Economics Unit 3: “Markets: Not just for fleas and stocks”

Elaborated Unit Focus

In this unit, students will demonstrate their knowledge of Microeconomic concepts by running an online, computer simulated hologenerator company. A hologenerator is a hypothetical electronic product that generates a three dimensional image. The students will analyze the performance of their company through application of unit three concepts. Using the theme of Gain from Trade, students will give examples from their on-line company illustrating how specialization provided greater satisfaction to their customers, their business and its investors. Incorporating the theme of Incentives, students will analyze their data to set production levels, target consumers and reinvest any profit. Drawing upon the theme of Interdependency, students will illustrate and explain a market graph for their industry and a graph of their firm’s current output and market price. They will also illustrate how a government imposed price ceiling and an increase in the minimum wage could affect their company’s costs, profits, and/or production. Employing the theme of Scarcity, the student will apply the concept of elasticity to explain the effect of time, competition and price changes on the quantity of product demanded by consumers.

Standards/Elements

SSEF3 The student will explain how specialization and voluntary exchange between buyers and sellers increase the satisfaction of both parties.
   a. Give examples of how individuals and businesses specialize.
   b. Explain that both parties gain as a result of voluntary, non-fraudulent exchange.

SSEMI1 The student will describe how households, businesses, and governments are interdependent and interact through flows of goods, services, and money.
   a. Illustrate by means of a circular flow diagram, the Product market; the Resource market; the real flow of goods and services between and among businesses, households, and government; and the flow of money.
   b. Explain the role of money and how it facilitates exchange.

SSEMI2 The student will explain how the Law of Demand, the Law of Supply, prices, and profits work to determine production and distribution in a market economy.
   b. Describe the role of buyers and sellers in determining market clearing price.
   c. Illustrate on a graph how supply and demand determine equilibrium price and quantity.
   d. Explain how prices serve as incentives in a market economy.
SSEMI3 The student will explain how markets, prices, and competition influence economic behavior.
   a. Identify and illustrate on a graph factors that cause changes in market supply and demand.
   b. Explain and illustrate on a graph how price floors create surpluses and price ceilings create shortages.
   c. Define price elasticity of demand and supply.

SSEMI4 The student will explain the organization and role of business and analyze the four types of market structures in the U.S. economy.
   a. Compare and contrast three forms of business organization—sole proprietorship, partnership, and corporation.
   b. Explain the role of profit as an incentive for entrepreneurs.
   c. Identify the basic characteristics of monopoly, oligopoly, monopolistic competition, and pure competition.

Enduring Understandings/Essential Questions

Gain from Trade: The student will understand that parties trade voluntarily when they expect to gain.
   • Why don’t people create all their own goods and services?
   • How does specialization by business and individuals lead to greater efficiency, lower prices, and increased production?
   • How are buyers and sellers determined in the economy?
   • When do we engage in voluntary and involuntary exchange in the American economy?

Interdependency: The student will understand that, because of interdependency, a decision made by one party has intended and unintended consequences on other parties.
   • How are households, business, and government interrelated through markets and the flow of money?
   • How are prices established in a market economy?
   • What forces lead to changes in supply and demand?

Scarcity: The student will understand that scarcity of all resources forces parties to make choices and that these choices always incur a cost.
   • What factors affect the level of competition in various U.S. industries?
   • How do available substitutes, income, and time affect consumer responses to price changes?
   • How does the condition of scarcity affect producer decisions about production, capital investment, and research/development?

Incentives: The student will understand that parties respond predictably to positive and negative incentives.
   • What are the different roles does money plays in the U.S. economy?
   • Why do increases in market prices encourage producers to sell more goods and services?
   • How can the market structure of an industry influence the number of firms selling a product and the prices they charge?
*NOTE: The balanced assessment plan included in this unit is presented as a series of suggested activities. It is not expected that the teacher complete all assessments for a successful unit.

