



AgExplorer and Tractor Supply Company Virtual Field Trip (VFT)

Educator Companion Guide – “Beyond the Sale: Careers the Deliver”

Overview

The AgExplorer and Tractor Supply Company Virtual Field Trip takes your students on a “bark to bite” journey to explore the careers that bring a new dog food from idea to dog bowl. Students meet the team at Tractor Supply Company to learn how product development, marketing, distribution and merchandising are important careers to delivering the products they use every day.

The Virtual Field Trip illustrates a variety of highly-skilled careers, both supervisory and wage employment, involved in consumer product manufacturing and sales. It also develops students’ awareness of the role of different careers, types of firms, and market structures in improving products and processes. Finally, it highlights key economics concepts, such as supply and demand, prices, and profits and how these function in a market economy. This companion guide has been designed to help educators connect and extend the learning from the VFT to classroom concepts. Activities are flexible enough to be used before or after the VFT.

Objectives

Students will:

- Identify the role that supply and demand, prices, and profits play in determining production and distribution in a market economy.
- Examine the organization and role of business firms and analyze the various types of market structures in the United States economy.
- Explore how various professionals in business firms play a role in the development, marketing, distribution, and merchandising of everyday products.



Materials

- Copies of *Supply and Demand Vocabulary* handout, one per student
- Internet Access
- Copies of *Careers that Deliver* capture sheet, one per student
- Copies of *Career Profile Research* handout, one per student
- Copies of dog food “bags” (clip art or photo), one each for 2/3 of the class
- Copies of *Voluntary Exchange Activity: Supply & Demand* handout, one per student

Before the Field Trip

1. Begin class by handing each student a copy of the *Supply and Demand Vocabulary* handout.
2. Show the *Demand and Supply Explained* video:
<https://www.youtube.com/watch?v=LwLh6ax0zTE>
3. As they watch the video, ask students to match the terms from the word bank to their definitions.
4. Then, review the Supply and Demand Shifters and ask students to think of examples relevant to the dog food market.
5. Call on students to share what they have written.
6. Explain that they will now be connecting these basic economic concepts to real careers in merchandising. Introduce students to the Virtual Field Trip by reading the VFT Overview (listed on page 1).

During the Virtual Field Trip

1. Distribute the *Careers that Deliver* capture sheet to students and review the background information.
2. Direct students to watch the AgExplorer and Tractor Supply Company Virtual Field Trip. While they watch, they should list two background experiences/training opportunities each professional highlighted as influential or helpful in their current career.
3. Then, students should look to match some of their personal background and training opportunities with the careers featured in the presentation and answer the other questions on the last page of the capture sheet.



After the Virtual Field Trip

Two activity options are available for students to apply and summarize their learning.

Activity #1 (Career Investigation)

1. Remind students that during the VFT, they met many professionals who are dedicated to ensuring the production and distribution of the highest quality products to help solve the complex needs of consumers. From Product Development Engineers to Marketing Managers, to Material Handlers and Visual Merchandisers, each career plays a unique role in satisfying customers' wants or filling a market niche by identifying problems, creating solutions, thinking critically, and effectively communicating as part of a team.
2. The VFT highlighted several of these careers. Ask students to share what they remember about these jobs:
 - Product Development - Engineer
 - Marketing Manager
 - Distribution – Material Handler
 - Retail – Store Trainer
 - Visual Merchandiser
3. Then, challenge students to learn more about one of the two careers they listed on the last page of their *Careers that Deliver* capture sheet. Pass out the *Career Profile Research* handout. Invite students to go to www.agexplorer.com and find one career within the Agribusiness pathway that goes along with one career students learned about during the Virtual Field Trip. Guide students to record their research on the handout.
4. Once research is completed, invite students to identify a gap in their school's course offerings and write a persuasive letter to the principal asking that the school offer more opportunities in this area, either directly or through partnership with outside groups.



