Econ Essentials

DIGITAL LESSON BUNDLE

Implementation Guide for Educators #2: Futures Trading

Objectives

Students will:

- **Describe** how hedgers and speculators use futures to accomplish their goals.
- **Cite** examples of hedgers.
- **Compare** and contrast fundamental and technical analysis.
- Explain tools traders can use when performing technical analysis.

Overview

In this lesson, students learn about futures trading, including what futures are, how they are used, and the types of analysis used by futures traders to help them make informed decisions before making a trade. The lesson begins with an engaging game called Guess My Ten that gets students thinking about topics related to futures and activates prior knowledge. The game is then referenced throughout the lesson as students watch videos and engage in activities to deepen their knowledge of futures trading.

Throughout the lessons, students explore the role of hedgers and speculators and how the two bring balance to the futures marketplace. They learn about fundamental and technical analyses and will form an opinion about which type of analysis they prefer. Examples of a market snapshot and various ways to view trade data will be presented, and students will have the option to explore more data on their own. Information about a free trading simulator for highly engaged students is shared at the end.

Content Areas

Economics; Business; Financial Literacy; Finance

Suggested Time

2 sessions: The lesson can be expanded to include an additional exploration of the data tools, which will add time if performed in class.

Grade Level

Grades 9–12

Essential Questions for Students

- What types of individuals and businesses trade futures products?
- What type of research do traders use to inform their activity?
- How does data inform futures trading?



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Key Vocabulary

Futures, options, risk, futures contracts, hedgers, speculators, technical analysis, fundamental analysis, candlestick chart

Materials

Both Sessions

- Futures Trading Implementation Guide
- The Futures Marketplace: An Introduction for Educators—one copy
- Computer with projector, television, or interactive board

Session 1

- Futures Trading PowerPoint Slides 1–47
- Guess My Ten in Action Student Capture Sheet—one copy per student

Session 2

- Futures Trading PowerPoint Slides 48-61
- Buckets of Analysis—one copy per small group or pair, cut into slips in advance
- Fundamental and Technical Bucket Signs—one copy of each
- Two buckets, containers, large manila envelopes, or file folders with two edges staples to serve as containers
- Tape to attach the signs to the buckets, containers, envelopes, or folders
- Create Your Own Guess My Ten Student Capture Sheet one copy per student
- Explore the Data Student Handout—one copy per student (optional)

Background

The futures marketplace provides a way for people and businesses to manage risk and seek profit. As with any trade, at least two parties are needed to bring balance to the marketplace. In futures trading, these parties are known as hedgers and speculators. Hedgers use futures contracts to protect themselves from potential losses in the future caused by price fluctuations. Speculators, on the other hand, buy or sell futures contracts in the hope of making a profit from changes in the price of the underlying asset. Hedgers and speculators both conduct research and analyze data before entering into a futures contract.

THE FUTURES MARKETPLACE: AN INTRODUCTION FOR EDUCATORS

Want to better understand futures and the concepts and vocabulary students are likely to encounter in this lesson? <u>Download</u> this easy-to-understand resource designed just for educators.

In this lesson, students are first introduced to the concept of futures trading and then learn about some of the analyses and tools hedgers and speculators use when making trading decisions. The research they do usually falls into one of two categories: fundamental or technical analysis.



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When traders read the latest newsfeed or pay attention to activity in the economy, they are performing a fundamental analysis. Information such as changes in interest rates, new regulations, weather forecasts, and government reports informs their decision-making process.

In contrast, technical analysis involves reviewing historical data in tables and charts. When performing this type of research, traders are in search of trends and a better understanding of potential future activity in the market. Students may encounter new forms of data analysis and presentation when viewing some of the technical analysis tools used by hedgers and speculators. In particular, the candlestick and bar charts featured in this lesson show multiple pieces of data in one easy-to-understand snapshot. Students interested in mathematics and data may be particularly drawn to this content.

Using this Guide

This guide aims to prepare educators to use this digital lesson bundle. It provides slide-by-slide instructions to ensure educators are prepared to explain, discuss, and facilitate the hands-on content in the presentation. The lesson is designed to cover two class sessions, but it can be flexible depending on the students' needs and available time. Additional extension ideas are included at the end of the manuscript.