### Balanced Assessment Plan

<table>
<thead>
<tr>
<th>Description of Assessment (V.3 refers to an interactive CD-ROM published by the National Council on Economic Education. See resources for more on acquiring V.3)</th>
<th>Standard/Element</th>
<th>Type of Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers put students into groups instructing them on how to construct a product such as a pizza or a book. Students will participate in three rounds of production comparing at the end of each round how differences in inputs and production methods affected their output. For a detailed version of this activity see… Productivity (V.3, Economics in Action: 14 Greatest Hits for Teaching High School Economics) Working in small groups, the students participate in a production simulation to determine the effects of specialization on labor productivity, the division of labor, and investment in human capital and capital goods.</td>
<td>SSEF6 a, b and c</td>
<td>*Informal observation *dialogue and discussion *self assessment</td>
</tr>
<tr>
<td>Getting More, Using Less (V. 3, Focus: High School Economics – Lesson 8) Students observe or participate in a pizza production simulation to determine the effects on labor productivity of specialization, the division of labor and investment in human capital and capital goods.</td>
<td>SSEF6 a, b and c</td>
<td>*Informal observation *dialogue and discussion *self assessment</td>
</tr>
<tr>
<td>Students will participate in a demonstration of the circular flow diagram. Teachers will provide different colored paper that represents money, natural resources, capital resources, human resources and a finished good. Approximately half the class will act as households holding a collection of 15 resources (being an unequal mixture of natural, capital and human resources). The other half of the class would be businesses holding ten pieces of money. Businesses would go about the act of buying the necessary resources for the production of their product. After collecting one each of natural, capital and human resources the businesses will exchange that set for one finished good. They will then sell that finished good back to the households. The teacher needs to debrief the simulation by having the students construct the circular flow diagram.</td>
<td>SSEMI1 a and b</td>
<td>*Informal observation *dialogue and discussion *self assessment</td>
</tr>
</tbody>
</table>
For an identical and more detailed description see Circular flow diagram / Circular flow of Economic Activity (V.3, Focus: High School Economics, Lesson 16)
In this lesson, the students read about market interactions and participate in a simulation. ‘Econoland’ involves transactions between businesses and households in two kinds of markets: product markets and resource (or input) markets. They discuss how the government fits into this model and translate their conclusions into a circular-flow diagram.

| **Graphing relays** | Students work in teams to complete a graph of a situation presented by the teacher. The teacher can call out the scenario or write descriptions on cards. Each student is responsible for correctly drawing only one curve / axis and its corresponding label, then they hand off the marker to the next teammate. Teachers can accommodate multiple teams by using a long dry erase board or by posting dry erase flip chart paper around the room. | SSEMI2 a, b, c and d also SSEMI3 a, b and c | *Informal observation and discussion |
| **Slates** | Using small dry erase boards or some other display device students will graph situations presented by the teacher. See page 10. | SSEMI2 a, b, c and d also SSEMI3 a, b and c | *Informal observation and discussion |
| **Graphing quizzes** | Students respond to a series of multiple choice and short answer questions on unit 3 topics. See attached quiz below on page 13. | SSEMI3 a, b and c | *Constructed response |
| | Students will simulate a commodities market with half the class acting as buyers and the other half sellers. The teacher will supply two different colored cards, one for buyers and one for sellers with a varying range of prices for both buyers and sellers. Buyers should try to sell below what is on their card and sellers should try to sell for more. Both buyers and sellers should record each transaction noting the price on cards and the transaction price. Prizes can be awarded for the highest net gain in both the seller and buyer category. After the completion of three 2 minute rounds, the teacher can construct both a supply and demand curve using the prices determined by the buyers and sellers in the market. | SSEMI2 b, c and d | *Informal observation and discussion |

For a more detailed version of this activity see the Classroom Market for Crude Oil (V.3, Focus: High School Economics - Lesson 3)
Students participate in a simulation to experience how a competitive market works. Although most markets are not as competitive as the market in this activity, by playing “A Market in Oil” students gain a better understanding of how the interaction of buyers and sellers determines prices in any market.

**Market Structure Candy Shoppes**

Through participation in four rounds of candy buying and selling, students will simulate the four market structures. By analyzing each round in the simulation students will derive the characteristics of market structures from their own experience. See attachments under resources for specifics. Pg 14.

<table>
<thead>
<tr>
<th>SSEMI1</th>
<th>SSEMI4</th>
</tr>
</thead>
<tbody>
<tr>
<td>a and b</td>
<td>b and c</td>
</tr>
</tbody>
</table>

*informal observation and constructed response
*dialogue and discussion

**Sweet Opportunities**


Acting as a team of business consultants for a hypothetical client, students will evaluate the entrepreneurial strengths and weaknesses of the proposed business. Students will research the three main forms of business organizations and recommend the most appropriate form to their client.

