

The Story of Supply and Demand: Cabbage Patch Dolls, Beanie Babies, and White Power Rangers

Karen Campbell, WVPT

Overview

Topic: Economics, Supply and Demand. Supply and demand are key concepts in the study of economics. In this lesson, students will participate in a hands-on activity to develop the concepts of supply and demand, then investigate the relationships among supply, demand, and prices with video resources. Finally, students will apply the concepts by running a simulated “Lemonade Stand” using web resources.

Time Allotment

Two 45-minute periods

Media Components

Give and Take #10, The Changing Market: Supply and Demand

Computer with Internet connection

Presentation device

Web Applications: In this lesson, the Web is used primarily for problem-solving. Students will apply lesson concepts through a simulation game.

Websites:

- Lemonade Stand - This is a variation of the classic simulation game where students must make decisions to increase profits.
www.coolmath4kids.com/lemonade
- Social Studies for Kids, Basic Economics: Supply and Demand - This basic informational website defines supply and demand with easy-to-understand explanations.
socialstudiesforkids.com/articles/economics/supplyanddemand1.htm
- Supply and Demand (Assessment) This website gives a brief description of supply and demand and a short quiz.
pittsford.monroe.edu/jefferson/califieri/economics/SupDemand.html

- Mini-Society (Extensions). The Mini-Society site offers an experience-based instructional system for teaching economics to students.
www.minisociety.org

Learning Objectives and Standards

The student will be able to:

- define the terms supply and demand
- identify what happens when demand exceeds supply
- identify what happens when supply exceeds demand
- explain how supply and demand affect choices
- explain how supply and demand affect prices
- apply concepts in a simulated business situation.

(This lesson addresses Va. SOL 1995 History and Social Science 7.6; 2001 History and Social Science CE.9; 1995 Math 7.21; 2001 Math 7.18)

Materials

- 3-4 boxes of colored markers
- 1 stopwatch

Student Handouts:

- Coloring pages for Introductory Activity – 1 per student



The Story of Supply and Demand: Cabbage Patch Dolls, Beanie Babies . . .

- EconoBucks (\$100 for each student, extras for students who finish first)
- Activity sheet for Assessment – 1 per student

Teacher Preparations

- Make copies of coloring sheets. You need one sheet per student. Only make one copy of the tree sheet, then equal amounts of the other sheets.
- Gather three or four boxes of markers, depending on the number of students. Take the red markers out of all boxes except one.
- Copy EconoBucks on green paper. Cut out.
- Bookmark the following websites for use during the culminating activity:
www.coolmath4kids.com/lemonade/socialstudiesforkids.com/articles/economics/supplyanddemand1.htm
pittsford.monroe.edu/jefferson/calfieri/economics/SupDemand.html
- Cue videotape to directly after title sequence (:47).

Introductory Activity

1. We are going to start off today by having a little fun as we learn about economics. Give each student \$100 in Econo Bucks and a coloring page. [See teacher preparation.]

Note to the Teacher

The purpose of this activity is to demonstrate the concepts of supply and demand. All coloring sheets require red; however, only one red marker is available. On the other hand, only one coloring sheet requires brown, but three or four brown markers are available. Instructions for the activity: Your first assignment will be to complete this coloring page, and your grade will depend on how fast you can get your picture colored and how much money you have left. I'm going to auction off the markers, and you will be able to purchase one marker at my auction. You will have one minute to color with that marker. After I call time, you will have 15 seconds to buy and sell markers among your classmates, then another minute to color. We will repeat that sequence.

3. Before beginning the auction, tell students that they may not begin coloring until time is called. Auction off the markers.

Note to the Teacher

Make a production of selling the markers from each box, but wait until the 3rd box to sell the red marker. Since students know the colors that they need, they should try to purchase other markers; however, offer them for sale to illustrate the point.

After selling the markers, remind students that they will have the opportunity to sell their marker to others, charging anything they like.

4. You will have one minute to color with this marker, then you will have the opportunity to buy and sell markers to get the next color that you need. Give students one minute, then call time. Give students 15 seconds to buy/sell markers, then another minute to color. Repeat. By the 3rd time you should have some students with finished pictures, give each of them \$20 in Econo Bucks. For the 4th sequence, let each student auction their marker to the rest of the group, then give students one minute to color. Give students with finished pictures another \$10.

5. What did you learn from this activity? Allow student discussion. On the board, write the terms “supply” and “demand.” Do you know what these terms mean? If students are just beginning the unit or to reinforce the meanings, you may want to visit the website: socialstudiesforkids.com/articles/economics/supplyanddemand1.htm. Have students read the descriptions of the terms. What does this have to do with our markers? What was our supply of red markers? (1) What was the demand? (Number of students in class). What was our supply of brown marker? (3 or 4) What was the demand? (1) How did this affect the sale of the markers? Discuss differences.