The accompanying presentation was created with PowerPoint so that it can be used in a variety of classrooms. If you display the slides on a projector or television, simply progress through the PowerPoint by clicking to advance. All of the interactive aspects of the presentation occur with a click. This may include images, text boxes, and links in your web browser. Please note that if using Google Slides, the builtin timer for the game will not function properly as that animation feature is only available in PowerPoint. If you are using an interactive whiteboard, tap on each slide with your finger or stylus to activate the interactive aspects of the presentation. In the notes for each slide, there will be information on how to proceed.

EXPAND YOUR UNDERSTANDING OF FUTURES

Want to learn more about futures? <u>Futures</u> <u>Fundamentals</u> offers introductory information on futures that is appropriate for students and educators. For those wishing to dive even deeper, check out some free resources available on the site. Those related to this Digital Lesson Bundle include:

- <u>Understanding the</u> <u>Role of Speculators</u>
- Trading and Analysis
- <u>Using Fundamental</u>
 <u>Analysis When</u>
 <u>Evaluating Trades</u>
- <u>Technical Analysis</u>





Procedure SESSION 1

ENGAGE | Slides 1–37

Overview

You will begin this session with a game in which teams of students compete to brainstorm terms associated with a series of categories and match a pre-selected list. At the end, they discover that all of the categories relate in some way to futures trading.

Slide 0

• This slide provides the lesson title. It is hidden in slideshow view to avoid students getting the answer to the game's bonus round.

Slide 1

- Welcome students to the game "Guess My Ten." (Optional: Add the tagline, "Where the Teacher is Always Right" for a bit of humor.)
- Share that they will be divided into teams where they will work together to name as many things as possible that meet a certain category.
- Warm students up for the game by posing the following questions:
 - How many flavors of ice cream do you think you could name?
 - Would you be able to name more in a group than by yourself?
 - Do you think you can you name ten?
 - If I had a list of ten flavors, how many of mine do you think you could name?
- Let students know that each round will feature a new category and an opportunity to win points as a team.

Slide 2

- Review the game mechanics, clicking to reveal each rule one at a time.
- Clarify any student questions about the game.
- Allow students to form groups before proceeding.
- Make sure each group has scrap paper and a pencil or pen.

Slide 3

- Ask students if they are ready to begin.
- Direct the person selected in each team as the first recorder to raise their hands.
- Remind students that this role will change for each round so that they take turns with this responsibility.

Futures Fundamentals



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- Let students know that there will be a total of ten rounds. They will start out easy and get progressively harder.
- For each round, they will have 30 seconds from the time you click "START" to create their list. When you call "time," the recorders must stop writing.
- Remind them to list as many terms as they can that match the category.

Slide 5

- Read the category, "Hamburger Toppings at a Restaurant."
- Click START! if using the built-in timer.
- When time runs out, tell students to stop writing.

Slide 6

- Click to reveal each item on the list.
- Ask each group for their total number of points (one for each item that matches the list).
- In the case of a tie, use one or more of the following as a tiebreaker or any others that you prefer.
 - Jalapeños
 - Mushrooms
 - Barbecue sauce
 - Banana peppers
- Announce the winning team and, if desired, list their score on the board or a scratch sheet of paper.

THE "START!" TIMER

The Futures Trading PowerPoint has a builtin timer function using animations. When you click directly on the word START! in the circle, it will begin to disappear over the span of 30 seconds. You can adjust the timing in the Animations Pane. Select the Donut shape and adjust the Duration in the Timing menu. **Note:** Google Slides does not have this same animation feature. If using the presentation in Google *Slides, select an alternate* method for keeping time.



Slides 7-33

• Repeat the process for the remaining categories. The lists below provide optional tiebreakers for each one. Continue to keep track of team scores as you go and remind teams to switch recorders, so they don't get tired of writing. If needed, remind students that they might score more points if they collaborate quietly so other teams don't hear their answers.

Round	Slide	Category	Tiebreakers
2	8	Things that run on gasoline	Jet Skis, small tractors, portable camping stoves, go-karts
3	11	Activities that involve risk	ziplining, BMX biking, scuba diving, bull riding
4	14	Things that go up and down	tides, helium balloons, draw bridge, flag on a flagpole
5	17	Sources of information	encyclopedia, textbooks, biographies/ autobiographies/memoirs, academic articles/ journals
6	20	Examples of natural disasters	tsunami, sinkhole, dust storm
7	23	Types of metals	lead, tungsten, uranium, plutonium
8	26	Items made from corn	cat litter, plastic, fuel cells, insulation, corn oil, corn meal
9	29	Names of foreign currency	Kuwaiti dinar, Egyptian pound, Australian dollar
10	32	Things that get traded	shoes, games (video or board), toys, music playlists

Slide 34

- Review the scores from the end of Round 10.
- Inform students that there will now be a bonus round, but that it will be the reverse of the previous ones.

