



Additional Products for the Food Chain Mapping Activity

Agricultural Literacy Week 2018

If you are interested in swapping out the apple or Chobani cup for the Agricultural Literacy Week featured activity, consider using any of the items below. Bring in samples or examples of products that are of most interest to you, or that you produce on your farm.

Cheerios Cereal

- (1) Producing & Harvesting: What are Cheerios made from? *Oats*. How are oats harvested? *From a field with a combine. If they are for human consumption you'll need to hull them. This can be done by rubbing them between two rough surfaces that roll the hulls of the seed.*
- (2) Storage & Processing: Where are oats stored? *They are moved from the field in a grain truck to a grain bin.* How are the oats made into cereal? *The oats are milled, or ground up, so it can be cooked and shaped into "O" shapes.*
- (3) Transportation: How do you transport cereal? *On a pallet, in a truck.*
- (4) Selling and Eating: Where can you buy Cheerios? *Grocery stores, convenience stores, schools.* What other things can you make from oats? *Oatmeal, oat flour, oatmeal cookies, granola, horse feed, skin moisturizer.*

Grapes

- (1) Producing & Harvesting: Where do grapes grow? *On vines in vineyards.* How are they harvested? *By hand or with a mechanical harvester. The mechanical harvester drives over each row of grapes and has arms that shake the fruit loose. Then a series of conveyors move the grapes to a bin where they are carried away by another tractor.*
- (2) Storage & Processing: Where do you store grapes? *In a cooler with high humidity away from other fruits and vegetables that have a strong odor because grapes may absorb other odors.* How are grapes processed? *They are washed and packaged into bags.*
- (3) Transportation: How do grapes travel from the processor to the store? *In a refrigerated truck.*
- (4) Selling and Eating: Where can you buy grapes? *Grocery stores, farmer's markets, convenience stores, schools.* What are your favorite kind of grapes? What other ways can you process grapes? *Grape juice, raisins, wine.*

Grape Juice

- (1) Producing & Harvesting: What is grape juice made from? *Grapes.* Where do grapes grow? *On vines in vineyards.* How are they harvested? *By hand or with a mechanical harvester. The mechanical harvester drives over each row of grapes and has arms that shake the fruit loose. Then a series of conveyors move the grapes to a bin where they are carried away by another tractor.*

- (2) Storage & Processing: Where do you store grapes? *In a cooler with high humidity away from other fruits and vegetables that have a strong odor because grapes may absorb other odors.* How are grapes processed? *They are washed and mechanically squished into liquid. Then sugar is added to sweeten the juice and it is packed into cartons or bottles.*
- (3) Transportation: How is grape juice transported? *On a refrigerated truck, on pallets.*
- (4) Selling and Eating: Where can you buy grape juice? *Grocery stores, farmer's markets, convenience stores, schools.* What are your favorite kind of grape juice? What other ways can you process grapes? *Raisins, wine, grapes for eating.*

Lumber

- (1) What is the raw material lumber is made from? *Trees. Trees are a natural resource, and loggers re-plant trees after they are cut.* How are trees harvested? *Loggers select trees to improve the health of a forest. They use chainsaws to cut the trees, and special tractors known as skidders move the trees to central location.*
- (2) How are trees, now known as logs, stored? *In piles, at a landing.* How are logs processed before becoming lumber? *At a sawmill, the bark is taken off, the trees are cut to boards. The lumber can be sold as is, and some is dried to shrink before it is sold.*
- (3) How is lumber transported? *By stacking the lumber on trucks.*
- (4) Where do you buy lumber? *Hardware stores, lumberyards.* What can you build with lumber? What are other products made from trees? *Paper, mulch, Christmas trees, electricity, sponges, rubber.*

Terrell's Potato Chips

- (1) Producing & Harvesting: What are potato chips made from? *Potatoes.* Where do potatoes grow? *In a field, underground.* How are potatoes harvested? *They are dug up by hand with a potato hook or by machine with a plow or potato harvester. The dirt is then separated from the potatoes, either by hand or machine.*
- (2) Storage & Processing: Where do you store potatoes? *Potatoes need to be stored in a dark, well ventilated, cool to room temperature area. If they are not stored properly, the potatoes could begin to sprout or decompose.* How are potatoes processed into chips? *The washed potatoes are cut into thin slices, fried in oil, salt and other flavoring is added (barbeque, sour cream and onion, etc.), and the chips are bagged.*
- (3) Transportation: How are potato chips transported? *The bags of chips are carefully packed in boxes and transported on a truck.*
- (4) Selling and Eating: Where can you buy potato chips? *Grocery stores, convenience stores, schools.* What is your favorite flavor of potato chips? What other ways can potatoes be processed? *French fries, mashed potatoes, hash browns, salt potatoes, baked potatoes, etc.*

Eggs

- (1) Producing & Harvesting: Where do eggs come from? *Hens.* How are eggs harvested? *In small farms or operations, the eggs may be collected by hand. In larger operations the cages are sloped so the eggs can gently roll onto a conveyor belt to a collection area.*
- (2) Storage & Processing: Where do you store eggs? *Eggs must be constantly cooled to a core temperature of 45 °F.* How are eggs processed? *The eggs are washed in warm*

water with a mild detergent, dried, graded by size, color and other USDA requirements, and packaged into cartons.