<table>
<thead>
<tr>
<th>SSEMI4</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
</tr>
</tbody>
</table>

*observation and constructed response

**Performance Task for Unit #3  
“Markets: Not Just for Fleas and Stocks“**

- **Enduring understanding:**
  - **Gain from Trade:** The student will understand that parties trade voluntarily when they expect to gain. *(Economics)*
  - **Interdependency:** The student will understand that, because of interdependency, a decision made by one party has intended and unintended consequences on other parties. *(Economics)*
  - **Incentives:** The student will understand that parties respond predictably to positive and negative incentives. *(Economics)*
  - **Scarcity:** The student will understand that scarcity of all resources forces parties to make choices and that these choices always incur a cost. *(Economics)*

**Standards:**

SSEF3 The student will explain how specialization and voluntary exchange between buyers and sellers increase the satisfaction of both parties.

- a. Give examples of how individuals and businesses specialize.
- b. Explain that both parties gain as a result of voluntary, non-fraudulent exchange.
SSEMI1 The student will describe how households, businesses, and governments are interdependent and interact through flows of goods, services, and money.
   a. Illustrate by means of a circular flow diagram, the Product market; the Resource market; the real flow of goods and services between and among businesses, households, and government; and the flow of money.
   b. Explain the role of money and how it facilitates exchange.

SSEMI2 The student will explain how the Law of Demand, the Law of Supply, prices, and profits work to determine production and distribution in a market economy.
   b. Describe the role of buyers and sellers in determining market clearing price.
   c. Illustrate on a graph how supply and demand determine equilibrium price and quantity.
   d. Explain how prices serve as incentives in a market economy.

SSEMI3 The student will explain how markets, prices, and competition influence economic behavior.
   a. Identify and illustrate on a graph factors that cause changes in market supply and demand.
   b. Explain and illustrate on a graph how price floors create surpluses and price ceilings create shortages.
   c. Define price elasticity of demand and supply.

SSEMI4 The student will explain the organization and role of business and analyze the four types of market structures in the U.S. economy.
   a. Compare and contrast three forms of business organization—sole proprietorship, partnership, and corporation.
   b. Explain the role of profit as an incentive for entrepreneurs.
   c. Identify the basic characteristics of monopoly, oligopoly, monopolistic competition, and pure competition.

Performance Task on-line simulation located at http://titan.ja.org

You will act as an executive of a cutting-edge hologenerator corporation. (A hologenerator is a fictional electronic device used as the basis for this simulation. It projects holographic images of for music videos, video games, etc.) You and your fellow executives will operate a hologenerator company for 16 business quarters (a simulated 4-year period). Your corporate team will use financial, marketing, and production reports to make six key decisions for the company. These decisions include the price of your product, the number of hologenerators your company will produce, the types and cost of marketing the product, the amount of financial capital you will use to increase production capacity, the type and cost of new technological features for your product, and the amount of money your company will donate to charity.

As you make these decisions each quarter, an advanced online computer program will process your decisions and tell you how your company is performing in relationship to the other seven companies in the hologenerator market. It is your company’s goal to have the highest performance index (stock value), the highest retained earnings, and the largest market share. In some cases, your shrewd decision-making may even put the competition out of business. You will keep quarterly reports to determine the performance of your company over time.

After your company has operated for four years, you and your fellow executives decide to solicit $500,000 in financial capital from a group of investors (venture capitalists). Using your company and industry financial records, you will prepare the following information for your presentation to the venture capitalists:

- Identify the incentives motivating your company’s use of the $500,000. (How will your plan make the company more profitable and/or competitive?) (Be creative!)
- Explain how your potential the investors will gain by trading their $500,000 for a share of future earnings. Tell what percentage they will earn and why you think this is an appropriate return for their investment.
- Describe the special features of your company’s hologenerator and explain why, when faced with scarce resources, your company chose to specialize in these areas. (Be sure to include your company’s opportunity cost for these choices.)
- A status report explaining the interdependent nature of the hologenerator market in which your company competes. (This may include the rank, performance index (stock value), market share, revenue, costs, and profit for your company and its competitors).
• The advantages and disadvantages of your corporate form of business organization.
• The market structure in which your company operates, how the structure changed over time, and how the characteristics of this market structure affect your business decisions.
• A market graph for the hologenerator industry and a graph of your firm’s current output and market price.
• An explanation of how a government imposed price ceiling or an increase in the minimum wage could affect your costs, profit, and/or production.
• The effect of a price change on the quantity of your product demanded by consumers.
• The ways in which your hologenerator company reflects the circular flow diagram.