Slide 35

- Instead of coming up with a list, they should try and come up with the category that you are thinking of that fits all ten previous topics.
- Let students know that you will reveal the previous topics one at a time.
- The first group to shout out the correct category will gain the extra point for the bonus round.

- Reveal each category one at a time and pause briefly to see if any group has a guess.
- Note: If you have listed your objectives, essential questions, or the topic of today's lesson somewhere in the room or online, students may have an easier time guessing. If you have not, and this is a completely new topic, students may struggle to come up with the correct answer: Things Associated with Futures Trading.





- Share that each of the topics has some relation to futures trading.
- Ask students what, if anything, they already know about futures.
- Share with students that, in very basic terms, **futures** or **futures contracts** allow people or businesses to lock in a price today of a physical commodity or financial instrument for a future sale. Let them know that trading futures will be the topic of this lesson, and that they will learn much more about futures as you progress.
- Explain that some of the categories in the game connect in ways that are more obvious than others to futures. By the end of the lesson, though, they should be able to explain how each one might connect.
- Congratulate the winning team and offer a small prize, if desired.

APPLY | Slides 38–47

Overview

• You will continue this session by inviting students to look for the items and categories discussed in the game as they watch two videos and learn more about futures trading.

Slide 38

- Distribute a copy of **Guess My Ten in Action** to each student.
- Tell students that they will be watching a short video about futures and options contracts.
- Direct students to follow the directions and check off each category from the Guess My Ten game as they see or hear it referenced. Let them know that some may be a bit more obscure than others and not all will be mentioned.
- Ask them to also fill in the sentences in number 2. They should wait and complete the last two items later.
- Click to play the video, *Futures and Options*.

- Challenge students to share at least four things they learned about futures and options from watching the video.
- Find out how many of the ten topics they found connections to in the video. Point out the following, as needed:
 - Hamburger Toppings at a Restaurant (beef cattle are shown as livestock)
 - Things That Run on Gasoline (cars shown briefly)
 - Activities That Involve Risk (discussion of risk and protecting oneself from it)
 - Things that Go Up and Down (prices)
 - Sources of Information (not mentioned)
 - Examples of Natural Disasters (not mentioned)
 - Types of Metals (mentioned as something bought and sold everyday)
 - Items Made from Corn (corn prices are mentioned as something that changes all the time)





- Names of Foreign Currency (mentioned as something bought and sold everyday)
- Things That Get Traded (futures contracts for agricultural crops, livestock, metals, natural resources, stock indexes, interest rates, and foreign currencies)

- Share the real-world example of futures being used to help reduce **risk** for farmers.
- Point out that a drought is an example of a natural disaster and encourage students to check that off on their handout.
- Confirm students' understanding that futures involve a contract to buy or sell a commodity for a set price at a date in the future.
- Review student responses to the fill in the blanks.
 - **a.** Futures and options on futures involve an agreement to buy or sell something at a future **date**.
 - **b.** Most futures contracts are **sold** long before the potential delivery date.
 - **c.** Traders can exercise their option contract and avoid <u>**risk**</u> and potentially profit from the change in price.
 - **d.** With either futures or options on futures, the buyer gets a safety net in case **prices** move in the wrong direction.

Slide 41

- Remind students that futures are traded for many different types of commodities, including metals, crude oil and gas, foreign currency, and agricultural products. While each of these is likely to impact their daily lives, the agricultural and livestock prices are sometimes one of the easiest to see in action, especially if they (or their families) take note of the cost of groceries or eating out.
- Return students' attention to the **Guess My Ten Student Capture Sheet**. Direct students to complete the remaining two questions while watching the video.
- Play the video, *Risk on the Ranch*.
- Review the answers to the handout.
 - Number 3: Severe <u>weather</u>; Threat of disease; Regular ranch <u>upkeep</u> or <u>maintenance</u>; Higher <u>transportation</u> costs
 - Number 4: <u>up</u>; <u>more</u>

- Share with students that all trading activity requires at least two parties. In the case of futures trading, these two parties are referred to as **hedgers** and **speculators**.
 - Hedgers trade futures as a way of decreasing the risk of price fluctuations in commodities. Examples include the ranchers and corn farmers discussed in the video and the previous slide.
 - Speculators seek profit by assuming risk when buying futures.
 - Futures markets wouldn't work without hedgers and speculators bringing balance to the market.