Focus for Media Interaction

SAY: Are you starting to see why supply and demand are such important concepts in economics?

Now, let's look at a real-world example to see how this works in a business. We are going to watch a video about some teenagers who are trying to earn money for a trip. As you watch the video, be looking for how supply and demand affects prices. Also, look for the choices that must be made as a result. We will keep a record on the board, so we can review them at the end of the segment.

Pause vs. Stop

When using a video interactively with students, teachers need to decide when to use **PAUSE** and when to use **STOP**. **PAUSE** the video when the anticipated discussion or activity will take less than two minutes. **STOP** for longer periods. Pausing for too long at one time can cause video heads on the VCR to become clogged which may require cleaning to correct.

Time Cues

To synchronize your VCR with the time cues that are included with this lesson, zero/reset your time counter at the very beginning of the program, before the introduction and titles. Time cues are expressed as "minutes:seconds;" for example, 3:15 means three minutes and fifteen seconds.

Learning Activities

1. FOCUS: As you watch the video, find out what factors set prices. **PLAY** video, beginning right after title shot (:38). **PAUSE** when Melissa says "That may be the answer to our money problems." (:53) What sets prices? (Supply and demand). Why? Allow for discussion. As we go through the video, we will determine how supply and demand set prices. What do you think Melissa's idea is? (Sell cologne)

2. FOCUS: In this next segment, find out what needs to be their first step? **RESUME** video, **PAUSE** when Loretta writes UNISCENT on paper. (2:35) What is the first step? (Market survey). What is a market survey? (Show how many students are interested and how much they will pay) **REWIND**

and **REPLAY** if students didn't pick up that information. Why do you think they should do a market survey? Do you think companies actually do market surveys? How does the market survey help to make decisions about the business? Discuss.

3. FAST FORWARD to 4:05 when kids are running into the house. **FOCUS:** The kids have two important choices to make. Find out what they are. **PLAY** video, **PAUSE** on close-up of chart as the narrator is saying "the survey shows . . ." (4:51) What are the two choices that the kids must make? (How much to buy and how much to sell it for) Write these on the board. What does the survey show? Where is the greatest demand? Where is the least demand? How much would you sell the bottles of cologne for? Defend your decision.

4. FOCUS: Let's see how much they are going to sell it for. **RESUME** video, **PAUSE** on close-up of price on sign (7:45). How much are they selling it for? (\$2.00) Was that a good decision? What may have happened if they would have priced it higher? Lower?

5. FOCUS: Is there anything else that can affect the sales of Uniscent? **RESUME** video, **PAUSE** at 8:34 when Bo says "Thank you very much." What happens to the price when supply is low? (People were willing to pay more.) Why do you think they were willing to pay more? So, what relationship can you draw between their desire for the product, or the demand, and the price? Draw an arrow showing increasing demand and ask a student to show what happens to price. (It goes up also). Do the same for increasing supply. What will happen if supply increases? (Price goes down). Why do you think people would pay less? What is the relationship between supply and price? Have students restate relationships to demonstrate understanding. What decisions will they have to make now?

6. FOCUS: What has happened to the demand for Uniscent? **RESUME** video, **PAUSE** at 9:10 on close-up of revised chart. How has demand changed? (Increased) How will this affect price? Why do you think there was an increasing demand for Uniscent? What types of things might cause demand to increase? Decrease?

7. FOCUS: What decisions do they need to make now? **PAUSE** at 10:02 on close-up of phone. What is the next decision? (Financing) Why is this important? How do you think supply and demand affect the ability to get financing?

8. FOCUS: Let's see if they have made the right decisions. **PAUSE** at 11:22 when Bo says "the place is packed and nobody's buying." Any guesses as to why nobody's buying? We've noticed Loretta lurking about. Would anyone like to predict what she's up to? How do you think this would affect the kids?

9. FOCUS: There were things that the kids did not take into account when they were making their decisions. **PAUSE** at 12:08 when Ralph says "We've got competition." What did the kids fail to take into consideration? (Competition) How does competition affect supply and demand? (Increased supply) What happens to prices when there is increased supply? (Prices decrease) Why does increasing supply cause prices to decrease? What may be the results of decreasing prices? Do you have any ideas about Ralph, Bo, and Melissa can do about their problem?

10. FOCUS: Let's see what they decide to do. **RESUME** video, **STOP** video at the end. What solution did they find for their problem? (Create a new demand). How does this help them?

