Lesson 1: Food Groups

Activity Level: K-2 / Time: 45-60 minutes

PURPOSE
This lesson: Students will categorize food into five food groups while determining if food comes from an animal or plant; making the connection to where food is grown or raised locally.

Overview of Lesson Series: Students will explore the five food groups and what state-grown foods fit into each group. This club makes a local connection to good nutrition and a healthy lifestyle.

NEBRASKA STATE STANDARD CONNECTION
Kindergarten:
- SC.K.7.2.C Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.
- PE.K.3.4 Communicates the importance of health-related fitness components and nutrition for physical activity.
- PE.K.3.4.a Recognizes that food provides energy for physical activity. (E)

1st Grade:
- SS 1.3.5.b Match resources to their sources (e.g., food from farms, wood from trees, minerals from the ground, fish from the sea).
- PE.1.3.4.a Differentiates between healthy and unhealthy foods. (E)

2nd Grade:
- SS 2.2.2.a List various goods and services that can be produced with the same list of resources (e.g., soil, seed, and labor used to produce animal feed, plastics, cereal, or fuel).
- SS 2.3.4.b Identify patterns of land use (e.g., agricultural, residential, industrial, commercial, educational, recreational).
- PE.2.3.4.a Recognizes the impact of nutrition on physical activity. (E)

ACTIVITY SNAPSHOT
1. Organize and Prepare Supplies
2. Read Background Information
3. Interest Approach
4. Conduct Activities 1 & 2
5. Ask follow-up questions and make the connection to agriculture.
   - Is food important to us? Why?
   - Who grows our food?
   - Where does food grow?
   - Does our food come from animals or plants?
• Food is broken down into five food groups. Can you name the five we talked about today?
• What does that tell us about agriculture?
• What can we tell our family and friends about what we did today?

MATERIALS
• Whiteboard/Flipchart Post-it Notes
• Dry Erase Marker/Markers for Post-it
• Animal/Plant Cards
• Nebraska MyPlate Poster

WHAT’S THE CONNECTION TO AGRICULTURE?
We rely on plants and animals every day to provide us with the one of the most basic needs of survival; food. Farmers and ranchers work hard each day to ensure we have the world’s safest food supply while also providing us with healthy and nutritious choices to choose from.

PROCEDURES:
1. Organize and Prepare Supplies
   See “Materials” above.
2. Background Information
   Source: choosemyplate.gov & Nebraska Department of Agriculture

Students often don’t have an awareness or understanding that the food they eat each day comes from agriculture. It is important to know that we use agriculture every day from the time we wake up to the time we go to bed. Many do not make the connection that products we use each day are made up of components produced in agriculture. In fact, farm animals and plants contribute to many things Americans rely on or come in contact with nearly every day. Agriculture impacts our daily lives in ways many people may not realize. Nebraska grows crops and raises animals that provide us with food, fiber, and fuel. Many of the crops and livestock we grow and raise in Nebraska can be categorized into each of the five dietary food groups: fruits, vegetables, grains, protein, and dairy.

These five dietary food groups are the building blocks for a healthy diet. Recommendations are set forth by the U.S. Department of Agriculture. Food group guidelines were first introduced in 1916.

The food we eat each day comes from either a plant or an animal. Most of these plants and animals are raised or grown on farms. Farmers and ranchers throughout the United States and the world work hard to provide a nutritious and abundant food supply.

Animals raised on a farm are collectively called livestock. In the United States, the milk we drink is used to make dairy products such as cheese, yogurt, and ice cream, and is usually produced by dairy cows.
Goats are the next most common milk producing farm animal. Eggs are typically produced by chickens. Meat is provided by cattle, pigs, sheep, chickens, and turkeys. In addition to food, sheep also provide us with wool that makes the fabric commonly used for socks, coats, sweaters, and other clothing.

Farmers also grow plants that are used for animal feed, fuel, and food for humans. Some crops are raised to feed livestock, which in turn provide meat, milk, and eggs. Examples of crops raised for animal consumption include corn, soybeans, alfalfa, and grains such as wheat or barley. Other crops are raised for human consumption, including grains such as wheat and rice as well as various types of fruits and vegetables.

Vocabulary
MyPlate: U.S. Department of Agriculture’s color-coded image of a plate that illustrates the five food groups that are the building blocks for a healthy diet using a familiar image
Dairy: all milk products, including milk, yogurt, cheese etc.
Fruit: the sweet and fleshy product of a tree or other plant that contains seed and can be eaten as food
Grain: a small, hard seed, particularly the seed of one of the food plants wheat, corn, rye, oats, rice, and millet
Protein: an important part of a daily diet that helps humans and animals build muscles
Vegetables: any herbaceous plant whose fruits, seeds, roots, tubers, bulbs, stems, leaves or flower parts are used as food

3. Interest Approach (3-5 Minutes)
   a. Ask students, who grows the food we eat? Farmers and ranchers.
   b. Where does food grow? Soil, farms, the ground, Nebraska, all over the world.
   c. Explain that all the food we eat each day comes from either a plant or an animal. Most of these plants and animals were raised or grown on farms. Farmers and ranchers throughout the United States and the world work hard to provide a nutritious and abundant food supply.