Activity #2 (Voluntary Exchange Activity: Supply & Demand)

1. Divide students into two equal groups, Buyers for Tractor Supply Company & Bark to Bite Dog Food Brand Manufacturers (Sellers).
2. Inform each team that they have been tasked with buying or selling dog food at the best price possible. Students will engage in three rounds of buying and selling, with some students changing sides and some aspects of the scenario changing each round.
3. Inform students they will practice negotiation skills to determine the price of a good; make predictions regarding changes in a dog food market; and demonstrate active participation and cooperative learning skills. Dog food cutouts and clipart money are included in this guide to use for trading.
4. Pass out the *Voluntary Exchange Activity: Supply & Demand* handout and review the scenario and instructions with the class. Review the definitions for Consumer and Producer Surplus (or loss) and how to calculate those on their chart. Give each Seller a “bag” of dog food representing their supply, instructing them that they can only make one sale. Then, inform the Buyers only what their maximum price is for Round 1, and the Sellers only what their minimum sale price is. (NOTE: It’s important that each group doesn’t hear the other’s price to ensure robust negotiation. See recommended Buyer Max and Seller min for each round, below.)
 - ▶ R1 (half buyers/half sellers) Seller Min \$30 Buyer Max \$130
 - ▶ R2 (2/3 of class buyers and 1/3 of class sellers) Seller Min \$25 Buyer Max \$125
 - ▶ R3 (1/3 of class buyers and 2/3 of class sellers) Seller Min \$125 Buyer Max \$25
5. After each Seller has completed their Round 1 sale and all students have recorded their data in the chart on the capture sheet, move enough Sellers to the Buyers’ side so that there are twice as many Buyers as Sellers and repeat the process with Round 2 maximum and minimum sales prices and scenario. (Again, only give one “bag” to each seller, as they can still only make one sale.)
6. Debrief with the class after all students have recorded their Round 2 data (Note: Buyers unable to make a purchase should record “\$0”). Encourage students’ understanding of how greater demand (more Buyers than Sellers) impacted prices and therefore profit for the Sellers by guiding students through the discussion questions on the back of the capture sheet.
7. For Round 3, the Sellers from Round 2 now become Buyers (twice as many Sellers as



Buyers). Repeat the process with Round 3 maximum and minimum sales prices and scenario. (Again, only give one “bag” to each seller, as they can still only make one sale.)

8. Conclude the lesson with a final debrief with the class after all students have recorded their Round 3 data (Note: Sellers unable to make a sale should record “\$0”). Encourage students’ understanding of how greater supply (more Sellers than Buyers) impacted prices and therefore potential profit for the retailers. Review all discussion questions.

HS National Standards

Scarcity and Economic Reasoning

- *Students will understand that productive resources are limited; therefore, people cannot have all the goods and services they want. As a result, they must choose some things and give up others.*
 - E.5 Explain that voluntary exchange occurs when all participating parties expect to gain.

Supply and Demand

- *Students will understand the role that supply and demand, prices, and profits play in determining production and distribution in a market economy.*
 - E.11 Define supply and demand and provide relevant examples.
 - E.12 Describe the role of buyers and sellers in determining the equilibrium price
 - E.17 Identify factors that cause changes in market supply and demand

Market Structures

- *Students will understand the organization and role of business firms and analyze the various types of market structures in the United States economy.*
 - E.27 Explain how competition among many sellers lowers costs and prices and encourages producers to produce more.

Agricultural Business, Supply &Service Standards, Benchmarks & Performance Indicators (competencies)

Standard AB-5: Understand basic technical skills and knowledge in the occupational area of agricultural business, supply and service.