11. Review supply and demand and the relationships between them and price. Go over the list of business decisions to make sure that students understand the ramifications of these decisions.

Culminating Activities

1. Now that you are experts on the concepts of supply and demand, let's see well you can do in your business. Using the computer and a projection device in front of the class, go to the Lemonade Stand game (www.coolmath4kids.com/lemonade). Play through the game the first time together, discussing decisions and determining how they may affect prices. This will serve to model and focus students' computer use.

2. On the opening page, read through the information together and discuss. Relate this to the activities you've done in class. What factors will affect your business/profit? What affects demand?

3. Click OK twice to continue. On this page, you must decide how many paper cups and how much sugar, lemon, and ice cubes to purchase. Discuss each decision and make choices. Be sure to check weather forecast.

4. Run simulation. Students should carefully note customer responses. Discuss changes that need to be made. Were customers satisfied? Did you sell all of your lemonade? Did you run out of supplies? What factors are affecting the sales? What can you do to increase profit?

5. Have students record money at the end of each day.

6. Modify choices. Run simulation. Do this for five days. Discuss results.

7. Take students to the computer lab or allow students time to work individually or in groups on classroom computers. Have them work through the Lemonade Game, recording results.

Assessment

Assess students' understanding throughout the lesson with questioning and observation of class participation. After the culminating activity, have students complete the activity sheet. A short online quiz is available at pittsford.monroe.edu/jefferson/calfieri/economics/SupDemand.html.

Community Connections

1. Invite a local business person to speak to the class about how supply and demand affect their business.

2. Have students monitor local gas prices, analyzing trends in price changes.

3. Invite an economist to speak to the class about basic economic concepts and possible career options (SOL CE.12).

Cross-Curricular Extensions

Math: Have students record data each day for the Lemonade Stand. Set up a spreadsheet to calculate profit and loss, then graph and analyze results. (C/T 8.1, Math 7.21)

Social Studies: Participate in the Mini-Society activity available at www.minisociety.org. (Social Studies CE.9)

English: Have students create advertisements for their lemonade stand, utilizing various persuasive techniques. (English 7.3)

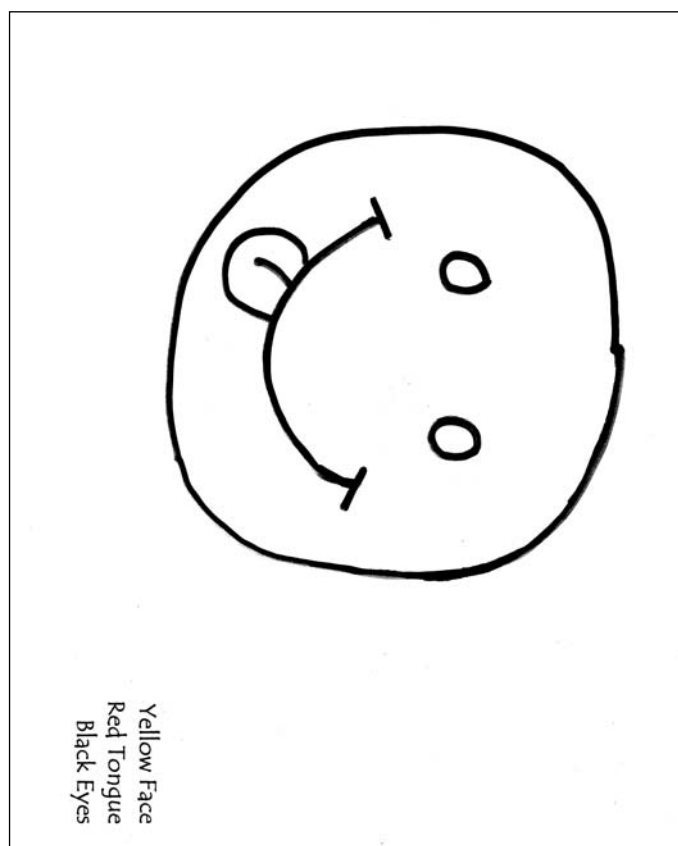
Special Needs Students: Provide appropriate modifications for the special needs students based on the IEP. The use of video supports visual and auditory learning. Hands-on activities and simulation games promote understanding.

