

## Markets & Prices Lesson Plan

### **Overview**

This lesson plan is about how prices change depending on how much people want to buy and sell the product or service. When buyers and sellers compete, it creates the supply and demand in any market.

### **Objectives**

By the end of the lesson, students will:

- Understand the concept of markets and how buyers and sellers interact to determine prices and allocate goods and services.
- Predict how prices change when there is either a shortage or surplus of a product available.

### Vocabulary

- **Markets** are a place for the exchange of goods, services, or financial products.
- Ask Price is the minimum price a seller would be willing to take in order to make a trade.
- **Bid Price** is the highest price a potential buyer of a good, service, or security would be willing to pay.
- **Demand** is a description of how much of a good or service would be purchased by consumers at a given price level.
- **Scarcity** is an economic concept that states that humanity has unlimited wants, but limited resources.
- **Relative Price** represents the value or cost of one item in relation to another, indicating the trade-off or exchange rate between the two items.
- **Supply** is an economic concept describing the relationship between market price and how much of a product will be produced and put for sale by businesses.
- A **Shortage** occurs when the quantity demanded exceeds quantity supplied.
- A **Surplus** occurs when quantity supplied exceeds quantity demanded.

### **Standards**

This Lesson Plan aligns to the CEE National Content Standards in Economics, Standard 20 (Fiscal and Monetary Policy).

### **Lesson Plan Includes**



### **Activity Summary**

Introduction
 Time: 5 mins.



- PFL Stock Game

   Time: 20 mins.
   Time: 20 mins.
- 'What is Economics?'
   Time: 25 ins..
   Time: 25 ins..

- 'Understanding Price Movements'
  Time: 21 ins..
- 'Supply & Demand Examples...'
  Time: 26 mins.
- 'Benefits of Competition'
  Time: 10 mins.
- Market Clearing Class Activity
   Time 45 mins.
- Market Barriers Group Activity
   Time: 15 mins.

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### **Introduction**

In this lesson, students will explore the fundamental concepts of markets and prices. They will gain an understanding of how markets function and why prices play a crucial role in economic decision-making. Additionally, they will learn about the factors that contribute to efficient market outcomes, such as competition and the free flow of information.

By understanding the essential role of markets and prices, students will develop a deeper appreciation for the complex workings of supply and demand in the economy and the impact it has on their own lives and the world around them.

Today, we will be learning about financial interactions in the market.

- We will be exploring the concept of markets and how they function in our economy.
- We will dive into the role of prices and understand how they serve as signals and incentives for producers and consumers.
- Additionally, we will examine how prices help answer important economic questions and contribute to resource allocation and overall well-being in society.



## **Independent Activities**

Activities designed for students to learn independently, either in class or as homework. Some activities include presentations if you prefer to use them for direct instruction instead of independent study.

#### Independent Activities Include:

1. Personal Finance Lab Stock Game	Time: 20 Minutes
2. 'What is Economics?' Lesson	<b>Time:</b> 25 Minutes
3. 'Understanding Price Movements' Lesson	<b>Time:</b> 21 Minutes
4. 'Supply and Demand Examples in the Stock Market' Lesson	<b>Time:</b> 26 Minutes
5. 'Benefits of Competition' Lesson	<b>Time:</b> 10 Minutes



# 1. PersonalFinanceLab Stock Game

Have students complete 20 minutes of the PersonalFinanceLab.com Stock Game. When setting up your class, you can use the default settings that include stocks, bonds and mutual funds. Students will be learning how to research stocks, as they build their virtual portfolio.

Time: 20 Minutes Required Resources: PersonalFinanceLab.com site license & computer access.

Type: Technology-Based Activity

lndividual Activity/Homework

🔁 Class Discussion

Resource Links Stock Game - Make A Trade (Stocks)

Building a Portfolio Interactive Activity Basic Research and Comparing Stocks

### **Getting Started**

1. **Basic Research:** assign your students the 'Building a Portfolio' interactive activity. It will walk them through how to use the research tools on PersonalFinanceLab.com.