*Note concerning rubrics: Each performance task is accompanied by two rubrics. The first (with bolded borders) is designed to address content and understanding of the standards in terms of the enduring understandings. The second rubric focuses on the product of the performance task. This is where students are scored on items involving grammar, punctuation, spelling, creativity, presentation, etc. It is NOT intended that each rubric counts for 50% of the assessment. Teachers should weigh each section of the rubric according to the areas they wish to emphasize.

Map and Globe Skills: 

Information Processing Skills: 1. 3. 5. 9. 11. 12

*Note concerning rubrics: Performance tasks are accompanied by two rubrics: a content rubric and a process rubric. The content rubric (with bold borders) is designed to measure how well a student can use the standards to demonstrate the enduring understanding(s). The process rubric focuses on the product of the performance task. It is intended that the CONTENT rubric is weighed more heavily when assigning a grade to the students.
## Content Rubric for Performance Task

<table>
<thead>
<tr>
<th>Scale Criteria</th>
<th>1 (Below Standard)</th>
<th>2 (Needs Improvement)</th>
<th>3 (Meets Standard)</th>
<th>4 (Exceeds Standard)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Describes how consumers, investors, and the hologenerator company gains from specialization and trade.</strong></td>
<td>Correctly explains only gains from trade OR gains from specialization AND fails to relate the concept to the hologenerator company or industry.</td>
<td>Correctly explains general gains from trade and specialization, but fails to apply this understanding specifically to the hologenerator company or industry.</td>
<td>Correctly identifies how the hologenerator company has specialized to provide greater satisfaction to its customers, gives evidence to support gains from the trade of hologenerators for both the consumer and the company, and assesses potential gains for investors.</td>
<td>Everything in 3 PLUS examples of gains from trade drawn from real life examples.</td>
</tr>
<tr>
<td><strong>Analyzes the role of incentives in establishing prices, producing products, and simulating demand.</strong></td>
<td>Correctly only three or fewer of the concepts listed for level 2.</td>
<td>Correctly explains the role of incentives, the advantages/disadvantages of corporations, the laws of supply and demand, but fails to connect the concepts to the hologenerator company or industry.</td>
<td>Correctly analyzes how the profit incentive guided key business decisions for the hologenerator company, explains how the laws of supply and demand apply to the hologenerator market, highlights the advantages and disadvantages of the corporate form of business organization, and describes the role of incentives within the hologenerator market structure.</td>
<td>Everything in 3 PLUS examples of gains from trade drawn from real life examples.</td>
</tr>
<tr>
<td><strong>Explains the interdependent relationship between consumers and producers as well as businesses within an industry.</strong></td>
<td>Correctly explains only one or two of the graphs/concepts in level 2.</td>
<td>Correctly draws and explains a market graph, a price ceiling, and a price floor, but fails to connect the concepts/graphs to the hologenerator company or industry.</td>
<td>Accurately illustrates and explains a market graph for the hologenerator industry and a graph of your firm’s current output and market price; illustrates how a government imposed price ceiling and an increase in the minimum wage could affect the costs, profit, and/or production of the hologenerator company.</td>
<td>Everything in 3 PLUS examples of gains from trade drawn from real life examples.</td>
</tr>
<tr>
<td><strong>Analyzes how scarcity influences the choices made by the hologenerator company and the willingness of consumers to purchase the product.</strong></td>
<td>Correctly explains only one or two of the concepts in level 2.</td>
<td>Correctly defines elasticity, tells factors that influence elasticity of demand and supply, and explains the circular flow diagram, but fails to connect these concepts to the hologenerator company or industry.</td>
<td>Correctly applies the concept of elasticity to explain the effect of a price change on the quantity of product demanded by consumers, explains the factors that guide elasticity of demand and supply, and explains the roles the hologenerator company plays within the circular flow diagram.</td>
<td>Everything in 3 PLUS examples of gains from trade drawn from real life examples.</td>
</tr>
</tbody>
</table>
## Product RUBRIC

