***Lesson 1: Exploring Nuts- Teacher’s Guide***

**Estimated Time for Completion- approximately 45 minutes**

**Student Learning Objectives:**

* As a result of this lesson the student will…
  + Develop a deeper understanding of nut production and marketing.
  + Become familiarized with market trends for nuts.
  + Utilize the Market Maker application in order to identify area nut production.

**Purpose:** Maybe “nuts” is only a term you use to describe a certain friend of yours, but you may be surprised how big the nut industry truly reaches. Whether it is because they are a popular trail mix ingredient, a source of biodiesel oil or because they can be a deadly allergen, nuts are a common product that can be processed and used in numerous ways that have made them well known. It is easy to think of nuts being used only in their whole, edible form, but the reality is that nuts can be a very versatile product.

**Directions:** Access the commodities and products tab on the AgMRC website (<http://www.agmrc.org>) and find the link to Nuts. Utilize information located here to answer the questions below:

1. What is the only state that produces almonds in the US? What are the recent market trends for almonds?

* First, select the commodities and products link.
* Second, select the nuts link
* Third, select the almonds link.
* Fourth, use the information on the page and links provided to answer the question.

1. Using the FOODMARKETMAKER.COM tab, find a nut producer in your state. If no producers are listed for your state, choose a different state. What kind(s) of nuts do they grow?

* First, select the Food Industry Market Maker tab.
* Second, select a state.
* Third, using the Find a Business area select “Find a Farmer/Rancher”.
* Fourth, select Fruit and Nuts from the choices.
* Fifth, select Nut Product Type from the choices.
* Sixth, select a nut type.
* Seventh, use the information given to answer the question.

1. Pine nuts have many different uses. What are the different forms of pine nut uses (ex. shelled, oil) and what are they used for?

* First, select the commodities and products link.
* Second, select the nuts link
* Third, select the pine nuts link.
* Fourth, use the information on the page and links provided to answer the question.

1. How do the nutritional traits of a pistachio nut compare to halibut, broccoli, and bananas?

* First, select the commodities and products link.
* Second, select the nuts link
* Third, select the pistachio link.
* Fourth, use the information on the page and links provided to answer the question.

1. What are 4 value-added products that are made from peanuts?

* First, select the commodities and products link.
* Second, select the nuts link
* Third, select the peanuts link.
* Fourth, use the information on the page and links provided to answer the question.

1. Choose one of the nut types (other than pine nuts and pistachio) from the AgMRC list and give some reported health benefits from eating them. How could this be used in marketing? Who would you market them to?

* First, select the commodities and products link.
* Second, select the nuts link.
* Third, select one of the types of nuts and use the information on the page and the links provided to answer the question.

**Reinforcement activity: Exploring Nuts**

For this activity you will need to select one of the types of nuts listed in the AgMRC website. For the selected nut type, you will need to research as a small group or individually (decided by your teacher) what the process is for growing that type of nut. You will then put together a report type selected by your teacher (informational poster or brochure, formal presentation, etc.) to use to present your information to the rest of the class.

Information to report includes, but is not limited to the following:

* Growing season
* Ideal climate
* Production per acre
* Area needed per plant
* If it needs to be grown in any particular crop rotation
* Preferred soil type