2. **Buy What You Know:** students will be recommended to start with investing in companies or brands they're familiar with.

3. **Make a Trade:** students will <u>place their first trades</u>, and get experience placing different order types. <u>Tutorial videos</u> available on site will walk them through what to do.

4. **Portfolio Management:** students can use the <u>Open Positions</u> page to manage their holdings.

5. **Class Rankings:** your students can keep track of their position in your class from the <u>My</u> <u>Rankings</u> page.

6. **Teacher Reports**: you can monitor your students' activity from your admin account. Click the <u>Reports</u> tab on the main menu to view their progress and grades on lessons you assign.

### **Discussion Questions**

- What are your investment goals?
- What is your risk tolerance?
- What are the risks and returns of investing in different security types?

- Understanding the impact of asset allocation on investment outcomes
- Building familiarity with investment concepts and financial markets
- Developing critical thinking and decision-making skills
- Opportunity for reflection, analysis, and improvement of investment strategies



### 2. 'What is Economics?' Lesson

Assign your students the 'What is Economics?' lesson on PersonalFinanceLab.com. This lesson defines economics as the study of the trade-offs and choices made by individuals, businesses, schools, and governments to improve outcomes. This lesson also covers different allocation methods, price controls, and the distribution of wealth.

They will be required to complete the quiz at the end of the lesson. If used as homework, follow up the next day with discussion questions.

Time: 25 MinutesType:	Technology-Based Activity
Required Resources: PersonalFinanceLab.com	🟫 Individual Activity/Homework
site license & computer access.	🔁 Class Discussion
	Presentation
	Assessment

#### Resource Links What is Economics? (personalfinancelab.com)

### Presentation

What is Economics? GoogleSlides Presentation

### **Discussion Questions**

- 1. What are some potential trade-offs and costs associated with using different allocation methods in the economy? How might these trade-offs impact market outcomes and resource allocations?
- 2. Discuss the pros and cons of using taxes and transfers to change the distribution of wealth. What are the potential implications for overall economic growth and job creation?
- 3. What factors should be considered when determining how to allocate government funds?

- The central problem in economics is exploring the costs and benefits of different choices.
- Supply and demand are key factors in determining prices and market outcomes in the economy.
- Market outcomes influence resource allocations, such as the number of coal miners, average length of education, and worker income.
- Taxes and transfers can be used to change the distribution of wealth, but there are trade-offs between consumption and investment for future growth.



## 3. 'Understanding Price Movements' Lesson

Assign your students the 'Understanding Price Movements' lesson on PersonalFinanceLab.com. This lesson explains how stock and bond prices are influenced by factors such as company performance, market trends, economic conditions, and investor sentiment.

Students will be required to complete the quiz at the end of the lesson. If used as homework, follow up the next day with discussion questions.

Time: 21 Minutes	Type:	💻 Technology-Based Activity
Required Resources: PersonalFinanceLab.com	า	🟠 Individual Activity/Homework
site license & computer access.		🛃 Class Discussion
		Presentation

🗳 Assessment

### Resource Links

Understanding Price Movements (personalfinancelab.com)

### Presentation

Understanding Price Movements GoogleSlides Presentation

### **Discussion Questions**

- 1. How do positive and negative expectations impact stock prices?
- 2. What are the differences between realized and expected earnings? How can these affect investment decisions?
- 3. Can you give an example of a systemic and an unsystematic risk? How can these types of risks impact a company's stock performance?
- 4. How can an investor use financial statements and other financial indicators to analyze a company's performance?
- 5. What role do credit ratings play in determining interest rates on debt and why is this important for companies and governments?