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Scale</th>
<th>1 (Below Expectations)</th>
<th>2 (Needs Improvement)</th>
<th>3 (Meets Expectations)</th>
<th>4 (Exceeds Expectations)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Presentation Skills</strong></td>
<td></td>
<td>Presenters lack two or more of the components outlined in level 3.</td>
<td>Presenters lack one of the components outlined in level 3.</td>
<td>Presenters are dressed in business attire. All group members speak clearly using appropriate professional language. All group members participate equally in the presentation. The presentation includes at least three quality visual aids.</td>
<td>Everything in 3 PLUS a formal written proposal outlining the plan and a contract for the venture capitalists outlining their projected return on the investment.</td>
</tr>
<tr>
<td><strong>Use of simulation data.</strong></td>
<td></td>
<td>Presentation includes numbers for less than half of the presentation.</td>
<td>Presentation includes specific numbers only for half of the presentation components.</td>
<td>Presentation includes references to accurate simulation data and records for each component of the presentation.</td>
<td>Everything in 3 PLUS realistic projections for future sales, profits, and market share.</td>
</tr>
</tbody>
</table>

## Resources for Unit

- [www.bie.org](http://www.bie.org) – this on line curriculum center offers an all inclusive, problem based learning unit incorporating most of the unit three standards. The name of this unit is *The High School Food Court*.

- [http://titan.ja.org](http://titan.ja.org) – location of computer simulation for the performance task a “Tip Sheet” is attached below

Virtualeconomics V.3 CD – go to [WWW.GCEE.org](http://WWW.GCEE.org) and click on register for workshops to enroll for the CD and its required training. The workshop is currently provided at no cost to the participant.

Slates guidelines / how to… see below

[www.econedlink.org/lessons/index.cfm?lesson=EM533&page=teacher](http://www.econedlink.org/lessons/index.cfm?lesson=EM533&page=teacher) link for Sweet Opportunities assessment… also see attachment below for a graphic organizer to be used with the activity

Market Structures instruction and data sheets attached below

V.3 Advanced Placement Micro Student Activity Book . Unit 3 Lesson 1 Activity 24: Different Type of Market Structures
Student Slates How To Guide

Materials Needed:

10” X 10” or 12” X 12” dry erase board; dry erase marker, some sort of an eraser (ex. old clean sock) Most home improvement stores will cut the white dry erase boards at no charge. All boards and dry erase markers can most likely be purchased for less than $50 at 2007 prices. As a substitute for the dry erase boards, teachers may use 8 1/2 X 11 blank copy paper.

Procedure / Use

Each student will have his own slate, dry erase marker and eraser. The teacher will present a market situation, on the overhead, board or verbally, that must be correctly graphed on the slates.

An example: …market for candy bars: show an increase in the number of consumers in the market.

The students should correctly label the vertical (price) and horizontal axis (quantity), place a correctly labeled positive (upward) sloped supply curve, a correctly labeled negative (down) sloping demand curve and a second correctly labeled demand curve to the right of the first demand curve, which illustrated (showed the proper shift) the increase in the number of consumers.

After graphing the situation each student will show their graph allowing the teacher to view the entire classes’ graphs in just a few moments, making comments as to adjustments that need to be made, labeling omissions, excellent examples, etc… This can be used as a sponge activity for the lesson and / or for review.
### Graphing Quiz

**Name:** ___________________________  **Date:** ___________________________  **Blk:** __________________________

1) People who start businesses are important to the economy because
   - A) they take the risks and help add jobs to the economy.
   - B) they pay more taxes.
   - C) they are involved in high-tech industries only.
   - D) they are greedy.

2) In general, which form of business organization has the greatest capacity to raise large sums of financial capital?
   - A) Proprietorships
   - B) Partnerships
   - C) Limited partnerships
   - D) Corporations

3) The most numerous type of firm in the United States is the
   - A) proprietorship.
   - B) partnership.
   - C) corporation.
   - D) limited partnership.

4) Of the owners of the following firms, which do not have unlimited liability for their businesses’ debts?
   - A) Dave’s Grocery Store, Dave Jones, proprietor
   - B) The partnership of Smiley and Smith, Attorneys-at-Law
   - C) The Lakeworth Corporation
   - D) Dobby’s Feed and Seed Store, a proprietorship

5) Which of the following is most likely to increase productivity in a plant working at or near capacity?
   - A) The use of more and better machinery.
   - B) The addition of new workers.
   - C) Keeping plant operations on a small scale.
   - D) Operating beyond the point of diminishing returns.