Find *your* Future in Agriculture

Name _____ Date _____

Supply and Demand Vocabulary

Directions: As you watch the video “Demand and Supply Explained-Econ 2.1,”

<https://www.youtube.com/watch?v=LwLh6axOzTE> match the words in the Word Bank with their definitions. Then, review the Supply Shifters and Demand Shifters and think of an example for each using dog food.

| Word Bank | | |
|---------------|---------------|----------|
| Law of Supply | Law of Demand | |
| Equilibrium | Surplus | Shortage |

1. When the price goes up, people buy less and when the price goes down, people buy more.

2. If the price goes up, the producer has an incentive to make more to increase profit.

3. A mismatch between supply and demand when the price is high (creating more supply than demand).

4. A mismatch between supply and demand when the price is low (creating more demand than supply).

5. The price at which supply and demand are the same.

| Supply Shifters |
|---|
| 1. Price of Resources e.g. price of chicken, a main ingredient in dog food, increases/decreases |
| 2. Number of Manufacturers _____ |
| 3. Technology _____ |
| 4. Taxes & Subsidies _____ |
| 5. Market Expectations _____ |
| Demand Shifters |
| 1. Tastes/Preferences _____ |
| 2. Number of Consumers _____ |
| 3. Price of Related Goods (Substitute or Compliment) e.g. a substitute good for dry dog kibble is raw dog food; compliments are kibble storage containers and scoops. |
| 4. Income _____ |
| 5. Market Expectations _____ |

TEACHER KEY

Supply and Demand Vocabulary

Directions: As you watch the video, match the words in the Word Bank with their definitions. Then, review the Supply Shifters and Demand Shifters and think of an example for each using dog food.

| Word Bank | | |
|---------------|---------------|----------|
| Law of Supply | Law of Demand | |
| Equilibrium | Surplus | Shortage |

- When the price goes up, people buy less and when the price goes down, people buy more.
Law of Demand
- If the price goes up, the producer has an incentive to make more to increase profit.
Law of Supply
- A mismatch between supply and demand when the price is high (creating more supply than demand).
Surplus
- A mismatch between supply and demand when the price is low (creating more demand than supply).
Shortage
- The price at which supply and demand are the same.
Equilibrium

| <u>Supply Shifters</u> |
|---|
| 1. Price of Resources e.g. price of chicken, a main ingredient in dog food, increases/decreases |
| 2. Number of Manufacturers <u># of dog food manufacturers goes up or down</u> |
| 3. Technology <u>new packaging material lowers per unit cost</u> |
| 4. Taxes & Subsidies <u>government cuts corporate taxes</u> |
| 5. Market Expectations <u>cost of chicken expected to increase 50%</u> |
| <u>Demand Shifters</u> |
| 1. Tastes/Preferences <u>more dog owners prefer buying kibble over other types of food or vice versa</u> |
| 2. Number of Consumers <u># of dog owners increases/decreases</u> |
| 3. Price of Related Goods (Substitute or Compliment) e.g. a substitute good for dry dog kibble is raw dog food; compliments are kibble storage containers and scoops. |
| 4. Income <u>avg. income of dog owners goes up/down</u> |
| 5. Market Expectations <u># of dog owners expected to increase 10%</u> |



Name _____ Date _____

Careers that Deliver Capture Sheet
(To be completed during the virtual field trip)

In this Virtual Field Trip, you will meet the team at Tractor Supply Company to learn how product development, marketing, distribution and visual merchandising are important careers to delivering the products you use every day.

This Virtual Field Trip illustrates a variety of highly-skilled careers involved in merchandising.

First, you'll hear from an engineer who is involved in product development whose job duties include gathering information from customers, evaluating industry trends, conducting market research, and creating and developing new products.

Another important career highlighted in the Virtual Field Trip is marketing manager. Careers in marketing include activities like market research, writing, video production, planning events and more.

Furthermore, you'll learn about careers in distribution and retail. Careers in distribution entail moving/storing products, inventory management, shipping, and packaging; whereas, careers in retail include such activities as selling, merchandising, training, managing, etc.

Finally, you'll hear from a Visual Merchandiser who will lead a live walk through of the Merchandising Innovation Center and discuss the factors considered when a new product is added to maximize sales.

All the professionals you will hear from during the Virtual Field Trip will mention the background required for their careers, as well as high school courses/training opportunities that were valuable in preparing them for their field.