- (3) Transportation: How are eggs transported? *On a refrigerated truck where the temperature is held constant at 45 °F.*
- (4) Selling and Eating: Where can you buy eggs? *Farmer's markets, grocery stores, convenience stores.* What is your favorite way to eat eggs? Have you ever tried eggs from an animal other than a chicken? *Quail, duck, etc.*

Carrot

- (1) Producing & Harvesting: Where do carrots grow? *In a field, underground.* How are carrots harvested? *Either by hand or with a mechanical carrot harvester. A carrot harvester will harvest carrots by pulling the carrot from the soil from the top or pulling the carrots out of the ground from underneath after a different machine cuts the tops off.*
- (2) Storage & Processing: Where are carrots stored? How are carrots processed? *The tops of the carrot are trimmed off right after harvesting. The carrots are washed and either packaged for sale or peeled and cut into a smaller size to be sold as baby carrots.*
- (3) Transportation: How are carrots transported? *On a refrigerated truck.*
- (4) Selling and Eating: Where can you buy carrots? *Grocery stores, farmer's markets.* What is your favorite way to eat carrots?

Maple Syrup

- (1) Producing & Harvesting: Where does maple syrup come from? *Maple trees, in the form of sap. Sap can only be harvested late winter-early spring when the days reach temperatures above freezing and the nights reach temperatures below freezing.* How is sap harvested? *Maple trees are tapped by drilling holes into their trunks and the sap can be harvested in buckets, bags, or through tubing that flows into a larger collection tank.*
- (2) Storage & Processing: How do you store sap? *Sap is stored in a large collection tank or several smaller barrels in a cool temperature for a maximum of 7 days.* How is sap processed into maple syrup? *Depending on the operation, the sap may be run through a reverse osmosis system to remove a majority of the water. The sap is then boiled to a certain sugar content, filtered, and bottled.*
- (3) Transportation: How do you transport maple syrup? *On a truck.*
- (4) Selling and Eating: Where can you buy maple syrup? *Farmer's markets, grocery stores, directly from the producer.* How do you eat maple syrup? What other ways can maple syrup be processed? *Maple candy, maple cotton candy, sap water, etc.*

Raisins

- (1) Producing & Harvesting: What are raisins made from? *Grapes.* Where do grapes grow? *On vines in vineyards.* How are they harvested? *By hand or with a mechanical harvester. The mechanical harvester drives over each row of grapes and has arms that shake the fruit loose. Then a series of conveyors move the grapes to a bin where they are carried away by another tractor.*
- (2) Storage & Processing: Where do you store grapes? *In a cooler with high humidity away from other fruits and vegetables that have a strong odor because grapes may absorb other odors.* How are grapes processed into raisins? *The grapes are dried or dehydrated, the raisins are washed, sorted, and packaged.*

- (3) Transportation: How are raisins transported? *The individual packages are put into boxes or on pallets and transported on a truck.*
- (4) Selling and Eating: Where can you buy raisins? *Grocery stores, convenience stores.* What are other ways grapes can be processed? *Grape juice, grapes for eating, wine.*

Yarn

- (1) Producing & Harvesting: Where does yarn come from? *Sheep (it can also come from goats, camels, and rabbits).* How is wool harvested? *The sheep is put on a stand and a person or team of people use electric clippers to shear, or cut, the wool from the sheep. This does not hurt the sheep (think of it like a haircut).*
- (2) Storage & Processing: How do you store wool? *The wool is "skirted" to remove sweat, twigs, leaves, etc. It is then stored in an airtight container to keep out pests.* How is wool processed? *The wool is sorted and graded, washed, carded (process where the fibers are passed through a series of metal teeth that straighten and blend them), spun to create thread, and dyed.*
- (3) Transportation: How is yarn transported? *On a truck or used directly by the producer.*
- (4) Selling and Eating: Where can you buy yarn? *Fabric stores, craft stores.* What are some uses for yarn? *Clothing, craft projects, blankets.*