Agri-Entrepreneurship Program











Unit: 2

Lesson: 2.1

You Supply They Demand

Precepts:

A. Action

A3. Plan effectively

A8. Evaluate and reflect on actions taken and make

appropriate modifications

N. Decision Making

N1. Demonstrate the decision making process

O. Flexibility and Adaptability

O1. Manages change

National Standards:

NM-DATA.9-12.3 Develop and evaluate inferences and predictions

that are based on data.

NSS-EC.9-12.8 Supply and Demand

Student Learning Objectives: As a result of this lesson, the student will ...

- 1. Define and explain supply and demand.
- 2. Apply the supply and demand principle to real life examples.



Instruction time for this lesson: 75 minutes

Resources:



- National FFA Organization, LifeKnowledge® materials, 2008
- Gibson, J., Usry, R., Hass, L., Liles, R. & Moore, G. Agribusiness: Management, Marketing, Human Resource Development, Communication, & Technology. Danville, Illinois. Interstate Publishers, Inc., 2001.
- Elliot, J., Agribusiness: *Decisions & Dollars*. Albany, New York. Delmar Publishers, 1998.
- Mariotti, S. *Entrepreneurship: Starting and operating a small business.* Upper Saddle River, New Jersey. Pearson Prentice Hall, 2007.

Tools, Equipment, and Supplies:

- Something of value that each student would want to have. (Must have enough of these for each student in the class. Examples include candy, trinkets, a photo of a new product students would be interested in, etc.)
- Tokens, multiple colors of poker chips or play money to use in the auction with students.
- One copy of TM.1 as a transparency or one copy for each student as a handout.

Key Terms:

The following terms are presented in this lesson and appear in bold italics:

Supply Demand



Students will be given a box of tokens, poker chips of at least two different colors and asked to select any number of them from one to a handful. If using play money, randomly pass out money in different quantities to different students. Place a value on the tokens or use the given value on money. (Make certain this is done AFTER students have already selected their tokens.)



Welcome to class students. How many of you have ever been to an auction?

If students have not been to an auction, describe the action and excitement present.



Did you have fun? Did you ever want to raise your hand and feel the adrenaline rush through your veins and have your heart beating fast, knowing that you might get the item if someone else doesn't bid again? Well, today we are going to participate in a class auction. Everyone must participate and the only way to receive an "A" today for your class work is for you to have this item purchased by the end of the hour.

Pull out an object that students would like to have and let the students know that they will only receive an "A" on today's activities if they obtain this selected item. You will announce the bidding to open at a random predetermined amount and they may use their tokens or money to purchase the item.



I have just one of these items and whoever has this at the end of the hour will receive an "A" for today's work. Are you ready to have an auction? Well let's begin.

Continue auction until a student has bid the highest price for this item and obtained it. Then pull out a large **supply** of the same item that just sold while announcing that you do just happen to have a few more of these items. Tell the students you're willing to open the bidding at an extremely low amount. WAIT & WATCH THEIR REACTION!

After watching and hearing their comments, begin a discussion on how they felt when they didn't have enough money to purchase the item to get an "A."



How did you feel when you didn't have enough money to purchase the item? Why?

Solicit answers



In our last lesson we learned about the advantages and disadvantages of being an entrepreneur and the meaning of risk. The activity we just completed leads us into what we will be talking about today. *Supply* and *Demand*! So, be ready to participate and apply concepts to *supply* and *demand*.

Write **supply** and **demand** on board. Ask the individual who bought the overpriced item to 1) define what these terms mean to him in light of the experience he just had, 2) explain why he was motivated to pay such a high price for it, and 3) let us know if he would have paid so much had he known there were additional items for everyone.

Objective 1: Define and explain *supply* and *demand*.

After completing the auction activity, the students will switch gears and plot information on the worksheet that is to be handed out (AS.1). Don't explain any of the terms; just pass out the worksheet, read the instruction aloud to the class, and ask for questions. Then give them three to five minutes to complete the graph and think of how they might answer the two questions at the end of the worksheet.



Good work students. Thank you so much for participating and interacting with the activity. Now we are going to switch gears and go

from participating in the *supply* and *demand* cycle to looking at it on a graph having data plotted on it. After I distribute this activity sheet, we will read the directions together and then take three to five minutes to complete it. Think how you might answer the two questions at the end. What questions do you have?

Distribute AS.1 and read the instructions aloud.



What questions are there before we begin? You may begin.

Allow three to five minutes to complete the worksheet. After the class has finished go ahead and begin the discussion of **supply** and **demand** and capture the definitions of both.



Excellent work students! Who will be the first to define the two terms - *supply* and *demand*? (Solicit some answers from students and praise them for giving their definition.) Those were very thoughtful answers. Let's capture this formal definition so that we all have the same answer.

Supply – the amount of product that a producer is willing and able to sell at a specified price

Demand – the amount of product that a buyer is willing and able to buy at a specified price

As we can see in our definitions, *supply* and *demand* shows the relationships between a product's accessibility and the interest shown in it by the consumer.

