

FEDERAL RESERVE BANK OF ST. LOUIS | ECONOMIC EDUCATION

## Teaching Market Structures with a Competitive Gum Market

**Lesson Authors**  
Curt Anderson, Ph.D., Professor Emeritus, University of Minnesota-Duluth  
Scott Wolla, Ph.D., Federal Reserve Bank of St. Louis

**Standards and Benchmarks** (see page 10)

**Lesson Description**  
In this lesson, students participate in an activity that demonstrates a key economic idea: The level of competition in an industry is a major determinant of product prices. Students are placed in groups that replicate four competitive conditions—perfect competition, monopoly, competitive oligopoly, and collusive oligopoly. Students act as firms in each industry competing to sell their product to the teacher (acting as a consumer). Through the market activity, students learn that when many firms are competing in an industry, prices begin to reflect the cost of production, whereas a single seller can command a high price. They also learn how collusion can result in groups of sellers behaving as monopolists.

**Grade Level**  
High School or College

**Concepts**  
Barriers to entry  
Collusion  
Market structure  
Monopoly  
Oligopoly  
Perfect competition

**econlowdown**  
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# Teaching Market Structures with a Competitive Gum Market

**Presented by:**

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FEDERAL RESERVE BANK OF ST. LOUIS | **econlowdown**  
click, teach, engage

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1		Yes / No	\$
2		Yes / No	\$
3		Yes / No	\$
4		Yes / No	\$

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\$4 in Quarters

Assorted Change

Pack of Chewing Gum



**Monopoly:** A market for a good or service where there is only one supplier, or that is dominated by one supplier. Barriers prevent entry to the market and there are no close substitutes for the product.

**Barriers to entry:** Factors that make it difficult for a new firm to enter a market.

**Oligopoly:** A market structure in which a few large firms dominate a market.

**Collusion:** An illegal agreement among firms to divide the market, set prices, or limit production.

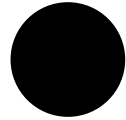
**Perfect competition:** A market in which there are many buyers and many sellers of an identical product.

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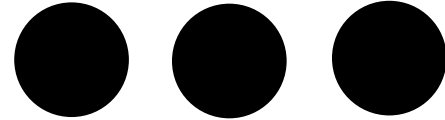
1	One	Monopoly	High relative to buyers' willingness to pay
2	Few	Collusive Oligopoly	High relative to buyers' willingness to pay
3	Few	Competitive Oligopoly	Relatively low
4	Many	Perfect Competition	Low, near the cost of production

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**Group 1**



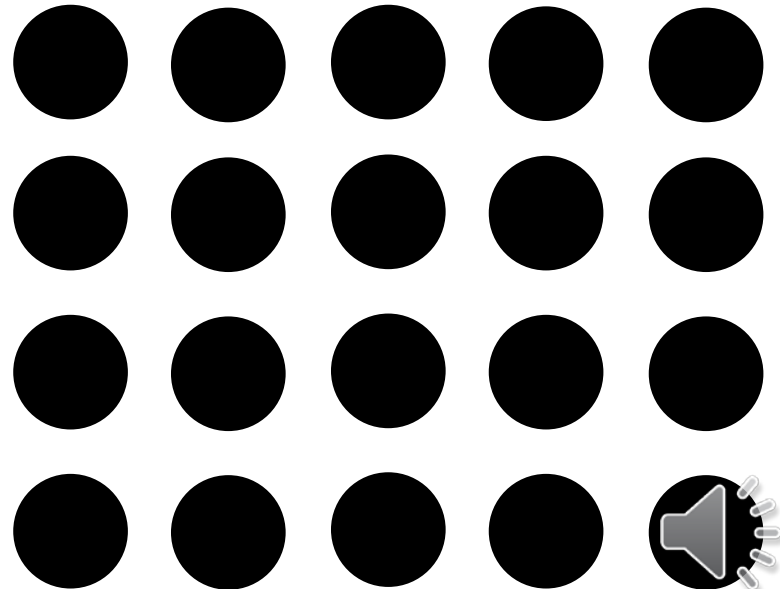
**Group 2 (allowed to discuss)**



**Group 3 (not allowed to discuss)**



**Group 4**

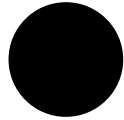


Group	Number of Sellers	Communication	Winning Bid
1		Yes / No	\$
2		Yes / No	\$
3		Yes / No	\$
4		Yes / No	\$



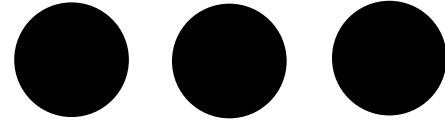
**Group 1**

**Likely result = \$1**



**Group 2 (allowed to discuss)**

**Likely result = \$1 split 3 ways**

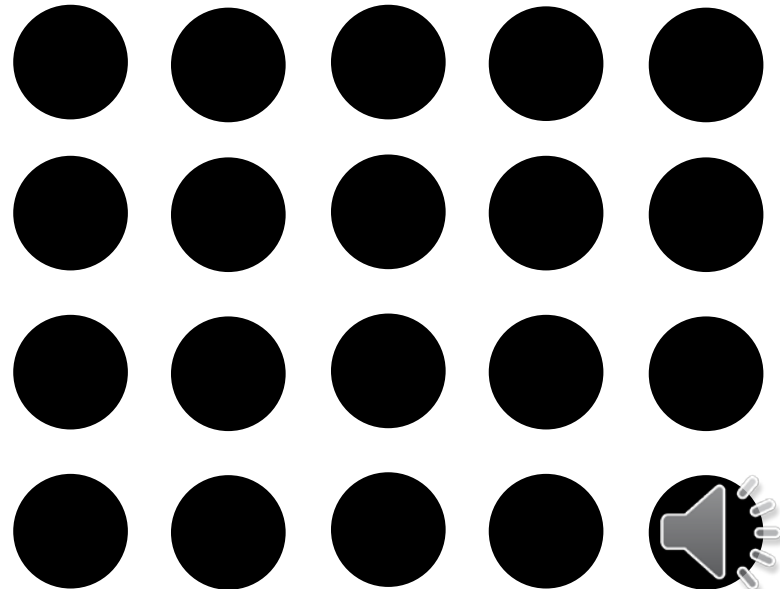


**Group 3 (not allowed to discuss)**

**Likely result = \$0.25 to \$1**



**Group 4, Likely result = \$0.01 to \$0.10**



## Market Structure Vocabulary

**Monopoly:** A market for a good or service where there is only one supplier, or that is dominated by one supplier. Barriers prevent entry to the market and there are no close substitutes for the product.

**Barriers to entry:** Factors that make it difficult for a new firm to enter a market.

**Oligopoly:** A market structure in which a few large firms dominate a market.

**Collusion:** An illegal agreement among firms to divide the market, set prices, or limit production.

**Perfect competition:** A market in which there are many buyers and many sellers of an identical product.



Group	Number of Sellers	Market Structure	Winning Bid
1	One	<b>Monopoly</b>	High relative to buyers' willingness to pay
2	Few	<b>Collusive Oligopoly</b>	High relative to buyers' willingness to pay
3	Few	<b>Competitive Oligopoly</b>	Relatively low
4	Many	<b>Perfect Competition</b>	Low, near the cost of production



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### Grade Level

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