

Name (please print clearly): _____

Econ Class Survey

Please write your answers to the questions in the space provided. This survey is designed to find out who you are as a student so that I can try to tailor the information presented in class in a way that will be most helpful to the general student population. Your individual responses will remain confidential and will not be used against you in any way.

1. What year are you in school (freshman, sophomore, etc.) _____
2. What is your major or planned course of study _____
3. Have you ever taken a college level economics class before? If so, when?
4. How would you rate your ability to read and work with graphs on a scale from 1 – 10 (1 being the lowest and 10 being the highest)

- _____
5. What is your favorite type of music? _____

Please list your favorite musical artist or band:

6. Please list your top 3 favorite movies of all time (in any order):

Who is your favorite actor? Favorite actress?

7. What is your favorite television show (either now or of all time)? Be honest, if *The Real Housewives of Wherever*, *My Big Redneck Wedding*, or anything Kardashian related is your favorite television show, then please say so. I won't judge you...

8. Do you currently have a job? _____

If so, what type of job do you have (ex. actor, note-taker, bone counter, bull fighter, lemon sticker remover, watermelon thrower, etc.)

What would you consider to be your dream job or career path?

9. Please list some of the things you like to do in your spare time (sports, hobbies, etc.)

10. What is your general impression of this class (for example, are you scared, nervous, excited, indifferent, worried etc. Please elaborate. For example, if you feel worried then please tell me why).

Please read and sign

FSU Academic Honor Pledge

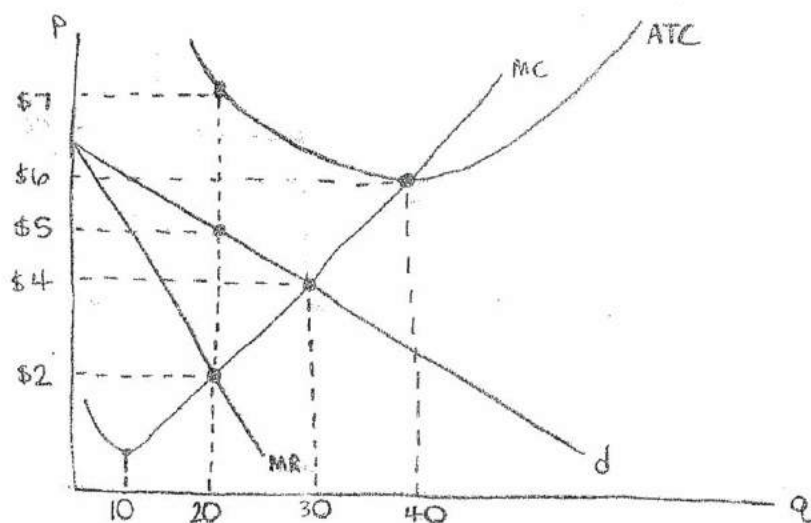
I affirm my commitment to the concept of responsible freedom. I will be honest and truthful and will strive for personal and institutional integrity at Florida State University. I will abide by the Academic Honor Policy at all times.

Signature _____

Name: _____

Price Searcher Markets

Charlie Kelly sells "Kitten Mittens" a glove for cats designed to prevent them from scratching up the furniture and making excessive amounts of noise when they walk. Please examine the graph depicting Charlie Kelly's business conditions for selling "Kitten Mittens" and answer the following questions.



1. How many Kitten Mittens should Charlie Kelly produce and what price should he charge?
2. How much total revenue is Charlie Kelly making?
3. What is the total cost of production incurred by this firm?
4. Is Charlie Kelly making a profit or a loss? What is the amount of the profit or loss?
5. Given the situation depicted in the graph, what do you expect to happen in the market for "Kitten Mittens"?

The Candy Trading Game (Full)

Class: Principles of Macroeconomics, Principles of Microeconomics, International Trade, Comparative Systems

Lesson: Trade creates value (the value of a good or service is subjective), free trade

Materials: A variety of junior-sized pieces of candy

Monetary Cost: variable (you can get 6-12 pieces of a single type of candy for about \$1.00 to \$1.89 each at Wal-Mart. I would recommend getting at least 8 different types of candy, but how much you get is up to you).

The Game:

This game provides a hands-on exercise that clearly demonstrates how the subjectivity of a good or service enables exchange to create value. I have provided a real example from one of my classes to facilitate this explanation. The instructor should divide the class up into groups of equal size with five to ten students to a group¹. Then label each group as A, B, C and so on until all groups are given a letter name. Write these group names across the board leaving enough space below them to write in the total value of the candy for each group before trade, after group trade, and after class trade².

