

Source Relay

This lesson plan emphasizes the importance of agriculture. Nearly all of the products we rely on in any given day originate from the plants and animals produced through agriculture.

Time: 30 minutes

Level: Adaptable to any level

Materials

- Four boxes labeled “Store,” “Factory,” “Farm,” and “Natural Resources”
- Poster board (for mounting product pictures)
- Glue or tape



Minnesota Social Studies Standards and Benchmarks

- 3.2.3.5.1 Explain that producing any good or service requires resources; describe the resources needed to produce a specific good or service explain why it is not possible to produce an unlimited amount of a good or service.
- 9.2.4.8.3 Describe commodities as natural resources necessary to produce goods and services
- 9.3.3.9.1 Analyze how humans modify, adapt and depend on the environment.

Background

Many people have the misconception that farms simply provide us with raw produce and other foods. In reality, agriculture also provides us with a wide variety of raw materials from which we are able to make clothes, books, cosmetics, medicines, sports equipment, and much more.

Students may not realize that the items they use every day come from resources that are found in the environment. These resources are either extracted from the natural world through industries such as mining, or they are used in agricultural production. Most students don't recognize the origins of the products, and they think of the sources of these products as factories or stores. It is important for students to understand that before an item ever enters a factory or store, it began as a resource or product of the natural world.

Procedure

1. Cut out the forty attached pictures of common products we see or use every day. Randomly divide the pictures into two groups. Use two colors of poster board (or card stock) and glue the pictures onto the poster board. Cut out the poster board around the pictures leaving a ¼ - ½ inch border. Laminate the pictures for future use.
2. If you prefer to get your students involved in the preparation stage, gather a variety of magazines or ads from the newspaper. Instruct your students to cut out pictures that represent items they use regularly (food, cars, soap, clothes, computer, etc.; avoid duplication). Glue these pictures onto poster board and laminate them if you wish to use them again.
3. Obtain four containers (boxes, plastic tubs, or paper grocery bags) and label each with one of the following: **Store, Factory, Farm and Natural Resources**. Identify a location for a relay race outside, in a wide hallway, or in a gymnasium.
4. Ask students what they did to get ready for school. Make a list of the common items used and foods eaten by the students. Discuss with students the types of items they use or eat every day. After or during discussion, ask students:
 - a. What does the word source mean to you?
 - b. What is the source of _____ (an item from the list of items used by students)?
5. Divide the class into two teams. Divide the laminated pictures by color. If you have used red and blue poster board, you have a red team and blue

team. Be sure you have the same number of pictures in each pile. Tell the students where they are going for the “relay race” and that they will need to line up behind one another. Their task will be to sort the pile of pictures placed in front of each team into one of the four tubs. Be sure to have all the pictures face down. Locate the tubs 20-50 feet away from the first person in each line.

6. Give students the following instructions:

*This is the source relay; your job is to place each picture in the tub that is the source for the items. When you are in the front of the line, pick up a card, look at the picture, then place the picture in the correct tub based on the product’s “source”— either **Store**, **Factory**, **Natural Resources**, or **Farm**. You are looking at the product, not the packaging. The next person in line goes when the person in front of him/her returns, crossing over the start line or hand-tagging the next person. The returning player should go to the end of the line. Continue the “relay race” until all of the pictures have been sorted. The first team done with the sort wins! Or do they? At the end, the class will see if the pictures were sorted correctly.*

7. After the activity, ask the students to gather around you as you go through the pictures in each box. As you hold up each picture, the students can show whether they agree or disagree with the sort.
 - a. Begin with the **Farm** container. If the item contains ingredients or raw products from a farm, the item is in the correct box. Examples would be any food items such as cereal, cookies, and milk, or any clothing item made out of a natural fiber such as cotton (jeans) or wool (coat). Some items from a farm that are not eaten or worn would be paint (this contains linseed or soybean oil), or fuel such as ethanol. Typically students only sort a few items into the **Farm** container.
 - b. Next, look at the **Natural Resources** tub; it will most likely only have a few items in it as well. Items in this tub should be products we get from the ocean, from plants or animals that occur naturally without management from humans, or from mining. Examples of items that should be in this box are: fish or shrimp (wild; however, fish and shrimp are also farmed), cars, salt, water, plastic (starts as oil, which is mined) synthetic fabrics (polyester, petroleum or oil products), computers, cell phones, any metallic items. Wood products may be in this box, but many wood products are from timber grown on farms – either container would be correct.
 - c. Remind your students that this is the Source Relay. What is the real source of the things we use every day? Nearly all are grown or mined – farmed or extracted from the natural world. With this concept in mind, you are ready to take a look at the **Factory** box. A factory is a place where raw ingredients are changed into the useful items we need or want; wood into furniture, ore into steel for cars, wheat into bread, and potatoes into chips. A factory assembles items for sale in a distribution center, a store. Everything in the **Factory** box should be sorted into either the **Farm** or **Natural Resources** container. After doing this, your students should catch on—all products have been grown or mined. They realize that like the **Factory** container, nothing should be in the **Store** container;

this is just where we purchase the items. Factories and stores rely on raw ingredients from the farm and natural world.

8. Every picture or product is now in either the **Farm** or **Natural Resources** container. At this point you'll want to remind students that farms need natural resources – soil, water, light, and air. The **Farm** container could actually be placed into the **Natural Resources** container!

Additional Activities

Depending on the level of your students and the area of focus (economics, social studies, environmental science, etc.) you can continue to discuss the impacts of recognizing the source of our food, clothing, shelter, etc.

Questions for Discussion

- Needs vs. Wants: Which of the products in the tubs do we need to survive? Which do we want for a variety of reasons?
- Considering all the things we use every day, how many careers do you think there might be in the area of farming or agriculture and natural resources? From production, processing (factory), to distribution what entry level and highly skilled jobs are there?
- Which items used in this activity are from renewable resources? What is a renewable resource? What is a recyclable resource? Which items are renewable/recyclable in the “Farms” container? Which are renewable/ recyclable from the “Natural Resources” container? Were there any items that were nonexhaustible?
- How does the proper management of farms and natural resources affect our quality of life?

Adapted from Utah Agriculture in the Classroom

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