- Let students know that you are going to play another round of "Guess My Ten" after watching another short video. Suggest that students pay attention to examples of hedgers and speculators and what each does.
- Play the video about hedgers and speculators.

Slide 44

- Invite students to work as an entire class to name examples of hedgers.
- If desired, students can also search online for additional examples.
- List student responses on a whiteboard or other location.

Slide 45

Let students know that you included more than just the ones they might have heard already in the videos and examples. Reveal the list of the hedgers one at a time, pausing to note how each might use futures and/or the role they might play as a hedger.

- Ranchers and farmers: Hedge against price fluctuations of their crops or livestock
- Oil producers: Hedge against price volatility with crude oil
- Airlines: Hedge against fuel price fluctuations
 - Ask students if they have ever heard about changes in the price of airline tickets. Point out that fuel costs are one of the largest operating expenses for airlines and they can fluctuate greatly.
- Food manufacturers or processors: Hedge against raw material price fluctuations (e.g., corn, beef, wheat, sugar) (Other manufacturers also hedge with futures. For example, textile manufacturers might hedge against price swings of cotton.)
 - Reference back to the Guess My Ten categories of hamburger toppings and items made from corn. Many of these would be impacted.
 - Challenge students to think of and name major food manufacturing companies. Below are several examples of food manufactures and brands students might recognize.
 - Kraft Heinz: macaroni and cheese, Maxwell House coffee, Oreos, Oscar Mayer meats
 - Tyson Foods: Tyson chicken nuggets, Jimmy Dean sausage, Ball Park hot dogs, Hillshire Farms meats
 - General Mills: Cheerios, Nature Valley snack bars, and Yoplait yogurt
 - Kellogg: Special K cereal, Pop-Tarts
- Construction companies: Hedge against price volatility of construction materials (e.g., lumber, steel)
- Mining companies: Hedge against fluctuations in metal prices (e.g., gold, silver)
 - Remind students of the metal they listed before.
 - Share with students that the following metals are mined in Ukraine, a country that has seen great turmoil: iron ore (used to produce steel), titanium (used in aerospace and





manufacturing), copper (used to produce electrical wiring and plumbing), and nickel (used to produce stainless steel and other alloys)

- Challenge students to consider how a conflict or war in the Ukraine could impact mining companies and present a risk for them?
- Banks: Hedge against interest rate fluctuations by using interest rate futures contracts.
- Governments: Hedge against price fluctuations of commodities or currencies to stabilize economic factors.
 - Remind students of the foreign currencies they listed before.
- Investment fund managers: Hedge against portfolio risk by using futures contracts as a form of insurance.
- Retailers: Hedge against changes in the prices of commodities such as sugar, coffee, or cocoa.
 - Ask students if they can think of any large companies that might see the price of sugar as something that could impact their ability to make a profit (i.e., Coca-Cola).

Slide 46

- Remind students that futures markets require both hedgers and speculators.
- Play the video about speculators.
- Ask students what new terms or names they heard in the video. Examples might include: proprietary trading firms, portfolio managers, hedge funds, and market makers.

- Reinforce that speculators take on risk in hope of making a profit. Students might recognize the similarities between this and other forms of investing, such as trading stocks, buying a home, or collecting art. In each case, a risk is taken because the price may not move in a direction that leads to a profit. But, if it does, there is profit to be made.
- Acknowledge that trading futures may be a lesser-known form of investing than some of these other examples, but that doesn't make it any less important. In fact, futures marketplaces see much higher volume of trades than stock exchanges, the housing market, and other types of investments. Commodities bought and sold on a futures exchange also play a large role in everyday life (i.e. the price we pay for gas at the pump or everyday necessities like groceries).
- Inform students that in the next session they will explore the data both speculators and hedgers use when making trading decisions.