Groups	A	B	C	D	E	Total
Before Trade						

The instructor then randomly hands out a junior size piece of candy to each student in the class. You may also want to line up all of the possible pieces of candy at the front of the class, so that students know what is available in the market³. While this assignment is largely random, you may want to give all of one group the same type candy so that you can explain how trade can greatly benefit countries without a diverse set of resources or output. You then ask each individual in a group to state the value that he or she places on their piece of candy using a 1-10 scale where 1 is the lowest and 10 is the highest. Add up the total value for each group and record them on the board.

Groups	A	B	C	D	E	Total
Before Trade	34	19	19	28	9	109

¹ This number will depend on how many students are in your class. I have played this game with as many as 160 students in a class. You may want to employ a student to work a calculator for you during this example, so that you can accurately add up the total for each group.

² Although you may want to leave the row names out of it so students don't anticipate the game.

³ In order to be effective, you will want a wide variety of different types of candy, I use Snickers, Butterfingers, M&Ms, Almond Joys, Mounds, Milky Ways, Twix, Skittles, etc. where the junior size pieces come about 8 to 10 in a pack. You want to be sure to have at least one non-chocolate type of candy to accommodate (and, thus, greatly increase the value) those students who are allergic to chocolate.

Then allow the class to spend some time (about one minute) trading with members of their own group. Make it clear that they can only trade with members of their own group, and cannot trade with members of any other group. Then ask each student again, how much they value their piece of candy on a scale of 1-10 with 1 being the lowest and ten being the highest⁴. Then add up the value for each group and the total for the class while remarking about how the value for each group increased after they traded. In my class experiment, group E was the homogeneous group and so they could not trade. Interestingly, group D was also unable to find any trades so their value did not increase at all.

Groups	A	B	C	D	E	Total
Before Trade	34	19	19	28	9	109
Group Trade	43	34	21	28	9	135

You can explain to the class that group E was unable to trade because of the lack of variety in their production and that this group was especially hurt by the inability to trade with other groups. Should you get a case where holders of heterogeneous candy fail to trade within their group then you can lump them with group E as those who would greatly benefit from free class trade. You explain to the class that people vary in their preference for different types of candy and because the value of this candy is subjective, two people can trade so that both people get a piece of candy that they valued more than the piece they had before trade. Two people would not voluntarily trade their candy unless it made both people better off, so, when these trades happen, the value of the candy increases, even though the actual candy has not changed at all. You then open up trade to the entire class, allowing people within a single group to trade with members of other groups. Then, once again, record the value that each student gives to his or her piece of candy and add them up for each group and the entire class.

Groups	A	B	C	D	E	Total
Before Trade	34	19	19	28	9	109
Group Trade	43	34	21	28	9	135
Class Trade	47	40	27	35	13	162

Then point out how the value for each group and, thus, the value for the entire class has increased even though the candy used has not changed. You can then apply this to the benefits of free international trade by explaining that although you called these groups A, B, C, D, E, etc. You could just have easily called them Argentina, Belize, Chile, Denmark, England, etc., and the total for the class represents the total for the entire world and then point out how much better off each country and the world is after the liberalization of trade.

A. Application to a large section class

Class: Principles of Macroeconomics, Principles of Microeconomics, International Trade

Lesson: Trade creates value (the value of a good or service is subjective), free trade

Materials: A variety of junior-sized pieces of candy

⁴ You may want to make a disclaimer that if you trade your candy for a piece of candy that you value less than the piece you traded for the purpose improving a fellow classmate (usually of the opposite gender) then you must include the benefit of making that person better off in the value of the candy you received from that trade.

Monetary Cost: variable (you can 12 pieces of single type of candy for 1.87 cents at Wal-Mart. I would recommend getting at least 8 different types of candy)

The Game:

Including every student in a classroom holding anywhere from 200 to 500 or more students can be a daunting and expensive task, but this game can still be easily applied to a large section by selecting a sample of students to come to the front of the class and perform the game in front of the rest of the students. To elicit participation you may want to offer extra credit for volunteering. You then play the game with the sample of students the same as you would if it were a small section⁵. In order to keep the rest of the class engaged, I ask students who do not play the game to fill out and turn in a student response activity that has them answer questions based on the game. This way, every student has an opportunity for the same extra credit points, each student stays engaged, and you can get copies of the totals should you want to refer to them later on in the semester.