Use the activity sheet to help guide students through the supply and demand theory. Explain that where supply and demand intersects is where the price is set and the amount sold is set.

At this point, have students write a short story incorporating the definitions of supply and demand using the <u>Dickens Moment</u>. The Dickens Moment taps into students' abilities to write and tell stories. Students review components or sections of information and think of a story they could tell others using that information. The information can be transformed into characters that interact, solve challenges, dialogue, etc. Challenge students to be creative and to show they can use the information in a different way than was presented to them.



Let us now switch gears. In a moment, when you are asked to begin, you will have an opportunity to be creative by generating a small two-paragraph story using the terms *supply* and *demand* as our characters. It can be funny or serious--just use the components of the definitions to help create the story. You will have 10 minutes to write this short story. No novels, just a short story. Who will explain the directions for this task to the class? You may begin.

At the end of ten minutes, allow three students volunteer and read their story.



Creative writing time is up. Who will be the first to read their short story to the class?

Thank you.

Objective 2: Apply the *supply* and *demand* principle to real life examples.

Pass out TM.1 or display it where everyone can see.



Great stories! Now that we have an idea of what *supply* and *demand* is, let's look at (*TM.1*) how three different companies' could sell the same product at different prices and quantities and how this affects the profit they will make.

Go through TM.1 with students and explain the prices and quantities sold. Examine how the first company sold all that they were putting in the store but weren't making any profit due to the selling price. Most important is to have students reflect on how they face supply and demand on a daily basis.

Review/ Summary:

Use a modified <u>Little Professor Moment</u> to review. The Little Professor e-Moment allows students to teach one another as you guide them. When we teach something we tend to learn it better. During the Little Professor Moment, portions of the content are taught to half the students at a time. Then, students take turns being "Little Professors" to their partners.



Great class today students. Here is how we will wrap up. When I say, "Go," pair up with someone and explain what *supply* is and then switch and let your partner explain what *demand* is. Go!

Application:

Extended classroom activity:

Have students break into pairs and develop a new product. Have them do a product research analysis and ask 10 people if they would be willing to buy their new product for their price. Answer the following questions: 1. Is the product desirable? 2. Does the product have an appropriate price? 3. Can we make it affordable and be able to make a profit?

► FFA activity: Students conduct a project with a current fundraising product to determine if they think they have maxed out their demand for the product being sold. Students could do this a variety of ways; conducting a survey or comparing their prices to others selling the same product to see if they are appropriately priced.

► SAE activity:

Individual students look at their SAEs or potential new SAEs and research if there is a **demand** for their product and if they could make a profit at the price at which the **demand** and **supply** would reach equilibrium.

Evaluation: Quiz – Lesson Assessment; Assess.1

Answers to Evaluation:

Answers to essay questions may vary but each student's answer should have the concept of the given definition in class.

- 1. *Supply* is the amount of product that a producer is willing and able to sell at a specified price.
- 2. **Demand** is the amount of product that a buyer is willing and able to buy at a specified price.

Answers will vary greatly but the idea to get from the students is anything that affects the *supply* or *demand* will affect how much is sold, at what price it is sold and the quantity available.

Lesson	2.1
Assess.	1

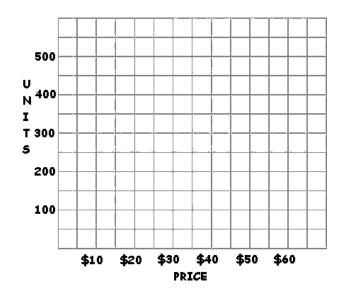
Assess.1	Name	
	Supply & Demand Quiz Assessment 2.1	
Define supply.		
Define demand.		
List some conditions that would change	e supply and demand.	

2.1 Activity Sheet 1 - Supply and Demand Introduction

Riley's clothing store wants to set a price for a new pair of jeans. Help Riley find the best price that will satisfy both customers and Riley.

- 1. Plot the points for **selling price** and **number supplied** on the graph below. Draw a line through these points and mark the line "**Supply**".
- 2. Plot the points for **selling price** and **number demanded**. Draw a line through these points and mark the line "**Demand**".
- 3. Estimate where supply and demand are equal (in equilibrium). Circle this point and identify the selling price and units sold.

Selling Price	Number Supplied	Number Demanded
\$10.00	17	496
\$20.00	134	392
\$30.00	251	288
\$40.00	368	184
\$50.00	485	80



Question:

1. From the activity above, how would you define supply and demand in your own words?

Transparency Master 1

Comparison of Three Companies' Prices and Quantities Sold

Company A	Company B	Company C
Price: \$5.50	Price \$12.50	Price – \$25
Quantity sold – 1000	Quantity sold – 425	Quantity sold – 10
Profit margin -\$.10	Profit margin - \$4.10	Profit margin - \$17.75

Which company could continue to sell their product and continue to make a profit for a long period of time? (*Answer Company B*)

Why do you think so students? (Solicit some answers)

Which company over priced their product? What affect did this have on the quantity sold? Why?

Which company sold a large quantity? Why would this business not be able to continue to produce this product if the cost went up \$.20?

What are examples of how you face supply and demand on a daily basis?