



Futures Farming

Target Grade Level/ Age Range:

3-6 grade

Purpose:

Understand markets and commodities and complete simple equations

Materials:

“Futures Farming” worksheet

1 bag of M&M’s candy for each student (1.6 oz. or a bag with 55-60 M&M’s)

Calculator (optional)

Suggested Companion Resources:

1. Introduce the term “grain elevator”, which is where the farmer sells his corn. If possible, have an elevator manager come and speak to the class or arrange a visit to a grain elevator.
2. Contact the Iowa Corn Association, for more information on corn production, renewable resources, types of corn, corn processing, corn uses, and career information. www.iowacorn.org

Vocabulary:

- Futures- Commodities or stocks bought or sold upon agreement of delivery at a later date.
- Acre- Portion of land about the size of a football field
- Bushel- How a crop is measured; can be measured by weight or volume.
- Expenses- Items the farmer must pay for in order to stay in business. (Examples include electricity, gasoline, taxes, crop production products etc.)
- Profit-Amount of money made after expenses are paid.

Background – Agricultural Connections:

A lot of planning goes into the sale of a farmer’s crop. In order to make the most money, a farmer must predict when he will receive the best price for his or her crop, even before the crop is harvested. This is called “futures” because the prediction the farmer makes is based on the future. The futures market can be both complicated and risky. In this activity, students will see if they are good predictors with their “crop” in hopes of making the most money.

Procedures:

1. Introduce the “Farmers Dilemma” activity by reading the background information from above. Then go over the terms given at the beginning of the lesson either as a class or have the students do this individually. You could have the students match the term to the definition as well.
2. Pass out the bags of M&M’s and the worksheets that are attached. ***Do not open the M&M’s!** Using their worksheet and candy, students need to estimate how many M&M’s of each color they think might be in their single bag before opening it.



3. Move onto step 2 on the worksheet and have the students decide how many per color they wish to pre-sell.
 - a. Once the students have their totals, they now have bushels of corn they can sell.
 - b. This is a good time to talk about how many bushels of corn a farmer produces in one acre. (In Iowa, the average yield of corn per acre is 185 bushels according to the USDA for 2014; the average estimated for U.S. for 2014 is 171.7 bushels per acre)
4. Discuss the term “futures” that the students defined earlier. A farmer has the opportunity to sell his/her crop before he harvests it. For example, if the farmer thinks he/she may have 150 bushels of corn to sell in the fall, he/she may sell 100 bushels ahead of time at a higher price. Why wouldn't the farmer want to sell all 150 bushels at the better price? ANSWER: There might be a drought, flood, or wind damage that could hurt the farmers' yield, OR he/she might not harvest 150 bushels of corn. In order to make money the farmer must have the number of bushels he/she sold ahead of time, otherwise he/she loses money. It is like barrowing money...someday you have to pay it back.
*Remember the farmer is taking a risk like the students are doing with their candy. Imagine taking a risk with thousands of dollars, not just candy!
5. Complete step 2 on the worksheet.
6. Have the students open their bags of M&M's. No snacking yet! Complete step 3 on the worksheet.
7. Complete step 4,5,6,7, and 8 in the activity. Students may eat their candy at the end of the activity.

Discussion Questions:

1. How many of you realized that a farmer only makes money at certain times of the year?
2. How is the method of payment different than when some of your parents receive their paychecks?
3. What are some subjects in school that a farmer must be familiar with or understand well?
4. How would budgeting funds come into play in a farmer's family life?

Did you know? (Ag facts)

- April 3, 1848 The Chicago Board of Trade (CBOT) is founded as a cash market for grain.
- Futures trading is regulated by an agency of the Department of Agriculture called the Commodity Futures Trading Commission

Sources/Credits:

Innovations in Agriculture: Resource Guide for Teachers, Illinois Farm Bureau

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Curriculum Connections:

- Iowa Core Social Studies:
 - Understand that all economies throughout the world rely upon universal concepts. SS>3-5.E.6