



A SEARCH FOR THE SOURCE

OBJECTIVES

Students will work collaboratively to identify natural resources and see how they make up the products we rely on daily. They will be able to recognize that everything we make and use in society is either found in our environment or is produced on farms using natural resources (i.e. land and water).

MA STATE FRAMEWORK(s)

Economics Standards T1

Speaking and Listening Standards [SL] 112

ESSENTIAL QUESTIONS

- What is a "natural resource"?
- How are natural resources used to create the products we use daily?
- How does value change when a material is produced from a natural resource?
- How can we preserve the earth's natural resources?

MATERIALS NEEDED

- [Source Search Image Cards](https://bit.ly/3XdXqr1), (https://bit.ly/3XdXqr1) 1 copy
- [Source Search Item Reference List](https://bit.ly/3VNsUDn), (https://bit.ly/3VNsUDn) 1 copy
- Glue
- Index cards 2 different colors (for mounting product pictures)
- Four boxes labeled "Stores," "Factories," "Farms," and "Natural Resources"

INTRODUCTION

Ask students what they did to get ready for school. Make a list of the common items used and foods eaten by the students in preparation for school each morning. Write the list on the board.

1. Once the list has been made, choose several random items and ask the students where or how that item was originally created. For example, where was the food they ate for breakfast produced? What was used to make the car that drove them to school?

2. Inform students that they will be participating in an activity to learn about the sources of many day-to-day items.

Review the Vocabulary

agriculture: the science, art, or practice of cultivating the soil, producing crops, and raising livestock and in varying degrees the preparation and marketing of the resulting products

mineral: an inorganic substance needed by the human body for good health

natural resources: materials or substances such as minerals, forests, water, and fertile land that occur in nature and can be used for economic gain

source: a place, person, or thing from which something originates

Lesson Adapted From:

[National Agriculture in the Classroom](#) by

Deborah Spielmaker from Project Season by Deborah Parrella

PREPARATION

Print and cut out the Source Search Image Cards showing 40 everyday items.

Optional: If you prefer to get your students involved in the preparation stage (and have time), have students gather their own pictures of everyday items. Gather a variety of magazines or slick ads from the Sunday newspaper and instruct your students to cut out pictures that represent items they use regularly (food, cars, soap, clothes, computers, etc.) Avoiding duplication, select 40.

Randomly divide the 40 pictures into two groups. Use two colors of index cards and glue the pictures onto the cards. Laminate for future use.

Obtain four containers (boxes, plastic tubs, paper box lids, or paper grocery bags) and label each with one of the following: "Stores," "Factories," "Farms," and, "Natural Resources."

Identify a suitable location for a relay race such as an area outside, a wide hallway, or the gymnasium.

ACTIVITY

1. Divide the class into two teams. Divide the laminated pictures by color. You should have 20 pictures in each pile. If you are using red and blue index cards, you will have a red and blue team.
2. Take the students to the location of the relay race and place each team in a single file line. Be sure to have all the pictures face down in front of the first person in each line. Locate the tubs 20-50 feet away from the lines.
3. Give students the following instructions: "This is the source relay. Your job is to place each card in the tub representing the original source of the everyday item that is pictured. When you are at the front of the line, pick up a card, look at the picture, then run to and place the picture in the correct tub based on the product's "source"– either "Stores," "Factories," "Natural Resources," or "Farms." Keep in mind that you are looking at the product, not the packaging. The next person in line goes when the person in front of them returns and crosses over the start line or hand-tags them. The returning player should go to the end of the line."
Optional Alternative: Rather than a relay race, you can also play the [Source Search Kahoot](https://bit.ly/kahoot-source-game) game (<https://bit.ly/kahoot-source-game>) or [Source Search Quizziz](https://bit.ly/quizziz-source-game) (<https://bit.ly/quizziz-source-game>). These online game quizzes may also be used as a formative assessment after the relay.
4. Ask students if they have any questions and clarify as needed. Begin the relay race and continue until all of the pictures have been sorted. The first team to finish the sort wins temporarily, but the ultimate winner will be determined by accuracy.
5. After the relay is over and the pictures are sorted, return to the classroom or have the students gather around you in a suitable location to go through the cards and discuss the correct answers. As you hold up each picture, the students can show whether they agree or disagree with the sort using the "thumbs up" or "thumbs down" signal, or another response as chosen. Use the attached Source Search Items Reference List for the correct answers and explanations for each card. You can also refer to the [Source Search e-Learning Lesson](https://youtu.be/V6oEEguU79g) (<https://youtu.be/V6oEEguU79g>) video for a recorded explanation. If you choose to keep score to identify a winner, have a student keep a tally for each team of the cards placed in the correct box.

ACTIVITY, cont.

Farms: Explain that 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 from a natural fiber such as cotton (jeans) or wool (coat). Some items from a farm that are not eaten or worn include paint (this contains linseed or soybean oil) or fuel such as ethanol.

Note: After most relays, the "Farms" container will typically have only a few items in it.

Natural Resources: Explain that 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, note that fish and shrimp can also be farmed), cars, salt, water, plastic (plastic starts as oil, which is mined), synthetic fabrics (polyester, petroleum or oil products), computers, cell phones, and any metallic items. Wood products may be in this box, but many wood products come from timber grown on farms. Let the class decide how to divide these. You might decide to "split the difference," put one (the fish) into the "Farms" box and the wood into the "Natural Resources" box. 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.

Note: This tub is also likely to only have a few items inside.

Factories: Explain that 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 to later be sold in a distribution center or store. With this information ask students, "Are there any items that can originally be sourced to a factory?" (No.) Proceed by sorting every card in the "Factories" box into either the "Farms" or "Natural Resources" container. After doing this, your students should understand that all originally sourced products have either been grown or mined.

Stores: Move to the box labeled "Stores." After receiving the explanation about factories, check for understanding by asking, "What type of things can be sourced to a store?" Students should realize that, like the "Factories" container, nothing should be in the "Stores" container; this is just where we purchase the items, it is not their original source. Clarify that factories and stores rely on raw ingredients from the farm and natural world. Every picture or product should now be in either the "Farms" or "Natural Resources" container.

To increase the level of understanding, ask students, "What natural resources do farms need in order to produce the products used to make all of these items?" (Soil, water, light, and air are natural resources that farmers rely on.) To illustrate, place the "Farms" box inside the "Natural Resources" box.

After conducting this activity, consider repeating the relay a second time using only two containers, "Farms" and "Natural Resources" to assess student understanding.

Review and summarize the following key concepts:

- Natural resources are materials or substances that occur on or in the earth naturally.
- Natural resources such as water and land are used by farmers to grow crops and raise livestock which can provide us with food, fiber, fuel, and shelter.
- Natural resources such as minerals mined from the earth or petroleum fuels mined from below the earth's surface are used to make glass, metal, and some plastics.
- We depend on natural resources for the items we rely on day-to-day. They should be used and managed wisely.
- Processing and manufacturing raw goods from farms or natural resources into food, tools, machines, and other items increases their value.

EXTENSIONS & VARIATIONS

1. Ask students to research some ways to conserve or manage our natural resources, including farms, and share their findings with the class.
2. Ask your students to create a concept web with one of the pictures used in the "Source Search" activity. Each picture should be placed in the center of a piece of large paper and the web drawn to identify associations or links to careers, natural resources or other products.