B. Application to deadweight loss (excess burden) as the result of taxation.

Deadweight loss is often a difficult concept for students to intuitively understand. Some students have trouble grasping the esoteric concept of a loss in value that results from transactions not happening. This game can be extended to provide students with a more tangible understanding of how a tax can reduce the number of transactions and, thus, create deadweight loss. One way to do this is to play this game again when reaching the topic of deadweight loss. In this game, you would distribute three pieces of candy to each student and ask each student how much the combined value of their candy is worth to them on a scale of 1-10. Then repeat the game as described above, but inform each student that they must pay a tax of one piece of candy to the instructor upon each trade⁶. The number of trades should be greatly diminished and the resulting increase in value should be far less than when you first played the game with no tax. You then explain to the class that this reduction in value represents the deadweight loss that results from the reduction in transactions that occurs when a tax is imposed.

If you do not have the time to replay this game in class or are just not inclined to do so then you can still effectively refer to this game when mentioning the concept of deadweight loss. Just ask your students the following hypothetical questions

*"What would happen if you were taxed a dime or quarter per trade? Would the number of trades go up or down?"*⁷

*"So, if the number of trades went down, would the value of each group and the entire class be higher or lower?"*⁸

⁵ Make sure you have the students who volunteered for the game write down their names so that you have a record of their participation.

⁶ While I have yet to do this, you can still give students only one piece of candy and inform the students to bring change such as dimes and quarters with them to class and set the tax rate at 10 cents or 25 cents per trade or change it throughout the game to illustrate the same concept. This would reduce the amount of candy that you have to buy and you would make at least some of your money back.

⁷ The class should respond that the number of trades would go down.

⁸ The class should respond that the value would be lower.

This way, students can actually see a tangible number and think about how it would be lower due to the reduction in trades that resulted from the change in their own behavior when the imposition of a tax changed their incentives. This questions is located on the student activity sheet should you choose to have students complete it.

C. Application to international trade and tariffs

In order to apply this game to the concept of tariffs then you can repeat the game as described in the application to deadweight loss (section 2B), but only impose the tax in inter-class (international) trade. Again, you can forgo the repetition of the game with the following hypothetical questions.

“Imagine that you knew that you would be able to trade within your group freely, but would be taxed for trading outside of your group. What do you think would happen to the number of trades with people outside your group?”⁹

“What do you think would happen to the total value of each group? of the entire class? Would any group have been made better off by this policy?”¹⁰

This should help enlighten the class about the effects of international tariffs and why free trade is more economically efficient.

D. Application to comparative systems: central planning vs. market organization

An instructor can also use this game to illustrate why market organization is a more efficient economic system than central planning. Play the game in its original version and explain to the class that when you handed out the piece of candy you were similar to a central planner who cannot possibly know each individual's preferences better than an individual knows his or her own preference. This is why value was so much lower before trade than after trade. Even when the instructor intended to match students with their preferred type of candy, the instructor does not have the information necessary to do so. This highlights the information problem inherent in central planning in a tangible way that impacts students first hand.

⁹ The class should respond that the number of inter-class trade would be lower.

¹⁰ The class should respond that the value would be lower for both each group and the entire class, and that no group would have been made better off by such a policy.

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Student Activity Sheet: The Candy Trading Game

Observe the candy game as it is played in class and write down the respective class totals:

Before Trade: _____

Group Trade: _____

Class Trade: _____

Answer the following questions with regard to the candy game:

1. Suppose I banned the final round of trading so that groups could not have traded with each other. Do you think any group would have been made better off by this policy forbidding trade between the groups? Compared to when groups were allowed to trade, what would have happened to the total value for the entire class under this policy?
2. Suppose I imposed a tax on trades so that each time a person made a trade that person would have to give me a quarter. What do you think would have happened to the number of trades? What would have happened to the total value for the entire class compared to when this tax did not exist?
3. Which do you think is a better system of economic organization, one without trade in which one person decides what piece of candy everyone will get, or one where people can trade for the candy that they want? Why?

Name: _____

Student Activity Sheet: The Candy Trading Game

Before Trade: Using the piece of candy that your teacher just gave you, please answer the following questions.