6) In market structure, when we discuss non-price competition, we most often refer to:
   - A) lack of prices in the market
   - B) boxing matches between too rival firms
   - C) prices that are so high producers cannot sell anything
   - D) advertising and public relations conducted by a firm

7) Which of the following is necessary for perfectly competitive markets to exist?
   - A) Economies of scale in production
   - B) Advertising
   - C) Barriers to entry for new entrepreneurs
   - D) Firms with products which are identical substitutes for each other

8) In economics, “demand” refers to
   - A) the intensity of desire for a good.
   - B) the amount of a good people need rather than the amount they want.
   - C) the satisfaction a good will provide a person.
   - D) the quantities of a good that people will buy at various prices.

9) An increase in demand is shown graphically by
   - A) a shift of the demand curve to the left.
   - B) a movement up along the existing curve.
   - C) a shift of the demand curve to the right.
   - D) a movement down the existing curve.

10) All of the following are examples of substitute goods except
   - A) soda and wings.
   - B) margarine and butter.
   - C) beef and chicken.
   - D) tea and coffee.

11) In the circular flow model,
   - A) businesses trade products for resources in the product market.
   - B) consumers trade resources for products in the resource market.
   - C) consumers trade products for money in the resource market.
   - D) producers trade products for money in the product market.

12) The two of the sectors illustrated in the circular flow model are
   - A) the employed and the unemployed.
   - B) foreign markets and domestic markets.
   - C) households and businesses.
   - D) land and labor.

13) (Past EOCT Question) When the cost of factors of production for suppliers increase, what is the likely result?
   - A) The supply curve will shift to the left.
   - B) The supply curve will become vertical.
   - C) The demand curve will shift to the left.
   - D) The demand curve will shift to the right.

14) (Past EOCT question) Timothy works for many years at a highly successful computer corporation. After a while he decides to leave the company and open his own clothing store. To raise capital for the store, Timothy sells all the vested stock he acquired while working at the computer corporation. The clothing store can be considered:
   - A) an oligopoly
   - B) a partnership
   - C) a sole proprietorship
   - D) a corporation
1. (10 points) Using the Venn Diagram below, compare and contrast perfect competition with monopolistic competition. You must have a minimum of two characteristics in each of the three sections.

Monopolistic Competition     Both     Perfect Competition

---

Georgia Department of Education
Kathy Cox, State Superintendent of Schools
ECONOMICS FRAMEWORK UNIT 3
UPDATED 8/18/2007 • Page 12 of 20
Copyright 2007 © All Rights Reserved
2. How will the following changes affect the market price of wheat flour (assuming that the market is initially in equilibrium)? In each case, draw the new demand or supply curve and circle the arrow corresponding to the directional change of the equilibrium price and quantity. Be sure to show an arrow pointing to the direction of the shift.

(a) People consume more bread.

(b) The discovery of a new cheaper way of milling flour.

(c) The prices of other grains rise.

(d) Rice and potatoes fall in price.
### Market Structure Candy Shoppes

**Perfect Competition Round #1**

Give six to eight students (depending on class size) one of the following cards. These students will act as candy sellers. Give each of these sellers an equal number of identical candies. Give six to eight students five, one dollar bills in play money. When you say go, the buyers will attempt to purchase candy from the sellers. The sellers MUST follow the instructions on the card. When sellers and buyers finish their exchange, use open-ended questioning to fill in the Market Structure Simulation Chart based on the simulated buying and selling round.

<table>
<thead>
<tr>
<th>You must sell your product for $1 You may not advertise your product Or offer any deals to customers</th>
<th>You must sell your product for $1 You may not advertise your product Or offer any deals to customers</th>
<th>You must sell your product for $1 You may not advertise your product Or offer any deals to customers</th>
</tr>
</thead>
<tbody>
<tr>
<td>You must sell your product for $1 You may not advertise your product Or offer any deals to customers</td>
<td>You must sell your product for $1 You may not advertise your product Or offer any deals to customers</td>
<td>You must sell your product for $1 You may not advertise your product Or offer any deals to customers</td>
</tr>
<tr>
<td>You must sell your product for $1 You may not advertise your product Or offer any deals to customers</td>
<td>You must sell your product for $1 You may not advertise your product Or offer any deals to customers</td>
<td>You must sell your product for $1 You may not advertise your product Or offer any deals to customers</td>
</tr>
</tbody>
</table>

**Monopolistic Competition Round #2**

Give six to eight students (depending on class size) one of the following cards. These students will act as candy sellers. Allow the sellers from the previous round to now act as the consumers in round two using the revenue they earned in round one. The sellers MUST follow the instructions on the card. When sellers and buyers finish their exchange, use open-ended questioning to fill in the Market Structure Simulation Chart based on the simulated buying and selling round.

