

## Source Search Item Reference List

Use the provided table for accurate answers and explanations regarding each relay item.

- **Farms:** If an item contains ingredients or raw products sourced from a farm, it belongs in this category. Examples include food items like cereal, cookies, milk, and clothing items made from natural fibers such as cotton (e.g., jeans) or wool (e.g., coat). Some non-consumable or non-wearable farm-related items include paint (containing linseed or soybean oil) or fuel like ethanol. Typically, the "*Farms*" container will have only a few items after most relays.
- **Natural Resources:** This category comprises products obtained from the ocean, naturally occurring plants or animals without human management, or mining. Examples of items that should be placed in this box are cars, salt, water, plastic (which originates from oil extracted through mining), synthetic fabrics (e.g., polyester derived from petroleum or oil products), computers, cell phones, and metallic items. While fish or shrimp can be caught in the wild, they can also be farmed. Wood products may belong to this category, but it's worth discussing with the class as many wood products come from timber grown on farms. Encourage your students to contemplate the "real" source of everyday items, emphasizing that most are either cultivated or extracted from the natural world. The "*Natural Resources*" container is also likely to contain only a few items.
- **Factories:** A factory is where raw ingredients are transformed into useful items we require or desire, such as wood into furniture, ore into steel for cars, wheat into bread, or potatoes into chips. Factories assemble goods that are later sold in distribution centers or stores. Ask the students, "Can factories be the original source of any items?" (*No*) Proceed by sorting each card in the "*Factories*" box into either the "*Farms*" or "*Natural Resources*" container. By doing this, your students should understand that all products were originally grown or mined.
- **Stores:** Now move on to the box labeled "*Stores*." After explaining factories, assess understanding by asking, "Are stores the original source of any items?" Students should realize that, similar to the "*Factories*" container, the "*Stores*" container should remain empty. Stores are where we purchase items but not their original source. Emphasize that factories and stores rely on raw ingredients from farms and the natural world. At this point, every picture or product should be placed in either the "*Farms*" or "*Natural Resources*" container.

Note that some products may originate from multiple sources or categories. For instance:

- Plastic can be derived from coal, natural gas, minerals, or plants, but it is commonly derived from crude oil. Most plastics are byproducts of oil extracted from beneath the Earth's surface.
- Glass is produced by melting minerals together at high temperatures. Minerals are extracted through mining.
- Metals and steel are obtained from minerals found in the Earth's crust. They are extracted through mining.
- Food products may come from different types of farms.

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Item	Sources	Description
basketball	farms or natural resources	Quality indoor basketballs are made of leather. Outdoor and less expensive basketballs are made from a synthetic petroleum-based rubber.
berries	farms	Berries are small fruits with lots of seeds. The seeds can be on the inside or outside of the fruit. Strawberry seeds cling to the outside, while blueberry seeds sit inside the fruit. Blueberry seeds are so tiny you might not even see or feel them.
car	natural resources	Cars are made from aluminum, steel, plastic, and glass. Aluminum (bauxite or) and steel are mined, plastic is mined, a petroleum product and glass is made of sand, also mined. The tires are made from a synthetic petroleum-based rubber. If the car has leather seats, these are from cattle or pig hides.
cereal	farms	Cereal is primarily made from grains such as wheat, corn, rice, or oats.
cheese	farms	Cheese begins with milk from a dairy farm. The milk is pasteurized and helpful bacteria is added, this gives cheese its taste and in the case of Swiss cheese, its holes. Rennet is an enzyme that is added to form curds (solid young cheese) and whey (mostly water from the milk). The curds are separated from the whey, molded, and soaked in a brine solution. The cheese may be aged before it is packaged.
cell phone	natural resources	A cell phone is made from plastic, glass, and metal. Metal is mined from ore, plastic, a petroleum product is mined, and glass is made of sand, also mined.
cookies	farms	The ingredients needed to make chocolate chip cookies originate on the farm. The flour is made from wheat. The sugar comes from the stems of sugarcane or the roots of sugar beets. The sugar found in most US products comes from sugar beets. Chocolate comes from the beans of cacao trees grown on farms located in tropical rainforests.
eggs	farms	Because the laying hens that produce commercially sold eggs are not kept in the same spaces as roosters, the chicken eggs sold in grocery stores are not fertilized eggs. A hen will lay one egg almost every day.
fleece sweatshirt	natural resources	Fleece is a synthetic polyester fiber made from petroleum extracted from beneath the Earth's surface. Plastic bottles are often recycled to make fleece.
French fries	farms	French fries are made from potatoes, a starchy tuberous stem that grows underground, that are peeled, cut, and fried in oil.
fruit	farms	Fruit grows on trees, vines, plants, or bushes. Fruit is the part of the flowering plant that contains the seeds.
hamburger	farms	All of the ingredients of a hamburger are grown or raised on a farm. The wheat for the bun, milk to make the cheese, beef for the patty, mustard, tomatoes, onions, and lettuce all begin on a farm.
handbag	farms or natural resources	Handbags, like the one pictured, can be made of leather or artificial leather. Animal hides (often cattle hides) are used to produce leather. Artificial leather, also known as pleather or leatherette, is made from a synthetic fiber (typically polyester) with a petroleum-based plastic coating (usually polyurethane or PVC).
hot dogs	farms	Hot dogs are made from finely ground trimmings of beef, pork, or poultry.