4. Learning Activity 1 - Animal or Plant (15-20 Minutes)
   Source: Activity Adapted from Iowa Agricultural Literacy Foundation
   a. Ask students what foods they typically eat in a day. Try to keep their responses limited to simple, raw foods that come purely from a plant or animal source and not both. If your students list food items such as pizza or a sandwich, only list a single part of the food (pepperoni, bread, or ham) to avoid confusion. Write on the board for students to see.

<table>
<thead>
<tr>
<th>Foods I Eat...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
</tr>
<tr>
<td>Turkey</td>
</tr>
<tr>
<td>Bread</td>
</tr>
<tr>
<td>Hamburger</td>
</tr>
<tr>
<td>Apple</td>
</tr>
<tr>
<td>Pear</td>
</tr>
<tr>
<td>Crackers</td>
</tr>
</tbody>
</table>
b. Ask students where they think these foods originate. Write their responses next to each food on the class list. For example, students may state that corn comes from the seeds of a plant. If they don’t know where a food comes from, label it with a question mark. Keep their responses on display for future reference.

<table>
<thead>
<tr>
<th>Foods I Eat...</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td>Seeds</td>
</tr>
<tr>
<td>Turkey</td>
<td>Grocery Store</td>
</tr>
<tr>
<td>Bread</td>
<td>Flour</td>
</tr>
<tr>
<td>Hamburger</td>
<td>?</td>
</tr>
<tr>
<td>Apple</td>
<td>Tree</td>
</tr>
<tr>
<td>Pear</td>
<td>?</td>
</tr>
<tr>
<td>Crackers</td>
<td>?</td>
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</tbody>
</table>

c. Use the Animal/Plant Cards and discuss as a class if each item comes from a plant or animal and then compare to the list on the board discussing if they come from a plant or animal.

d. Explain that all of these items come either from a plant or animal. All of these items are grown or raised on a farm or in an orchard and possibly even right here in Nebraska.

5. Learning Activity 2 – MyPlate, Rain, Rain, Bow (20-25 Minutes)

*Source: North Carolina Agriculture in the Classroom*

a. Using the list of food on the board, ask students how they could further classify these plants and animals.

b. Explain that we can classify them into five categories. Show the MyPlate poster and the colors they match to on MyPlate. We classify plants and animals into either fruit, vegetables, proteins, grains, or dairy.

c. Ask students for examples of each of the five food groups. *Fruit-apple, vegetable-cucumber, protein beef, etc.* Show students “My Nebraska Plate” poster; share the colors of each food group. *Fruit-red, vegetables-green, grains-orange, protein-purple, dairy-blue.* Hang in classroom for a reference.

d. Explain that we are going to play a game to review the five food groups called “Rain, Rain, Bow.”

e. The game is played like “Duck, Duck, Goose.” The class sits in a circle and one student is selected to be the “Leprechaun.”

f. The leprechaun skips around the circle, lightly tapping classmates on the head. With each tap, the leprechaun says, “Rain.” When the leprechaun taps a head and says, “Bow,” the selected child must chase the leprechaun around the circle. If the leprechaun can take the vacant seat without being caught, the selected student becomes the new leprechaun.

g. The new leprechaun names a food group. The former leprechaun must name the color that represents that food group and a food from that group. For example, if the new leprechaun says, “Fruit,” the old leprechaun must say, “Red” and name a fruit such as blueberries. If the old leprechaun is unable to name a food from that group, the class is called upon to give assistance.
While the chase is in process, seated students participate in a unison motion directed by the teacher (e.g., clapping hands, stomping the floor, nodding heads, snapping fingers, slapping the floor with alternating hands).

h. Once the game is finished, explain that over the course of the next seven lessons we will explore each food group a little bit more.

6. Ask Follow Up Questions and Make the Connection to Agriculture (3-5 Minutes)

- **Is food important to us? Why?**
  Yes, food is important for us to survive and to have the proper nutrition to live a healthy lifestyle.

- **Who grows our food?**
  Farmers and ranchers.

- **Where does food grow?**
  In the ground, on the farm, ranch, in an orchard or garden.

- **Does our food come from animals or plants?**
  Both, all food must come from an animal or plant.

- **Food is broken down into five food groups. Can you name the five we talked about today?**
  Fruits, vegetables, grains, proteins, dairy.

- **What does that tell us about agriculture?**
  The food we eat comes from agriculture and so do many of the items we use each day at school and at home. We use products from agriculture to make lots of things we can use. It is important to be aware agriculture is a part of our everyday lives.
Animal & Plant Cards

Bread-Plant
Animal & Plant Cards

Eggs-Animal
Animal & Plant Cards

Milk-Animal
Animal & Plant Cards

Peas-Plant
Animal & Plant Cards

Meat-Animal
Animal & Plant Cards

Butter-Animal
Lesson 1: Food Groups

Animal & Plant Cards

Apples-Plant
Animal & Plant Cards

Rice-Plant