About the Author

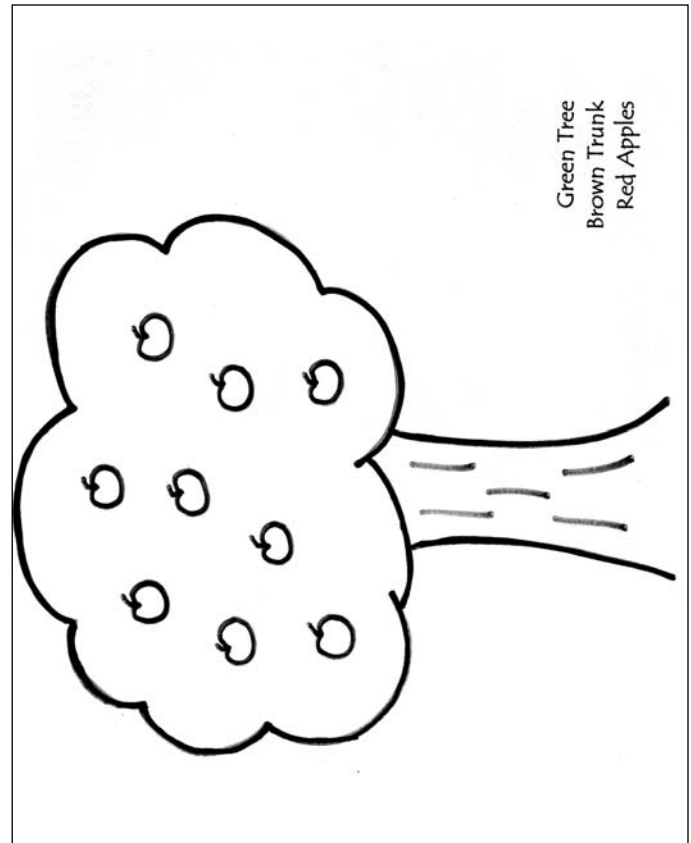
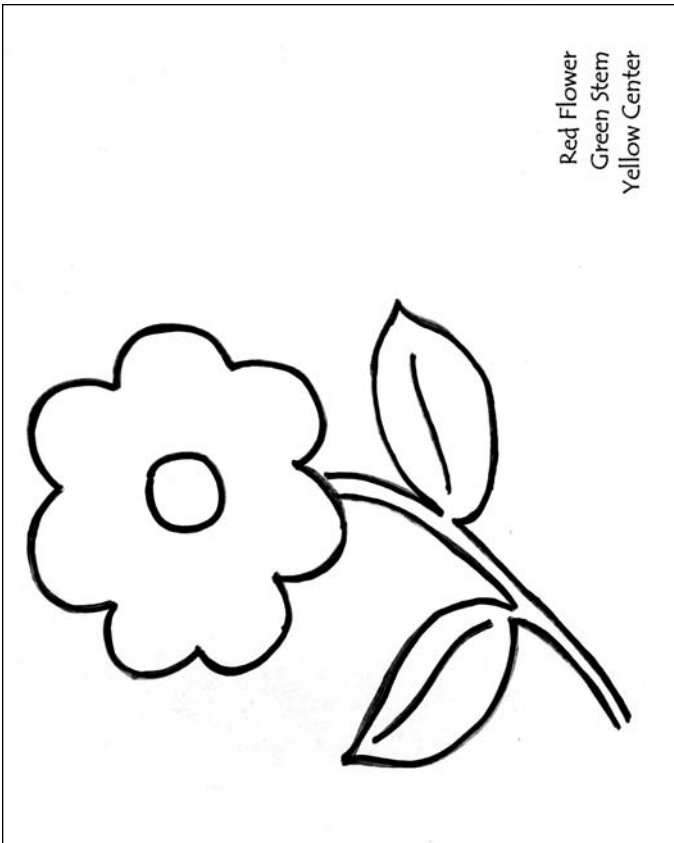
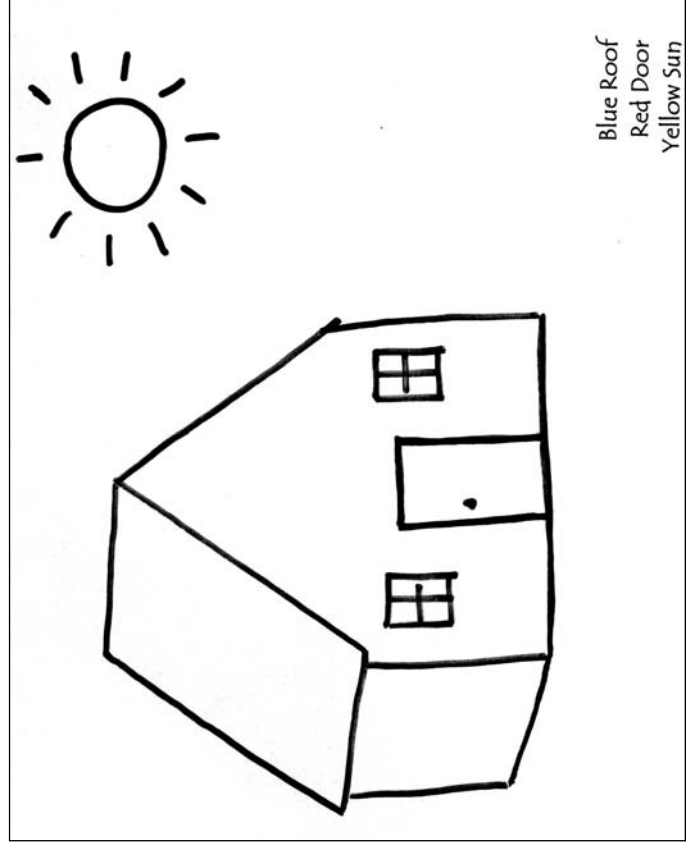
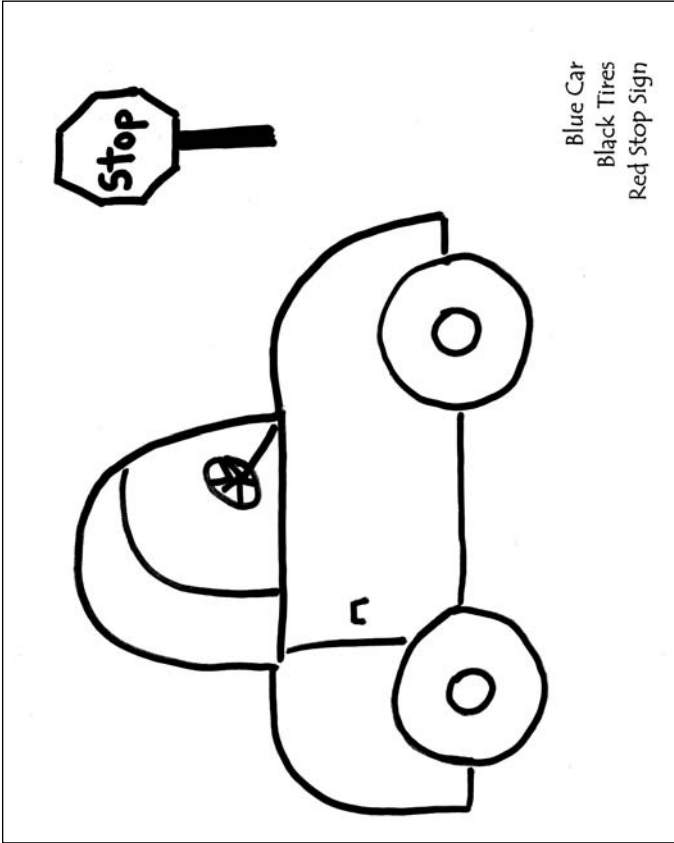
Karen K. Campbell