<table>
<thead>
<tr>
<th>You may sell at any price, you May offer specials and advertise Your product</th>
<th>You may sell at any price, you May offer specials and advertise Your product</th>
<th>You may sell at any price, you May offer specials and advertise Your product</th>
</tr>
</thead>
<tbody>
<tr>
<td>You may sell at any price, you May offer specials and advertise Your product</td>
<td>You may sell at any price, you May offer specials and advertise Your product</td>
<td>You may sell at any price, you May offer specials and advertise Your product</td>
</tr>
<tr>
<td>You may sell at any price, you May offer specials and advertise Your product</td>
<td>You may sell at any price, you May offer specials and advertise Your product</td>
<td>You may sell at any price, you May offer specials and advertise Your product</td>
</tr>
<tr>
<td>You may sell at any price, you May offer specials and advertise Your product</td>
<td>You may sell at any price, you May offer specials and advertise Your product</td>
<td>You may sell at any price, you May offer specials and advertise Your product</td>
</tr>
</tbody>
</table>
Oligopoly Round #3

Give three students one of the following cards. These students will act as candy sellers. Give each of these sellers an unequal number of differentiated candies. Be sure there are as many product in this round as were distributed in rounds one and two. Allow the sellers from the previous round to now act as the consumers in round three using the revenue they earned in round two. When you say go, the buyers will attempt to purchase candy from the sellers. The sellers MUST follow the instructions on the card. When sellers and buyers finish their exchange, use open-ended questioning to fill in the Market Structure Simulation Chart based on the simulated buying and selling round. Be sure to discuss the effectiveness of price collusion and its effect on revenue.

<table>
<thead>
<tr>
<th>Sell at any price – You may discuss prices with your competitors to drive up revenue.</th>
<th>Sell at any price – You may discuss prices with your competitors to drive up revenue.</th>
<th>Sell at any price – You may discuss prices with your competitors to drive up revenue.</th>
</tr>
</thead>
</table>

Monopoly Round #4

Give one student the following card. This student will act as a candy seller. Make sure the same number of products are in the market as there were in rounds one through three. Allow the sellers from the previous round to now act as the consumers in round four using the revenue they earned in round two. When you say go, the buyers will attempt to purchase candy from the seller. The seller MUST follow the instructions on the card. When seller and buyers finish their exchange, use open-ended questioning to fill in the Market Structure Simulation Chart based on the simulated buying and selling round. (You may want to emphasize candy security with your monopolist or theft may occur during this round.)

| Sell as much candy as you want at any price. Do not horde candy. If you sell everything, you will be able use your revenue to purchase some candy from your teacher at the end of the simulation. |  |  |
# Market Structures Data Sheet

<table>
<thead>
<tr>
<th></th>
<th># of Firms</th>
<th># of consumers</th>
<th># of products</th>
<th>Description of products</th>
<th>Price(s) of products</th>
<th>Total Revenue/firm</th>
<th>Amount Saved by consumers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Round 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Round 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Round 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Round 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Graphic Organizer for Sweet Opportunities

### Sole Proprietorship

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Partnership

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Corporations

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Tomorrow, we will meet in the computer lab to play the JA Titan computer business simulation. You will need to make five business decisions in each round of the simulation: price, production, marketing, capital investment, and research/development. Today, we will select our company teams, discuss how to understand company and industry reports, read some tips for succeeding in the simulation, and answer questions to ensure understanding.

1. Get into groups of three and select a name for your company.

   Company Name: _______________________
   Company Officers: _______________________

2. Develop a **pricing strategy**. Do you want to be a high price/low volume, middle price/middle volume, or low price/high volume? _____________________________

   What is the current price being charged by the company shown on the attached reports? _______
   What is the current Total cost/unit sold? ___________

   **Price Hint:** Your first company report will look similar to the sample provided. You have to make sure you set your price high enough to cover your total cost/unit sold. Initially, you may want to set your price between $25 and $37. What price do you think you will set for your company given the pricing strategy above? _______

3. Develop a **production strategy**. If you chose to be high price you will not increase your production level as much as a team that is a low price company.