- Stock prices mirror the present value of future earnings expectations and are influenced by financial performance, economic conditions, market trends, and investor sentiment.
- Investment banks play a key role in the IPO process, assisting companies in pricing their offerings and meeting regulatory requirements.
- Earnings reports, including expected and realized earnings, can greatly impact stock prices.
- Systematic risk affects the stock market as a whole, while unsystematic risk is specific to a company or industry.
- Bond prices are affected by interest rate risk and inflation.
- Credit ratings assigned by rating agencies can influence bond prices and interest rates.



## 4. 'Supply and Demand Examples in the Stock Market' Lesson

Assign your students the 'Supply and Demand Examples in the Stock Market' lesson on PersonalFinanceLab.com. This lesson explains how the stock market determines prices through the balance of supply and demand for stocks to reach market equilibrium. Students will be required to complete the quiz at the end of the lesson. If used as homework, follow up the next day with discussion questions.

Time: 26 Minutes	Type:	📃 Technology-Based Activity
Required Resources: PersonalFinanceLab.cor	n	🟠 Individual Activity/Homework
site license & computer access.		🛃 Class Discussion
		Fresentation
		Assessment

### **Resource Links**

Supply and Demand Examples in the Stock Market (personalfinancelab.com)

### **Presentation**

Supply and Demand Examples in the Stock Market GoogleSlides Presentation

### **Discussion Questions**

- 1. Describe in your own words Supply and Demand.
- 2. How does the concept of market equilibrium help to determine the price and quantity at which trades occur in the stock market?
- 3. Why is it important to consider the concept of surplus when analyzing supply and demand examples in the stock market? How does total surplus impact the efficiency of the market?

- Market equilibrium is the point where supply equals demand, and it is the price and quantity at which trades occur.
- Efficient equilibrium occurs when the total surplus, which is the sum of consumer surplus and producer surplus, is maximized.
- In a trading system where every trade has a different price, the total surplus is lower compared to a system where all trades occur at the same price.
- The stock market functions like a system of limit orders, where sellers set limit sell orders and buyers set limit buy orders.



## 5. 'Benefits of Competition' Lesson

Assign your students the 'Benefits of Competition' lesson on PersonalFinanceLab.com. This lesson explains how competition can encourage lower prices, more choices, and better quality product and services for consumers. It also covers the role of marketing to raise awareness and persuade consumers to choose one product over another. Students will be required to complete the quiz at the end of the lesson. If used as

homework, follow up the next day with discussion questions.

Time: 10 Minutes	Type:	拱 Technology-Based Activity
Required Resources: PersonalFinanceLab.	com	🕋 Individual Activity/Homework
site license & computer access.		🔂 Class Discussion
		Presentation
		Assessment

### **Resource Links**

Benefits of Competition (personalfinancelab.com)

### Presentation

Benefits of Competition Googleslide Presentation

### **Discussion Questions**

- 1. How does competition benefit consumers? Can you think of any examples where competition has led to improvements in products or services?
- 2. Discuss the role of barriers to entry in limiting competition. Can you identify any industries or markets where artificial barriers have hindered new producers from entering and competing?
- 3. What is the impact of information barriers on consumer choices and market competition? How can marketing and advertising contribute to overcoming these barriers and influencing consumer decisions?

- Product innovation and differentiation are a result of competition, leading to a greater range of products and prices for consumers.
- Barriers of entry can prevent new producers from entering the market and selling a competitive good. Artificial barriers, such as licensing requirements and permits, can increase market prices and limit competition.
- Cartels involve independent producers agreeing not to directly compete, which can raise market prices.
- Monopolies occur when a market is served by a single producer, leading to higher prices and less innovation. Beneficial monopolies, authorized by the government, can provide better prices and quality in certain circumstances, such as public utilities.



## **Full Class & Small Group Activities**

Full Class Activities are designed for whole-class participation. These are best used along with the direct instruction portion of the lesson.

#### Full Class Activities Include:

6. Market Clearing Class Activity......Time: 30-45 Minutes

Small Group Activities are designed for small groups of 3-4 students. These resources are best used after full-class direct instruction and activities.

