

In this lesson, students will learn about North Dakota agriculture by looking at a menu and determining where the food originates and is processed.

Supplies

- Attached menu
- Attached recipes
- Access to the internet

Setup

Students should already have studied agriculture in the state so they are familiar with the basics of agriculture. ND Studies offers relevant information for your students.

Objectives

- Students will understand the role of agriculture in their lives and where food comes from.
- Students will understand that North Dakota produces many different agricultural products.
- Students will understand that North Dakota has industries based on turning raw agricultural products into something that can be consumed by people.
- Students will be able to trace food from a restaurant menu back to where the ingredients are grown or raised.

Background

Many immigrants to Dakota Territory were drawn to the prairie by the Homestead Act of 1862, which allowed people to own a quarter section of land (160 acres) as long as they improved it. Native Americans had lived on the land for thousands of years, but recent wars had pushed many of the tribes such as the Lakotas further west, while other groups like the Yanktonais were already living on reservations by 1867. In 1868, the first land claim was filed in northeastern Dakota Territory near Pembina. European-Americans also obtained land through the Timber Culture Act and by purchasing it from railroad companies. Many people came here to obtain land to grow crops or raise livestock.

Today, agriculture makes up 25% of North Dakota's economy, making it the largest sector of the economy. North Dakota produces many different agricultural products and leads the nation in the production of several crops such as dry edible beans, wheat, honey, canola, flaxseed, oats, and dry edible peas. North Dakotans also raise livestock and poultry including cows, sheep, pigs, bison, chickens, and turkeys for their byproducts and meat. These agricultural products are processed into the food we eat. Due to the great variety of agricultural products in North Dakota, much of what we eat can be tied directly back to the state.

Activity

Tell the students that they will be investigating a claim made by a local restaurant. They will work in teams to decide if the claim is true or false.

Divide the students into groups of four. Four is the best number because there are four different sections to the menu they will be analyzing.

Tell the students the following: Your family is going to a new restaurant that claims that 90% of its food comes from North Dakota agricultural products. You are skeptical of the claim, so you are going to do some detective work to see if the claim is true. As a group, choose an appetizer, entrée, drink, and side from the menu below. Then track it back to its origin identifying only North Dakota companies and products.

Students will get recipes for each of the items on the menu. You can use the ones provided or find some of your own. (Recipes for basic foods like cheeseburgers or ribs are not provided.) Then, they will compare it to a list of North Dakota agricultural companies and their products. They will work their way backward to determine if the ingredients would be produced in the state.

First, they will use the recipes to determine what specific ingredients are in each component of the dishes from the meal they chose.

Next, they will look for individual businesses that may make those products in North Dakota. Good sites to use are the secretary of state's office (though not all are North Dakota-based businesses) and Pride of Dakota.

To close out this lesson, after the students have completed their research, discuss the following:

- Would a restaurant be able to use 90% North Dakota ingredients on a menu?
- Could they use 100%?
- What surprised you in analyzing the menu and agricultural products?
- What types of food categories were most difficult to find grown in North Dakota? Why do you think that is? (Note to teachers: An example of a food category might be fruit or vegetables.)



Appetizers

- Hummus and pretzels or bread
- Caviar and crackers
- Mac and cheese bites
- Potato skins with bacon and sour cream

Entrée

- Cheeseburger and french fries with a pickle spear on the side
- Bison ribs served with Three Sisters Salad
- Lamb chops with honey bacon baked beans
- Tofu alfredo linguine

Dessert

- Gelato
- Lefse
- SunButter cookies
- Caramel rolls
- Kuchen

Drink

- Milk
- Beer
- Wine
- Malted milk

Extension

You could add prices to the menu and have students calculate the cost of their meal, a tip, how much the restaurant might profit off the meal based on prices in the store, etc.

Students could create their own menu, or parts of it, based on North Dakota agricultural products.

Reflection questions

- What other businesses could be developed around the agriculture industry?
- Small family farms are struggling to survive. What crops or livestock could these farms raise to give them an advantage?
- Could we grow all we need in North Dakota and not depend on other states or nations?

Recipes

These recipes were chosen because they use ingredients produced by the North Dakota agricultural industry.

- Easy Homemade White Bread Recipe - Crazy for Crust
- Extra Easy Hummus Recipe (allrecipes.com)
- Fried Mac and Cheese Bites - Cooking For My Soul
- Gelato Recipe (allrecipes.com)
- Lefse Time Recipe, Best Lefse Recipe | Lefse Time
- SunButter Cookies 5 Ingredients ONLY Nut & Dairy free - Simply Bakings
- Sunflower Seed Butter - Detoxinista
- Three Sisters Salad - Canadian Food Focus
- Homemade Vanilla Ice Cream Recipe: How to Make It (tasteofhome.com)
- Best Homemade Alfredo Sauce {Easy 4 Ingredient Recipe + Video} (selfproclaimedfoodie.com)
- Stupid Easy Homemade Caramel Rolls - Julie's Eats & Treats® (julieseatsandtreats.com)
- Wheat Crackers Recipe (allrecipes.com)
- Authentic German Kuchen | Just A Pinch Recipes
- Baked Beans Recipe {With Bacon & Honey!} | Dinner, then Dessert (dinnerthendessert.com)

Investigative Tool

Directions: Use the chart below to complete the assignment. You will place the menu item you chose in the left-hand column titled “Menu item.” Then, use the corresponding recipe to complete the column “Individual ingredients.” To fill in the last two columns, conduct research about North Dakota companies and agricultural products using your textbook or the internet.

