

Source Search

A lesson from the New Jersey Agricultural Society

Learning Through Gardening Program

Grades: 3 - 5

Objective: The student will be able to:

- Identify the source of everyday products.
- Explain that agriculture provides nearly all
- of the products we rely on every day.



Materials

- Four boxes or bags labeled Store, Factory, Farm, and Natural Resources
- Source Search Pictures (available at New Jersey Agricultural Society website under Learning Through Gardening, Teacher Toolbox)

Note: It is best if the source search pictures are mounted on cardboard or laminated before the game.

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 leaves a factory or enters a store, it began as a resource or product of the natural world.

Preparation

Cut out the 40 source search pictures of common products we see or use every day. Randomly divide the pictures into two groups and mount them on poster board or construction paper of two different colors. Laminate the pictures for future use. Label four containers (boxes, plastic tubs or paper bags: Store, Factory, Farms and Natural Resources).

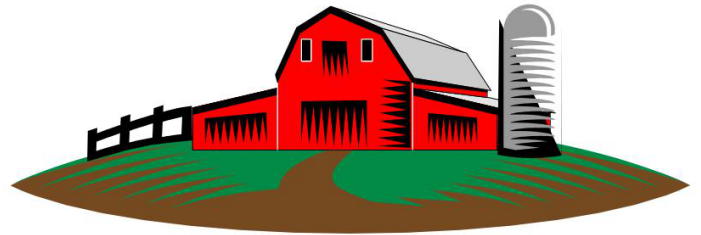
Procedure

Make a list with students of the common items they use and eat every day. Discuss with students the types of items they use or eat every day. Tell students that they will be having a relay race to learn about the sources of many day-to-day items. Explain source as where something comes from.

Divide the class into two teams. Divide the laminated pictures by color with the same number of pictures in each pile. Place the pictures face down.

Tell the students they are going to have a relay race and to line up behind one another.

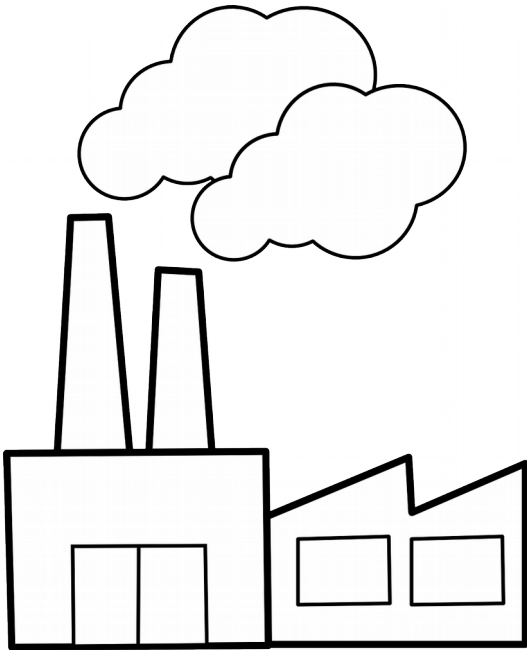
Their task will be to sort the pile of pictures placed in front of each team into one of the four containers.



Give students the following instructions: This is the source relay; your job is to place each picture in the container that is its source. When you are in the front of the line, pick up a card, look at the picture, then run to and place the picture in the correct container 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 them returns, and the returning player should go to the end of the line. Continue the relay race until all of the pictures have been sorted.

Now it is time to see if the pictures were sorted correctly. 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.

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. The Farm container will typically have only a few items in it.



Next, look at the Natural Resources container; it will probably only have a few items in it as well. Items in this container 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. Let the class decide how to divide these. You might decide to "split the difference;" put the fish into the

Farm box and the wood into the Natural Resources.

Remind your students that this is the source search. 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 get it - 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. 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!

Evaluation:

Students write a paragraph about what they learned in the relay race about the source of products we use every day.

Extensions

- Ask students to research some ways to conserve or manage our natural resources, including farms, and share their findings with the class.
- Do the relay a second time using only two containers, Farm and Natural Resources. This will help you to assess student understanding.