SESSION 2

APPLY | Slides 48–52

Overview

• In this session, you will expand upon students' understanding of futures trading with an exploration of the data used by both hedgers and speculators when making trading decisions.

Slide 48

- Remind students that in the previous session they learned about futures trading and the role of both hedgers and speculators.
- Call on volunteers to:
 - Explain hedging.
 - Give an example of a person or business that uses futures to hedge their risk.
 - Explain the goal of people and businesses that speculate.
 - Give an example of a speculator.
- Ask students what type of information they think hedgers and speculators might want to know before deciding to enter a futures contract or make a trade.

- Share with students that the types of information futures traders use when making decisions and how they examine it typically falls into two categories: fundamental and technical analysis.
- Call on a volunteer to read the description of each form of analysis.
- Tell students that they will work in small groups or pairs and consider examples of different types of data and information that futures traders use.
- Distribute a set of slips from the **Buckets of Analysis** student handout to each group.
- (Optional) Assign a number to each group, and direct students to write their group's number on the back of each slip.
- Inform students that they should review each slip and decide if it represents fundamental or technical analysis.
- Show students the "buckets" (actual buckets, containers, envelopes, or folders) marked with the **Fundamental and Technical Bucket Signs**.
- Once they have made their decisions, a group member should place the slips in the corresponding "buckets." This can be done one at a time or after the group is done sorting all the examples.
- Once students are done, remove the cards from the "buckets" and check student answers. If students numbered their slips, keep a tally of correct answers as you go.
 - Fundamental:
 - The World Agricultural Outlook Board (WAOB) releases its monthly report, The World Agricultural and Demand Estimates (WASDE).





- A new weather forecast predicts a late freeze in many areas of the country.
- A new trade agreement goes into effect between the United States, Mexico, and Canada.
- Your newsfeed has an article with the headline, "New Regulations Will Restrict Chemicals on Crops."
- Technical:
 - A candlestick shows a long wick.
 - The market snapshot for a commodity turns green.
 - You change the view on your "tick chart" to show a new bar every 25 trades.

- Play the video, Fundamental Analysis versus Technical Analysis.
- Call on students to share at least one characteristic that fundamental and technical analysis have in common and another that is unique to each.
- Revisit the examples of fundamental analysis from the bucket activity and challenge students to consider what information traders might try to gain from each based on what they learned in the video.
 - The World Agricultural Outlook Board (WAOB) releases its monthly report, The World Agricultural and Demand Estimates (WASDE).
 - Higher demand can increase prices while lower demand decreases prices
 - A new weather forecast predicts a late freeze in many areas of the country.
 - A freeze could reduce the supply of certain crops and increase the price
 - A new trade agreement goes into effect between the United States, Mexico, and Canada.
 - The terms of the agreement could impact trade between companies, making it more or less expensive to do business across borders.
 - Your newsfeed has an article with the headline, "New Regulations Will Restrict Chemicals on Crops."
 - If farmers currently use these chemicals to decrease damage by pests or reduce the risk of certain diseases, the supply of their product may drop in the future.

Slide 51

- Move the "buckets" from the previous buckets to opposite sides of the classroom.
- Direct students to move to the side of the room with the form of analysis they think they would feel more comfortable using: fundamental or technical.
- Allow several students to share the reason for their choice.

- Offer students a third option: using both fundamental and technical analysis.
- Ask if any students would move to the new "both" category and allow time for students to change locations.





- Debrief with students who moved and those who stayed where they were. Some students, for example, may gravitate to the mathematical nature of the technical analysis. They might not think it is better, but they may prefer to use that if given a choice. The converse is also true for those who would prefer to avoid math or charts.
- Reinforce that while some futures traders lean more heavily on one or the other form of analysis, each is valuable and important.

CONNECT | Slides 53–60

Overview

• The lesson can be continued by exploring some of the tools and data used in performing technical analysis.

Slide 53

- Share the market snapshot with students and explain each component that is shown. Clarify that the data is representative and not current.
- Click to reveal each component:
 - Current price
 - High and low prices
 - Ticker symbol
 - Movement
- Point out that the ticker symbols include information about both what is being traded and when. Each month has a corresponding letter code followed by a number representing the last digit in the year.

Slide 54

• Tell students colors provide an easy way to see the direction in which a price is heading. Green shows those that are rising, and red indicates prices that are dropping.