Menu item	Individual ingredients	ND company that produces it	Main agricultural ingredient

Menu item	Individual ingredients	ND company that produces it	Main agricultural ingredient
Hummus and bread	Hummus <ul style="list-style-type: none"> • Chickpeas • Canola oil • Spices to taste Bread <ul style="list-style-type: none"> • Wheat flour • Water • Butter • Milk • Sugar • Salt • Yeast 	Bread Poets North Dakota Mill American Crystal Sugar Cass Clay	Chickpeas Canola Wheat Dairy cows Sugar beets
Caviar and crackers	Paddlefish caviar Crackers	North Star Caviar	Caviar Wheat
Mac and cheese bites	Pasta Flour Cheese Seasoning Butter Milk	Dakota Pasta Growers Cass Clay North Dakota Mill	Wheat Chickens Dairy cows
Potato skins	Potatoes Cheese Sour cream Bacon	Cass Clay Associated Potato Growers Inc.	Potatoes Dairy cows Pigs
Cheeseburger and french fries	Bun <ul style="list-style-type: none"> • Wheat flour • Water • Butter • Milk • Sugar • Salt • Yeast Burger Cheese Potatoes Pickle <ul style="list-style-type: none"> • Cucumber • Dill • Canning salt • Sugar • Vinegar 	North Dakota Mill Schweitzer's Gourmet Meats Cass Clay Associated Potato Growers Inc The Jar Bar	Wheat Dairy cows Sugar beets Beef cows Dairy cows Potatoes Cucumber Sugar beets Dill

Menu item	Individual ingredients	ND company that produces it	Main agricultural ingredient
Bison ribs and salad	Bison ribs Salad <ul style="list-style-type: none"> • Winter squash • Corn • Black beans • Sugar • Canola oil • Vinegar • Seasoning to taste 	North American Bison Processing Plant	Bison Winter squash Corn Black beans Sugar beets Canola
Lamb chops and beans	Lamb chop Beans <ul style="list-style-type: none"> • Bacon • Onion • 3 different beans • Honey • Water • Brown sugar • Ketchup • Molasses • Worcestershire sauce • Mustard 	Butcher Block Meats A Touch of Honey	Lamb/sheep Pig Beans Honeybee hive Sugar beets Mustard seed
Tofu and alfredo linguini	Tofu Pasta/linguini Alfredo sauce		Soybeans Dairy Cows Wheat
Gelato	Gelato <ul style="list-style-type: none"> • Milk • Heavy cream • Sugar • Eggs 	Cows and Co. Creamery Cass Clay American Crystal Sugar Bartlett Farms	Dairy cows Sugar beets Chicken

Menu item	Individual ingredients	ND company that produces it	Main agricultural ingredient
Lefse	Lefse <ul style="list-style-type: none"> • Potatoes • Butter • Flour • Cream • Sugar • Salt 	Charlotte's Homemade Lefse	Potatoes Dairy cows Wheat Sugar beets
SunButter cookies	Cookies <ul style="list-style-type: none"> • Brown sugar • SunButter <ul style="list-style-type: none"> • Sunflower seeds • Salt • Sugar • Milk • Flour • Baking soda 	Cass Clay SunButter	Sugar beets Sunflowers Dairy cows Wheat
Caramel rolls	Bread <ul style="list-style-type: none"> • Wheat flour • Water • Butter • Milk • Sugar • Salt • Yeast Caramel <ul style="list-style-type: none"> • Brown sugar • Cream • Butter Sugar Butter Cinnamon	Cass Clay/Pride Dairy North Dakota Mill American Crystal Sugar	Wheat Dairy cows Sugar beets
Milk	Milk	Cass Clay	Dairy cows

Menu item	Individual ingredients	ND company that produces it	Main agricultural ingredient
Beer	Water Barley Hops Yeast	Laughing Sun Brewery	Barley
Wine	Wine <ul style="list-style-type: none"> • Sugar • Fruit juice • Water • Yeast 	Point of View Winery	Fruit Sugar beets
Malted milk	Ice cream <ul style="list-style-type: none"> • Cream • Sugar • Flavor Milk Malt <ul style="list-style-type: none"> • Malted barley 	Pride Dairy American Crystal Sugar	Dairy cows Sugar beets Barley

* Answers will vary based on recipes used and businesses.