

## **Economic Decision Making Middle School**

**Objective:** Students will explore cause and effect relationships of decisions through role playing in different scenarios.

**This Lesson Corresponds to:**

**Materials:**

-Economic Decision-Making worksheet

**Background Information:** The process of economic decision-making involves gathering all the relevant information and creating several possible scenarios and outcomes. These scenarios and outcomes are each analyzed in terms of pros and cons, costs and benefits.

In the maple industry producers are required to make an array of economic decisions throughout the season, many of these decisions affect them and the surrounding communities. Decisions producers are faced with include: whether or not to add more taps, if they should buy sap off a neighbor with maple trees, what type of container to put their product in, etc.

**Introduction:** Ask students to brainstorm some of the decisions they think producers may be faced with. Create a master list and ask the class to think of possible scenarios and outcomes for the various decisions; brainstorm pros and cons for each outcome.

**Activity: Economic Scenarios:** Students will work through possible outcomes for economic decisions in the maple industry and argue their point of view.

**Procedure:** Students can be split into small groups or the class can work through each scenario together as a whole.

-Once students have identified multiple outcomes for a scenario have them list pros and cons, costs and benefits for each outcome.

-Students can take sides and argue for one outcome over the other, making sure to support their decision.

**Scenario 1:** You are a maple producer, who is trying to grow your business. You have a very large evaporator and reverse osmosis machine. These two pieces of equipment mean that you can process much more sap than your maple trees can produce. You do some calculations, and you realize you can handle the sap from about 300 more taps. You mention your predicament to neighbors, who have been thinking about tapping their own trees. You begin to think of how you can collaborate together.

**Numbers:**

- Maple syrup sells on average for \$35 per gallon.
- One tap can produce up to a half a gallon of syrup per year.

- According to Cornell, it costs approximately \$6.89 per tap to set up a sugar stand, for 300 taps would cost \$2,067.00.
- Sap does not currently have an average price per gallon, but students can go through the negotiation process to determine the selling point.

**Scenario 2:** You are a newer maple producer, who is trying to figure out how you want to sell your product. You are producing approximately 100 gallons of syrup per year, and you need to decide if you want to sell your syrup in bulk to a bottling company and distributor who will sell it outside your community or if you want to bottle and sell your syrup on your own to local smaller markets. Bottling and selling your own maple syrup will take more of your time and resources, but it keeps your product within your community.

**Numbers:**

- Maple syrup on average sells in bulk for \$35 per gallon.
- Maple syrup can sell for upwards of \$70 per gallon at retail.
- One quart bottle costs \$1.02, and you would need about 400 to bottle all of the syrup you produce.
- To sell all 100 gallons of syrup, it would take one workweek, or 40 hours, of your time, which is valued at \$15 per hour.

**References and Resources:**

“Decision-Making Process” UMass Dartmouth. Retrieved 22 January 2019.

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“Maple Syrup Profile” AgMRC: Agricultural Marketing Resource Center. Retrieved 22 January 2019. <https://www.agmrc.org/commodities-products/specialty-crops/maple-sugar-profile>

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