Small Group Activities Include:

7. Market Barriers Group Activity......Time: 15-20 Minutes



## 6. Market Clearing Class Activity

The activity shows how buyers and sellers in a competitive market act in their own selfinterest, how prices serve as signals for buyers and sellers, and how equilibrium price is achieved through market forces. The activity highlights the importance of prices in a market economy.

Time: 30-45 Minutes

**Required Resources:** buyer & seller cards, visual aid (on the following pages).

Type: 🔆 Full Class Activity Class Discussion External Resource Worksheet

### **External Resource Links**

From Focus: Institutions and Markets, © National Council on Economic Education, New York, NY Lesson One: Markets and the Market System (See Activity 4)

### Instructions

1. Distribute buyer and seller cards to 16 students (buyer and seller cards should be printed on different colored sheets of paper).

2. Explain that there will be 7 rounds and a price will be announced at the beginning of each round.

3. In each round, buyers should find a seller who is willing to trade at that price, and sellers should find a buyer who is willing to trade at that price.

4. If a buyer or seller is unwilling to trade at the announced price, they should stand to the side or sit down for that round.

5. After initial pairings are made, allow time for "bumping". Unpaired buyers or sellers can bump paired buyers or sellers if they are willing to pay a higher price or offer a lower price, respectively.

6. After all possible bumps have been made, count the numbers of each group: unwilling sellers, unwilling buyers, exchange pairs, willing but unpaired sellers, and willing but unpaired buyers.

7. Record these numbers for each round on the visual aid provided.

8. Discuss whether there is a shortage or surplus in the market at each price round, and ask students to predict the direction of price based on the conditions of that round.

9. Complete the rounds in the order of \$3, \$5, \$7, \$15, \$13, \$11, and \$9.

10. Emphasize that the market clearing price is the only price at which quantity demanded equals quantity supplied, and discuss the impact of prices on buyers and sellers.



### **Discussion Questions**

#### 1. What is a market?

- a. The interaction of self-interested buyers and sellers, with prices acting as incentives and signals to both groups.
- 2. How are the basic economic questions (what, how, and for whom to produce) answered in a market economy?
  - a. Consumers signal what they are willing and able to pay for goods and services, and producers who are able to make a profit at those prices determine the most efficient way to produce products, competing against other producers.

### 3. What is the role of prices in a market economy?

a. Prices act as important signals of how scarce a good or service is. That affects the behavior of both buyers and sellers, with buyers wanting to consume more at low prices, and sellers willing to produce and sell more at high prices. In competitive markets adjustments occur automatically, with prices falling to eliminate surpluses and rising to eliminate shortages.

### Results

The table below summarizes the results at all prices:

Price	Unwilling Buyers	Unwilling Sellers	Exchange Pairs	Willing Unpaired Buys	Willing Unpaired Sellers
\$3	1	7	1	6	0
\$5	2	6	2	4	0
\$7	3	5	3	2	0
\$15	7	1	1	0	6
\$13	6	2	2	0	4
\$11	5	3	3	0	2
\$9	4	4	4	0	0



### Market Clearing Class Activity

Discover the market clearing price!

Round	Price	Unwilling Buyers	Unwilling Sellers	Exchange Pairs	Willing Unpaired Buys	Willing Unpaired Sellers
1	\$3					
2	\$5					
3	\$7					
4	\$15					
5	\$13					
6	\$11					
7	\$9					

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### Market Clearing Class Activity - Buyer Cards

Print on white paper and distribute to 8 students in your class.

