: the current sellers. When the Round 1 seller was the only one, they made a lot of profit but as more people joined them in selling the profit they earned likely dropped.*
   8. If you were president how might you feel about competition for your country? Would you want more or less competition? *Answers may vary but include that competition there is generally better outcomes for consumers so you would want to have more competition.* Follow this up by explaining that protecting competition and open markets is one indicator of economic freedom and there are significantly better outcomes for countries that have open markets including higher GDP, citizens have higher incomes, among other outcomes.
2. Next explain that with all policies there are winners and losers. In general, consumers benefit from more competition because there are more goods or services and the prices are lower. However, sellers generally do not like competition because it cuts into their profit. This idea has a lot of implications for policies that surround anti-trust laws, international trade policies like tariffs, and other instances where businesses might fight for protections like patents. Whenever competition is reduced consumers generally lose out.

Assessment

Have students research policies in the past 5 years that might have affected competition. Have them prepare a 5-minute presentation explaining the situation and how competition was affected (or was possibly going to be affected). Be sure to include the outcome of the policy—i.e. was it enacted and what has happened?

Activity 7.1 Seller Score Sheet

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Transaction** | **Price on Card** | **Transaction Price** | **Gain** | **Loss** | **Profit** |
| **1** |  |  |  |  |  |
| **2** |  |  |  |  |  |
| **3** |  |  |  |  |  |
| **4** |  |  |  |  |  |
| **5** |  |  |  |  |  |
| **Total For**  **Round 1** |  |  |  |  |  |
| **1** |  |  |  |  |  |
| **2** |  |  |  |  |  |
| **3** |  |  |  |  |  |
| **4** |  |  |  |  |  |
| **5** |  |  |  |  |  |
| **Total For**  **Round 2** |  |  |  |  |  |
| **1** |  |  |  |  |  |
| **2** |  |  |  |  |  |
| **3** |  |  |  |  |  |
| **4** |  |  |  |  |  |
| **5** |  |  |  |  |  |
| **Total For**  **Round 3** |  |  |  |  |  |
| **1** |  |  |  |  |  |
| **2** |  |  |  |  |  |
| **3** |  |  |  |  |  |
| **4** |  |  |  |  |  |
| **5** |  |  |  |  |  |
| **Total For**  **Round 4** |  |  |  |  |  |
| **Grand Total** |  |  |  |  |  |

You may make as many transactions as you wish in each round. If there are not enough lines on the chart, continue to record transactions on the lines for the next round and then continue onto the back, if necessary.

Activity 7.2 Buyer Score Sheet

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Transaction** | **Price on Card** | **Transaction Price** | **Gain** | **Loss** | **Profit** |
| **1** |  |  |  |  |  |
| **2** |  |  |  |  |  |
| **3** |  |  |  |  |  |
| **4** |  |  |  |  |  |
| **5** |  |  |  |  |  |
| **Total For**  **Round 1** |  |  |  |  |  |
| **1** |  |  |  |  |  |
| **2** |  |  |  |  |  |
| **3** |  |  |  |  |  |
| **4** |  |  |  |  |  |
| **5** |  |  |  |  |  |
| **Total For**  **Round 2** |  |  |  |  |  |
| **1** |  |  |  |  |  |
| **2** |  |  |  |  |  |
| **3** |  |  |  |  |  |
| **4** |  |  |  |  |  |
| **5** |  |  |  |  |  |
| **Total For**  **Round 3** |  |  |  |  |  |
| **1** |  |  |  |  |  |
| **2** |  |  |  |  |  |
| **3** |  |  |  |  |  |
| **4** |  |  |  |  |  |
| **5** |  |  |  |  |  |
| **Total For**  **Round 4** |  |  |  |  |  |
| **Grand Total** |  |  |  |  |  |

You may make as many transactions as you wish in each round. If there are not enough lines on the chart, continue to record transactions on the lines for the next round and then continue onto the back, if necessary.

Activity 7.3 Seller Cards

|  |  |
| --- | --- |
| **SELLER**  You are authorized to sell one box of  computer chips for as much as possible.  If you accept less than \_\_\_\_\_\_\_\_  per box, you lose money.  **DO NOT REVEAL THE PRICE.**  Record the price on this seller card  and on your student score sheet. | **SELLER**  You are authorized to sell one box of  computer chips for as much as possible.  If you accept less than \_\_\_\_\_\_\_\_  per box, you lose money.  **DO NOT REVEAL THE PRICE.**  Record the price on this seller card  and on your student score sheet. |
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Activity 7.4 Buyer Cards

|  |  |
| --- | --- |
| **BUYER**  You are authorized to buy one box of  computer chips. Pay as little as possible.  If you pay more than \_\_\_\_\_\_\_\_\_  per box, you lose money.  **DO NOT REVEAL THE PRICE.**  Record the price on this buyer card  and on your student score sheet. | **BUYER**  You are authorized to buy one box of  computer chips. Pay as little as possible.  If you pay more than \_\_\_\_\_\_\_\_\_  per box, you lose money.  **DO NOT REVEAL THE PRICE.**  Record the price on this buyer card  and on your student score sheet. |
| **BUYER**  You are authorized to buy one box of  computer chips. Pay as little as possible.  If you pay more than \_\_\_\_\_\_\_\_\_  per box, you lose money.  **DO NOT REVEAL THE PRICE.**  Record the price on this buyer card  and on your student score sheet. | **BUYER**  You are authorized to buy one box of  computer chips. Pay as little as possible.  If you pay more than \_\_\_\_\_\_\_\_\_  per box, you lose money.  **DO NOT REVEAL THE PRICE.**  Record the price on this buyer card  and on your student score sheet. |
| **BUYER**  You are authorized to buy one box of  computer chips. Pay as little as possible.  If you pay more than \_\_\_\_\_\_\_\_\_  per box, you lose money.  **DO NOT REVEAL THE PRICE.**  Record the price on this buyer card  and on your student score sheet. | **BUYER**  You are authorized to buy one box of  computer chips. Pay as little as possible.  If you pay more than \_\_\_\_\_\_\_\_\_  per box, you lose money.  **DO NOT REVEAL THE PRICE.**  Record the price on this buyer card  and on your student score sheet. |

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