- A. What type of candy do you have: _____
- B. What value do you give it on a scale from 1 (dislike) to 10 (like): _____
- C. Add your value to the rest of the members of your group. What is the group total:

- D. Your teacher will now add up the total for all of the groups in the class. What is this class total: _____

Group Trade: You may now trade, but with only members of your own group. At the end of the trading period, please re-answer these questions based on the piece of candy that you now have:

- A. What type of candy do you have: _____
- B. What value do you give it on a scale from 1 (dislike) to 10 (like): _____
- C. Add your value to the rest of the members of your group. What is the group total:

- D. Your teacher will now add up the total for all of the groups in the class. What is this class total: _____

Class Trade: You may now trade with anyone in the entire class. At the end of the trading period, please answer these questions one last time based on the piece of candy that you now have:

- A. What type of candy do you have: _____
- B. What value do you give it on a scale from 1 (dislike) to 10 (like): _____
- C. Add your value to the rest of the members of your group. What is the group total:

- D. Your teacher will now add up the total for all of the groups in the class. What is this class total: _____

Please answer the following questions with regard to the candy game:

4. Compare the piece of candy that you ended up with at the end of the game versus the one you were given at the beginning of the game. Did the value increase? In other words, are you happier after being allowed to trade? Why or why not?

5. Compare your total group value and the total class value at the end of the game compared to the beginning of the game. Did the value increase? In other words, is your group happier after being allowed to trade? What about the entire class? Why or why not.

6. How is it possible that the candy circulating throughout the class was worth more at the end of the game than at the beginning when the candy itself did not change?

7. Suppose I banned the final round of trading so that groups could not have traded with each other. Do you think any group would have been made better off by this policy forbidding trade between the groups? Compared to when groups were allowed to trade, what would have happened to the total value for the entire class under this policy? Would it be higher or lower? Why?

8. Suppose I imposed a tax on trades so that each time a person made a trade that person would have to give me a quarter. What do you think would have happened to the number of trades? What would have happened to the total value for the entire class compared to when this tax did not exist? Would it have been higher or lower? Why?

9. Which do you think is a better system of economic organization, one without trade in which one person decides what piece of candy everyone will get, or one where people can trade for the candy that they want? Why?

The Banana Eating Contest ¹

Class: Principles of Microeconomics

Lesson: Diminishing Marginal Utility

Materials: A large number of bananas (at least 24, but amount is variable)

Monetary Cost: Variable (depends on the number and price of bananas)

The Game:

This game is designed to teach the concept of diminishing marginal utility in a most obvious way. In class, about fifteen minutes before you get to the concept of diminishing marginal utility, ask for a few (usually two or three) hungry volunteers who like bananas to participate in this activity for extra credit. Then give each student an equal number of bananas (at least twelve per student) and explain that they will have about fifteen minutes to eat as many bananas as they can and after each banana they eat, they need to record how much happiness (utility) they derived from eating that banana on a scale from 0-100. Have them start eating the bananas, while you continue on with the lecture. When you get to the point in the lecture where you are about to discuss diminishing marginal utility then put a halt to the game and record the values listed by each participant on the board and explain that the participants' marginal utility eventually decreased as they ate more and more bananas, which illustrates the idea that as the consumption of a product increases, the marginal utility derived from consuming more of it will eventually decline. To create an incentive for participation and performance during this game, I offer one-fourth of a percentage point in extra credit for participating in the game², half of a percentage point for eating at least ten bananas, and a half of a percentage point to the winner of the contest. So an ambitious and particularly ravenous student could potentially earn 1.25 extra credit points.

It is important that these bananas not vary in ripeness or quality as that could jeopardize the outcome of the game. If there are no variations in ripeness or quality then the utility received from consuming each banana should eventually diminish as the person eats more and more bananas until the utility reaches zero, at which point the person won't eat another banana. I present two examples of participants who recorded the utility derived from each banana they ate along with written statements reflecting the experience of eating each banana (which I did not tell them to write, but they chose to write on their own). Although both participants' utility decreased over time down to zero where they stopped consuming bananas, the first participant's utility did not decline steadily over consumption due to quality variation; the second participant appeared to have homogeneous bananas. I incorporate this example to illustrate the importance of controlling for quality variation:

Banana Eating Contest Rules:

- 1. Each volunteer gets a bag containing 15 bananas and a bottle of water.**
- 2. You must consume the bananas and record the utility you get from consuming each banana (on a scale of 0-100 with 100 being the highest)**

¹ This concept can be demonstrated with any eating contest, but bananas were chosen for their inexpensiveness, health benefits (over unhealthy food such as candy) and quiet consumption (over louder foods such as apples). It has also been shown that an individual can eat over twenty bananas without suffering any gastro-intestinal problems.

² equivalent to 1 point in a 400 point system.