   What is the current factory capacity? ______ What is the current number of units produced? ________
   What is the current **capacity utilization** (percentage of factory capacity used) for the company shown on the attached reports? _______

   **Production Hint:** Initially, you may want to set your production at 75% to 85% of your factory capacity. You will have a chance to enlarge your factory using the capital investment strategy, but it takes one quarter of play before you can use this capacity.

   What number of units does your company want to produce? ______

4. Develop a **marketing strategy**. Generally, companies with high priced products will spend more on advertising/marketing than low priced products. In this simulation, you have to spend on marketing every quarter or you will experience a decrease in demand for your holo-generator. You may select the types of marketing campaigns you would like. Some require minimum fees.

   What is the current amount being spent on market by the company shown on the attached reports? _____
   What are the four types of marketing campaigns you may use? _______________________________________

   **Marketing Hint:** High price companies will usually do better with high-priced marketing strategies. Low price companies will need only basic marketing.

   What amount of money do you plan to spend on marketing in your first round? _________________

5. Develop a **capital investment strategy**. Capital investment can be used to enlarge or shrink your factory. You must cover the depreciation, theoretical losses due to usual wear and tear on equipment, before you can increase your factory size.

   What is the current amount being spent on market by the company shown on the attached reports? ______
   What are the four types of marketing campaigns you may use? _______________________________________

   **Marketing Hint:** High price companies will usually do better with high-priced marketing strategies. Low price companies will need only basic marketing.

   What amount of money do you plan to spend on marketing in your first round? _________________

   What is the current amount being spent on market by the company shown on the attached reports? ______
   What are the four types of marketing campaigns you may use? _______________________________________

   **Marketing Hint:** High price companies will usually do better with high-priced marketing strategies. Low price companies will need only basic marketing.

   What amount of money do you plan to spend on marketing in your first round? _________________
What was the cost of covering depreciation on your factory according to the attached report? _________
What was last quarter's capital investment amount? __________

**Capital Investment Hint:** Depreciation is equal to 5% of your factory's value. It cost $40/unit to increase your factory size.
What was the value of your factory (factory size) last quarter? __________
Calculate 5% of the factory value: _________ This is your amount to cover depreciation.
By how many units do you want to increase your factory? __________
Multiply this number of units by $40: _________ Add your depreciation amount: ________(This is the minimum you should invest for capital investment.)

6. Develop an **R & D strategy.** Research and development is important for all companies. High priced product companies need to invest more money, more quickly than due low price companies. However, a low price company with leading technology can put the other companies out of business.
What is the current amount invested in R&D? __________
Which feature is currently being developed? ________________________________
Which features do you want for your product? ________________________________
How much do you want to invest in R&D next quarter? __________

7. Develop a **Charitable Giving strategy.** Charitable giving can increase a company's community profile and build product loyalty. Businesses can choose causes that target its customer base or helps them politically. Businesses also receive tax breaks from the government when they give to recognized charities. Usually, businesses are more likely to give when business is good than when the company is struggling.
What is the current amount being given to charity? ______
Do you want to increase, decrease, or maintain current level? __________
Why? ________________________________
What amount do you plan to give in your next quarter of play?
<table>
<thead>
<tr>
<th>Company name</th>
<th>JA Titan Quarterly Report</th>
<th>Officer names:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Quarter Zero (Beginning Report)</td>
<td>Quarter One</td>
</tr>
<tr>
<td>Price</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital Investment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R&amp;D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charitable Giving</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Production Cost/Unit | | | | |
| Factory Capacity     | | | | |
| Inventory            | | | | |
| Employees            | | | | |
| Unfilled Orders      | | | | |
| Funds Available      | | | | |
| P. I.                | | | | |
| Rank                 | | | | |
| Retained Earnings    | | | | |
| Your price in relation to competitor prices (high, medium, low) | | | | |
| Market Share         | | | | |

*This unit was created by Mark DeCourcy and Sherilyn Narker with additional input from Dr. Bill Cranshaw, Chris Cannon, Marlo Mong and Sarah Brown. It was reviewed and approved by the Social Studies Advisory Council 8/02/2007.*