YOU ARE WILLING TO BUY	<b>YOU ARE WILLING TO BUY</b>
THE GOOD IF THE PRICE IS	THE GOOD IF THE PRICE IS
\$16 OR LESS	\$14 OR LESS
YOU ARE WILLING TO BUY	YOU ARE WILLING TO BUY
THE GOOD IF THE PRICE IS	THE GOOD IF THE PRICE IS
\$12 OR LESS	\$10 OR LESS
YOU ARE WILLING TO BUY	YOU ARE WILLING TO BUY THE
THE GOOD IF THE PRICE IS	GOOD IF THE PRICE IS
\$8 OR LESS	\$6 OR LESS
YOU ARE WILLING TO BUY THE	YOU ARE WILLING TO BUY THE
GOOD IF THE PRICE IS	GOOD IF THE PRICE IS
\$4 OR LESS	\$2 OR LESS

From Focus: Institutions and Markets, © National Council on Economic Education, New York, NY



### Market Clearing Class Activity - Seller Cards

Print on colored paper and distribute to 8 students in your class.

YOU ARE WILLING TO SELL	<b>YOU ARE WILLING TO SELL</b>
THE GOOD IF THE PRICE IS	THE GOOD IF THE PRICE IS
\$2 OR MORE	\$4 OR MORE
YOU ARE WILLING TO SELL	<b>YOU ARE WILLING TO SELL</b>
THE GOOD IF THE PRICE IS	THE GOOD IF THE PRICE IS
\$6 OR MORE	\$8 OR MORE
YOU ARE WILLING TO SELL	YOU ARE WILLING TO SELL
THE GOOD IF THE PRICE IS	THE GOOD IF THE PRICE IS
\$10 OR MORE	\$12 OR MORE
<b>YOU ARE WILLING TO SELL</b>	YOU ARE WILLING TO SELL
THE GOOD IF THE PRICE IS	THE GOOD IF THE PRICE IS
\$14 OR MORE	\$16 OR MORE

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## 👋 7. Market Barriers Group Activity

In this activity, divide the class into groups of 3-4 students. Instruct each group to choose one of the markets/industries on the following page and identify the potential barriers that new businesses may face when entering their chosen market.

Time: 15-20 Minutes

Type: 🏝 Small Group Activity

Worksheet

**Class Discussion** 

**Required Resources:** Whiteboard and markers or large white paper and pens/markers.

### Instructions

- 1. Divide the class into groups.
- 2. Provide each group with a list of different markets or industries (Markets Worksheet).
- 3. Using their chosen market or industry, students should discuss and analyze the ease of entry into that market. Identifying the potential barriers that new businesses may face when entering their chosen market.
- 4. Students should also discuss the potential advantages that a new enterprise may have when entering their chosen market, such as new vision, updated technologies, etc.
- 5. Each group should create a short presentation or summary of their analysis, including the barriers and advantages, and present it to the class.
- 6. After each group has presented, lead a class discussion to compare and contrast the ease of entry and potential barriers for different markets (Barriers Worksheet).

### **Discussion Questions**

- 1. In the age of digitalization, how do information barriers affect new businesses entering the market? Discuss how information gaps, limited access to market data, or lack of industry knowledge can act as barriers to entry.
- 2. Real market barriers, such as high capital requirements or resource limitations, can often discourage potential entrepreneurs from entering certain industries. How can innovative approaches, such as partnerships or alternative funding models, help overcome these barriers?
- 3. Discuss examples where companies have successfully navigated real market barriers to establish themselves.

- Market barriers are diverse and can vary greatly across different industries and markets.
- Artificial barriers, such as government regulations or monopolistic practices, can significantly impact new businesses' entry into a market and restrict competition.
- Information barriers, including limited access to market data or industry knowledge, can hinder new businesses' ability to make informed decisions and compete effectively.
- New businesses may bring fresh perspectives, innovative ideas, and disruptive technologies to the market, challenging the status quo and driving industry evolution.



### Market Barriers Group Activity - Markets Worksheet

Choose one of the following industries to analyze with your group.