While watching the AgExplorer and Tractor Supply Company Virtual Field Trip, complete the table below:

| List two background experiences/training opportunities each professional highlighted as influential. | |
|---|--|
| Product Development - Engineer | 1. 2. |
| Marketing Manager | 1. 2. |
| Distribution – Material Handler | 1. 2. |
| Retail – Store Trainer | 1. 2. |
| Visual Merchandiser | 1. 2. |



Now, match your own background /opportunities to the careers highlighted.

Which background experiences of yours is similar or you would like to be similar to any that you heard during the video? List two or three below.

Have you heard of any of the high school courses or training opportunities mentioned by any of the professionals as being available at your school?

If yes, list them below.

If not, which courses or opportunities would you be interested in exploring further to see if they could be offered at your school or through an extension/partnership program?

List **two** careers from the Virtual Field Trip that are most interesting to you based on your background and the training opportunities available to you. Explain.

Why is it important for a firm like Tractor Supply Company or others that sell consumer products, to have a diverse group of careers and employees?



Name _____ Date _____

Career Profile Research

Directions: Go to www.agexplorer.com and find one career within the Agribusiness pathway that goes along with a career you learned about during the Virtual Field Trip.

| CAREER NAME _____ | |
|---|--|
| Brief Description | |
| Training & Skills Required | |
| Salary Range | |
| Related Careers | |
| Current Job openings, If available | |
| Current classes I am taking that are related to this career | |
| How this career matches with some of my interests/skills/strengths | |
| Training opportunities I would need in the future to pursue this career | |

What surprised you most about the career you researched?

Would you want to explore this career more? Why or why not?



Name _____ Date _____

Voluntary Exchange Activity: Supply & Demand

Directions: Read the scenarios and follow your teacher’s directions to complete three rounds of voluntary exchange. Record your data on the table below and answer the discussion questions.

Scenario, Round 1:

Bark to Bite Dog Food Brand is releasing a new product to the market, and Tractor Supply Retailers are eager to buy it and offer it in their stores. Buyers and Sellers of this product meet weekly at the Pet Expo Exchange, located in this room. During the 5-minute-long trading session, half the class will be Buyers and the other half will be Sellers. Your goal is to make as much surplus as you can by negotiating a favorable **price**.

- **Buyers** (retailers who sell to consumers) must try to buy the dog food as cheaply as they can. If they pay less than their maximum price, they make a consumer’s surplus.
- **Sellers** (suppliers) must try to sell the dog food for as much as they can. If they sell above their minimum price, they make a producer’s surplus.

There will be three trading sessions. In each session, you can only buy or sell **ONCE**. When you make a deal, shake hands and go back to your desk to record your negotiated price and surplus or loss. If you do not make a sale or purchase, you take the entire minimum or maximum price for a loss. Are you the best negotiator in the class? Let’s find out. Good Luck!

| Round | Buying or Selling | Max. Buying or Min. Selling Price | Negotiated Price | Surplus (or Loss) |
|---------------|-------------------|-----------------------------------|------------------|-------------------|
| Example | Buying | \$500 | \$200 | \$300 |
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| Total: | | | | |

(See questions and adjustments for scenarios 2 and 3 on back)



Round 2: Change – Mass Recall of Competitor Brand Dog Food

1. What happened to demand or supply of dog food overall?
2. What happened to the price and quantity demanded of Bark to Bite Brand food. Why does this happen?
3. What is this called in Economics? Use your Supply and Demand Vocabulary handout.
4. What role did competition play? Who competed? How did that affect price?
5. Which shifted, supply or demand? Which specific shifter was involved?

Round 3: Change – Decrease in Price of Raw Dog Food (a substitute)

1. What happened to demand or supply of dog food overall?
2. What happened to the price and quantity supplied of Bark to Bite Brand food. Why does this happen?
3. What is this called in Economics? Use your Supply and Demand Vocabulary handout.
4. What role did competition play? Who competed? How did that affect price?
5. Which shifted, supply or demand? Which specific shifter was involved?

Manipulatives for Trading