Karen has been a Master Teacher for the NTTI since 1994. After teaching science for 16 years, Karen moved out of the classroom when she became the Technology Resource Teacher for Page County Schools. In this capacity, she works with the teachers in all of the county schools to assist them in the integration of technology into the curriculum. Karen has been involved with technology in Page County since the early days of Apple II computers. She serves on the division-wide technology committee and has served as technology trainer. Karen was named Page County Teacher of the Year in 1996. She received her B.S. degree from JMU. She is a member of the NEA, VEA, PC (Page County) EA, and VSTE. In her spare time, Karen enjoys hiking and camping.

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You may want to enlarge this student page on your copier.



\$10 <i>Econo</i>  Bucks	\$10 <i>Econo</i>  Bucks
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Cabbage Patch Dolls, Beanie Babies, and White Power Rangers

The Story of Supply and Demand

- I. Complete the following:
 - a. Did you complete your coloring sheet? _____
 - b. How much in EconoBucks did you have left? _____
 - c. What is supply?
 - d. What is demand?

II. Draw an arrow to show what happens to price when supply or demand changes:

Supply ↗ Price

Demand ↗ Price

III. Lemonade Stand

	Cash		Cash		Cash		Cash		Cash
Day 1		Day 7		Day 13		Day 19		Day 25	
Day 2		Day 8		Day 14		Day 20		Day 26	
Day 3		Day 9		Day 15		Day 21		Day 27	
Day 4		Day 10		Day 16		Day 22		Day 28	
Day 5		Day 11		Day 17		Day 23		Day 29	
Day 6		Day 12		Day 18		Day 24		Day 30	

IV. On the back of this paper, explain the choices that you made during the Lemonade Stand game in terms of supply and demand.