Slide 55

- Tell students there is an immense amount of information that can be discovered about futures prices, volume, trends, and more. Much of this can be summarized with charts to make it easier to visualize the data.
- Play the *Chart Types* video and explore three main types of charts: candlesticks, bars, and lines.

- Ask if any students have seen a **candlestick chart** before.
- Review the information from the video about candlestick charts. They show the following prices for a specific time interval: open, close, high, and low.
- Click to reveal various types of candlestick charts. Discuss the various types shown on the slide.





- Remind students that the lesson kicked off with the "Guess My Ten" game.
- Revisit each of the topics from the initial game and ask students how they connect to futures trading. Sample answers are shown.
 - Hamburger Toppings at a Restaurant: Hamburgers are sold at restaurants that might use futures to hedge the risk of beef or other prices fluctuating and impacting their costs.
 - Things You Might See on a Farm: Farmers can use futures to hedge against risk, both in the price of their products but also things they use, such as gas for equipment or feed for animals.
 - Activities That Involve Risk: Hedgers seek to reduce their risks while speculators accept risk in search of profits.
 - Things that Go Up and Down: Fluctuations in price drive the futures market as hedgers and speculators seek to either manage or accept risk.
 - Sources of Information: Futures traders use information from many sources and in different forms when deciding whether to enter into a futures contract or make a trade.
 - Examples of Natural Disasters: Droughts, floods, and storms can influence the anticipated prices of many commodities.
 - Types of Metals: Metals are commodities for which people and businesses can trade on a futures exchange.
 - Items Made from Corn: Corn is used in many products and can fluctuate in price. Futures contracts can be used both by producers and users of corn to manage the risk associated with these price swings.
 - Names of Foreign Currency: The value of foreign currencies can impact businesses that operate in other countries. They can use futures trading to hedge against the risk of the exchange rates lowering or rising.
 - Things That Get Traded: Futures contracts are an example of things that can be traded.

Slide 58

- Distribute a copy of the Create Your Own Guess My Ten Student Capture Sheet to each student.
- Prompt students to create their own version of the game with a category or topic related to the lesson and the ten items players would need to list.

Slides 59 and 60

• Optional: Select one or more students to share their games and have groups work together to respond. These slides can be copied and filled in with student work, or the game can be played without visuals.

14



EXTEND | Slide 61

Overview

• The lesson can be continued with an optional exploration of technical data available to futures traders.

Slide 61

- Visit the current quote for soybeans by clicking on the screenshot or opening this link (<u>https://www.cmegroup.com/markets/</u> <u>agriculture/oilseeds/soybean.html</u>) in a browser window.
- Ask students to identify the ticker symbol, most recent price, and change in price at the top.
- Select the Quotes tab and point out the futures for specific months and their corresponding codes. For soybeans, each begins with ZS, but the third letter and number correspond to the month and year.
- Click the chart icon for one of the months and explore the options to adjust the view.
- Provide students with direct links to various commodity quotes or use the QR codes on the optional **Explore the Data Student Handout**.

TRADING SIMULATOR

Encourage highlyengaged and interested students to take their learning a step further. Invite them to try their hands at trading with the <u>Trading Simulator</u> on Futures Fundamentals. **Note:** Students must create a free user ID using a valid email address to access the simulator. To avoid privacy concerns, consider creating a shared account or making several using email addresses you create for this purpose.

- Corn: https://www.cmegroup.com/markets/agriculture/grains/corn.html
- Milk: <u>https://www.cmegroup.com/markets/agriculture/dairy/class-iii-milk.html</u>
- o Gold: https://www.cmegroup.com/markets/metals/precious/gold.html
- U.S. Treasury Bonds: <u>https://www.cmegroup.com/trading/interest-rates/us-treasury/30-year-us-treasury-bond.html</u>
- Crude Oil: <u>https://www.cmegroup.com/trading/energy/crude-oil/light-sweet-crude.html</u>
- Live Cattle: <u>https://www.cmegroup.com/trading/agricultural/livestock/live-cattle.html</u>
- Allow time for students to explore on their own and share what they found.