<b>Item</b>	<b>Sources</b>	<b>Description</b>
ice cream	farms	Ice cream is primarily made from cream, milk, and sugar. Milk comes from dairy cows. Cream is the fat found in milk. Sugar comes from the stems of sugarcane or the roots of sugar beets. The sugar found in most US products comes from sugar beets.
jeans	farms	Jeans are made with denim fabric, a product made from cotton. Cotton is a soft, usually white fiber that grows in a boll around the seeds of a cotton plant.
juice	farms	100% juices are made from the pulp of ripe fruits and vegetables. Some “juices” contain only a percentage of “real fruit” juice.
mayonnaise	farms	Mayonnaise is traditionally made from eggs, oil, and vinegar.
milk	farms	The majority of fresh milk purchased in the US comes from cows raised on local dairy farms.
peanut butter	farms	Peanut butter is made from dry-roasted peanuts that are ground up. Unlike other nuts, peanuts do not grow on trees. The peanut is unusual because it grows on a plant that flowers above the ground, but the actual fruits (the peanuts) grow underground.
pet food	farms	Dry cat and dog food is made from grains such as corn, wheat, barley, and rice and proteins like beef, chicken, and eggs. Vitamins are added and fat is sprayed onto the kibble.
pizza	farms	The ingredients for pizza begin on the farm. Pizza dough is made from wheat, the sauce is made from tomatoes, and the cheese is made from milk.
popcorn	farms	Popcorn is one of five varieties of corn (dent corn, sweet corn, popcorn, flour corn, and flint corn). Each kernel of popcorn contains water stored inside soft starch. When the kernel is heated, the water expands and eventually bursts the kernel open. The starch becomes inflated and spills out to make the characteristic shape of popcorn.
salad	farms	The availability of certain produce items depends upon the growing season and the climate of a particular region. When there is a demand for fruits and vegetables that are out of season or that do not grow well in the climate of a particular region, produce will be transported in from the farms of another region or country.
salt	natural resources	Salt is a naturally recyclable mineral that is mined from salt deposits or harvested from salt water.
shoes	farms or natural resources	Shoes, like the pair pictured, can be made from leather or synthetic leather. Animal hides (often cattle hides) are used to produce leather. Synthetic leather, also known as pleather or leatherette, is made from a synthetic fiber (typically polyester) with a petroleum-based plastic coating (usually polyurethane or PVC).
shrimp	farms or natural resources	Shrimp can be either farm-raised or caught in the wild.
sink	natural resources	The sink pictured is made from stainless steel a mined product.
soda	natural resources	Carbonated water makes up about 89% of a typical full-calorie soft drink. About 10.4% of the drink is sugar and about .6% is made up of flavorings, coloring agents, sodium, caffeine, etc. Diet sodas can contain as much as 99% water.
stairs	farms	In the US, lumber comes from trees that are harvested from managed forests, also known as tree farms.
storage container	natural resources	This storage container is made from plastic, made from petroleum extracted from beneath the Earth’s surface.
toilet paper	farms	Toilet paper comes from trees that are harvested from managed forests, also known as tree farms.

Item	Sources	Description
water	natural resources	Water covers about 71% of the Earth's surface, but only about 2.5% is fresh water.
water bottle	natural resources	This water bottle is made from steel and plastic. Metal is mined from ore, plastic, a petroleum product is mined.
wheat bread	farms	The main ingredient in wheat bread is wheat flour, which is ground from the seeds of the wheat plant. The whole kernel is used to make the flour used in whole wheat bread. For white bread, the bran and germ is separated out and only the endosperm of the kernel is used to make the flour.
wool coat	farms	Wool is a fiber that comes from sheep. Sheep are sheared in early spring. The wool is combed, cleaned, and carded before it is ready to be spun into yarn.



Activity instructions, background information and additional resources to accompany this activity can be found in the lesson plans “A Search for the Source”. Use the QR code provided or search the National Agricultural Literacy Curriculum Matrix, [agclassroom.org/matrix](http://agclassroom.org/matrix), using the keywords *source search* and select the grade band relevant to your classroom.



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