<b>Technology</b>	<b>Automotive</b>
Apple, Microsoft, Alphabet Inc.	General Motors, Ford Motor, Tesla
<b>Retail</b>	<b>Pharmaceutical</b>
Walmart, Amazon.com, The Home	Johnson & Johnson, Pfizer, Merck &
Depot	Co.
<b>Financial Services</b>	<b>Energy</b>
JPMorgan Chase, Bank of America,	Exxon Mobil, Chevron, NextEra
Goldman Sachs Group	Energy
<b>Food and Beverage</b>	<b>Telecommunication</b>
The Coca-Cola Company, PepsiCo,	AT&T, Verizon Communications,
McDonald's	T-Mobile US
<b>Entertainment</b>	<b>Consumer Goods</b>
The Walt Disney Company, Netflix,	Proctor & Gamble, The Clorox
Sony Corporation	Company, Colgate-Palmolive

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### Market Barriers Group Activity - Barriers Worksheet

A summary of potential challenges new businesses will most likely face when entering each of the markets or industries.

<b>Technology</b> <ul> <li>High research and development costs</li> <li>Strong competition from established players</li> <li>Intellectual property protection challenges</li> </ul>	<ul> <li>Automotive</li> <li>High capital investment requirements</li> <li>Strict industry regulations and safety standards</li> <li>Limited access to distribution networks</li> </ul>
<b>Retail</b> <ul> <li>Intense competition from both brick-and-mortar and online retailers</li> <li>Rising real estate costs for establishing stores</li> <li>Inventory management challenges</li> </ul>	<ul> <li>Pharmaceutical</li> <li>Long and expensive drug development and approval process</li> <li>Stringent regulatory compliance requirements</li> <li>Patents and intellectual property protection issues</li> </ul>
<ul> <li>Financial Services</li> <li>Strict regulatory requirements and compliance costs</li> <li>Trust and credibility establishment for financial institutions</li> <li>High capital requirements for entry</li> </ul>	<ul> <li>Energy</li> <li>High upfront costs for infrastructure development</li> <li>Environmental and sustainability regulations</li> <li>Strong competition from existing energy providers</li> </ul>
<ul> <li>Food and Beverage</li> <li>Intense competition and crowded market</li> <li>High costs for product development, branding, and marketing</li> <li>Shelf space limitations in stores</li> </ul>	<ul> <li>Telecommunication</li> <li>High infrastructure costs for network establishment</li> <li>Licensing and regulatory compliance challenges</li> <li>Limited access to frequency spectrum</li> </ul>
<ul> <li>Entertainment</li> <li>High production and marketing costs</li> <li>Strong competition from established media companies</li> <li>Intellectual property rights and licensing challenges</li> </ul>	<ul> <li>Consumer Goods</li> <li>Intense competition from established brands</li> <li>Costly marketing and advertising campaigns to capture customer attention</li> <li>Inventory management and distribution challenges</li> </ul>



## **Conclusion**

Markets, either physical or conceptual, serve as a venue for exchanging goods, services or financial products. Buyers and sellers interact in these markets and cause price changes based on supply and demand. This interaction between buyers and sellers establishes prices, navigates the flow of goods and services, and balances supply and demand.

The creation of prices through this interaction also helps in the allocation of scarce goods and services. This help us predict and explain the price changes when there's either a shortage or surplus of a product.

Competition is a fundamental aspect of a market system. It fosters an environment where businesses compete for customers through better quality, product innovation, and affordable prices. This benefits the consumer as it ensures a wide selection of goods and services at competitive prices. Real and artificial barriers to entry impact new businesses seeking to enter a market. Whereas monopolies and cartels hinder competition, keeping prices high and limiting product innovation.

- The interaction of buyers and sellers establishes an active market and determines prices.
- This interaction also allocates scarce goods and services.
- Prices can change based on the surplus or shortage of a product.
- 'Demand' represents the quantity of a good or service consumers are willing to buy at a certain price level.
- 'Supply' is an indicator of the relationship between the market price and the quantity of a product businesses are ready to produce and sell.
- A market equilibrium is the point at which the supply of a product or service equals its demand, determining the price and quantity at which trades occur.