STANDARDS

- Voluntary National Content Standards in Economics from the Council for Economic Education
 - Standard 1—Scarcity (Grade 12, Benchmark 1): Choices made by individuals, firms, or government officials are constrained by the resources to which they have access.
 - Standard 2—Decision Making (Grade 12, Benchmark 6): Some decisions involve taking risks in that either the benefits or the costs could be uncertain. Risk taking carries a cost. When risk is present, the costs should be treated as higher than when risk is not present.
 - Standard 7—Markets and Prices (Grade 12 Benchmark 1): Market outcomes depend on the resources available to buyers and sellers, and on government policies.
 - Standard 7—Markets and Prices (Grade 12 Benchmark 4): Shortages of a product usually result in price increases in a market economy; surpluses usually result in price decreases.
 - Standard 8—Role of Prices (Grade 8): Markets are interrelated; changes in the price of one good or service can lead to changes in prices of many other goods and services.
 - Standard 8—Role of Prices (Grade 8): Scarce goods and services are allocated in a market economy through the influence of prices on production and consumption decisions.
 - Standard 8—Role of Prices (Grade 12): Changes in supply or demand cause relative prices to change; in turn, buyers and sellers adjust their purchase and sales decisions.
- National Standards for Business Education from the National Business Education Association
 - Economics—Economic Institutions and Incentives (Level 3, Standard 12) Explain the roles of profit and competition in a market-oriented economy.
 - Personal Finance—Saving and Investing (Level 3, Standard 9) Apply criteria for choosing a savings or investment instrument (e.g., market risk, inflation risk, interest rate risk, political risk, liquidity, and minimum amount needed for investment).
- <u>National Standards for Personal Financial Education</u> from the Council for Economic Education and Jump\$tart Coalition for Personal Financial Literacy
 - Investing (Grade 12, Standard 3) Investors expect to earn higher rates of return when they invest in riskier assets.
 - Investing (Grade 12, Standard 5) The prices of financial assets change in response to market conditions, interest rates, company performance, new information, and investor demand.

Guess My Ten in Action

Directions: Complete the following as you watch the videos.

1. Put a check next to each of the Guess My Ten categories that you see or hear represented in any way.

□ Hamburger Toppings at a Restaurant	□ Examples of Natural Disasters			
□ Things You Might See on a Farm	□ Types of Metals			
□ Activities That Involve Risk	□ Items Made from Corn			
□ Things that Go Up and Down	□ Names of Foreign Currency			

- Sources of Information
- **2.** Fill in the blanks below.
 - a. Futures and options on futures involve an agreement to buy or sell something at a future

□ Things That Get Traded

b. Most futures contracts are ______ long before the potential delivery date.

c. Traders can exercise their option and avoid a ______ and potentially ______ from the change in price.

d. With either futures or options on futures, the buyer gets a safety net in case

_____ move in the wrong direction.

3. Risks cattle producers face that impact business and the price received for livestock include:

- Severe _____
- Rising feed costs
- Threat of _____

• Escalating gas prices feed costs which correlates to higher

Regular ranch ______

_____ costs

4. Circle the correct terms.

A severe drought occurs in the southern plains	+	Increased grain costs drive the cost of feed [up / down].	-	Cattle ranchers are unable to maintain their herds	+	Feedlot operators pay [more / less] for cattle.	-	Meat packers pay more to the feedlots. They pass the cost along to
plains		[up / down].						
								consumers.



Buckets of Analysis

Teacher: Make one copy per small group or pair of students. Cut into strips in advance of the class.

WASDE	The World Agricultural Outlook Board (WAOB) releases its monthly report, The World Agricultural and Demand Estimates (WASDE).
	A new weather forecast predicts a late freeze in many areas of the country.
TRADE AGREEMENT	A new trade agreement goes into effect between the United States, Mexico, and Canada.
REGULATIONS	Your newsfeed has an article with the headline, "New Regulations Will Restrict Chemicals on Crops."
	A candlestick shows a long wick.
Corn 684.6 High 687.4 +7.4 Low 680.0 +1.11 ZCH24 TRADE	The market snapshot for a commodity turns green.
	You change the view on your "tick chart" to show a new bar every 25 trades.



Fundamental and Technical Bucket Signs

Teacher: Make one copy. Cut along the dotted line. Adhere each sign to a bucket, container, manilla envelope, or file folder with the short sides stapled together.





Create Your Own Guess My Ten

Directions: Create your own Guess My Ten game related to the lesson. Come up with a category or topic and the ten items players must match to score points.



Econ Essentials

Explore the Data

Directions: Use the QR codes below to access information on the following futures.



Econ Essentials