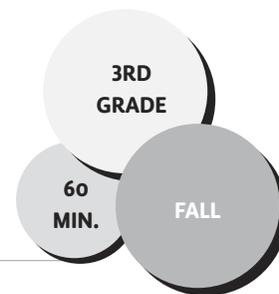# Get to the Source

THEME: MAKING HEALTHY FOOD CHOICES

ESSENTIAL QUESTION

How can we tell the difference between whole foods versus processed foods?

LEARNING OBJECTIVES

✓ Students will be able to draw connections between common foods and their sources.
✓ Students will be able to interpret the information on a nutrition label to identify whole, minimally processed, and highly processed foods.
✓ Students will be able to articulate the health benefits of eating whole and minimally processed foods.

CONCEPTS

nutrition label
minimally versus highly processed
product   whole Food

Engaging the Classroom Teacher

• During Action Step 1, to save time, suggest that the teacher tape the food images to students' backs as you're explaining the activity.
• During Action Step 2, suggest that the teacher help ensure students are playing by the rules, being respectful, and staying safe.

• During Action Step 6, suggest that the teacher circulate to different groups, answering questions and asking probing questions to help students arrange their processed food spectra.

LESSON DESCRIPTION

In this lesson, students play a game to identify foods and match them to their sources. They then learn the definition of minimally versus highly processed foods and, in groups, apply that understanding to sort various food products that share an original, whole food source. This lesson can be taught in conjunction with lessons Let's Jam and Tortilla Time.

MATERIALS

☐ Tape or glue
☐ Matching Food Source Cards (pp. 320–323)
☐ Sample Nutrition Label
☐ 5 sets of Processed Spectrum Sets (pp. 324–328)
☐ 5 zip lock bags (or other container) to hold food source sets
☐ 5 pieces of chart paper (1 for each group)

PREPARATION

> In leading this lesson, remember to emphasize inquiry around food and not judgment on food choices.

> Photocopy and cut out Matching Food Source Cards.

> Photocopy the Sample Nutrition Label of peanut butter, or find another food specifically for your students.

> Photocopy and cut out Processed Spectrum Sets, and put each set into a zip lock bag.

ACTION STEPS

1. What Food Am I?: Have students gather in a circle. Explain, *I'm going to tape a picture of a food onto each of your backs. Then we're going to play a game called "What Food Am I?" where we have to ask each other yes/no questions to figure out what we have on our backs. For example, I could ask "Am I fruit?" Or "Do I come in packaging?" Or "Am I spicy?" Could I ask "What color am I?"* (No, because that's not a yes/no question). Tape a food image to students' backs, making sure their match is in the mix. Remind students to keep the foods they see on their classmates' backs a secret and that the game isn't fun if we give away the food without the person guessing. Start the game and have students walk around the room, asking each other yes/no questions. If a student guesses their food, the student can move the card onto their front and continue answering questions for other players. Model with the classroom teacher as your partner before the game starts. Give students about five minutes to play and then call them back into a circle. *(10 min.)*

2. Connecting to the Source: Ask, *What did you notice about the different types of food pictures we had?* Say, *You might have noticed that some of you were whole foods, like a fruit or vegetable, and some of you were food products, things to eat that you make from whole foods. A whole food is food in its natural state that has been processed as little as possible,* *like a tomato, a berry, or corn, whereas a product is something you make with a whole food, like jam or french fries, and it might come in packaging if you buy it at the store.* Explain that now that they know what foods they have, they're going to stand up and try to find their match. Each food product has a whole food source match. For example, orange juice would match to an orange. Tell students once they find their match they should return to the circle to sit with their partner. Give students about five minutes or until everyone is back in the circle, and have pairs share how they know they're a match. *(10 min.)*

3. Defining Processed Foods: Say, *Raise your picture up in the air if you could be taken straight from a garden or farm. You're all the whole foods! Raise your picture up in the air if a person has to do some work to make you. You're all the food products or processed foods! What does it mean to be processed?* Field responses from students, and get to the idea that a processed food has been changed from its original form. Explain that people process foods by mashing them, cooking them, or blending them with other ingredients. This makes the food more convenient to eat, helps the food last longer, or changes the food's taste or texture. Explain, *There is a whole spectrum of food products from minimally to highly processed foods. Foods that are minimally processed are still really close to their original food source. For example, applesauce can be as simple as apples cut up and cooked down with nothing else added or maybe just a little cinnamon, lemon, and sugar. But the more original food is changed, and the more ingredients that are added to it, the more highly processed it becomes.* *(5 min.)*

4. Reading Nutrition Labels: Show students a copy of the nutrition label for peanut butter. Explain that the first ingredient listed is what the product has the most of, and the ingredients go in decreasing order. Say, *The more ingredients you see listed there, the more highly processed the product is. Also, if you see ingredients like "diglycerides," that you don't recognize or have trouble pronouncing, that probably means it's a chemical ingredient to change the color or texture or a preservative to make the product keep on the shelf longer.* **(5 min.)**

5. Modeling: Show students one of the Processed Spectrum Sets, and explain that they'll arrange the pictures of foods from whole, to minimally processed, to highly processed. While modeling your thinking process for the class, demonstrate how students can go about this. Explain, *You can think of it by asking how many steps you think it would take to make that food or how many ingredients you would need to add. Foods with the most steps or ingredients go toward the end, and foods with the least steps or added ingredients go toward the beginning.* For example, if doing the oat spectrum, say, *These plain oats look the most like something that would come off of a plant. And then I know it's pretty easy to make oatmeal. You just add water or milk and heat it, so I think that would be the next one. I think this cereal doesn't really look like oats anymore. People probably had to use a machine to make it, so I think that's the most processed thing. I'll put it on the end.* Explain to students that there's no right or wrong, as long as they have an explanation for their order.

6. Sorting Processed Spectrum: Have groups display their spectra for the class. Then have students circulate through the room, observing other groups' arrangements and writing questions or comments on Post-its that they add to each spectrum. Then have each group share their spectrum and answer any questions that arose. **(15 min.)**

<div style="background:gray">

REFLECTION

Have students discuss the following questions in small groups, then share with the class: **(5 min.)**

Social and emotional learning
- *How did you work together with classmates?*
- *What parts of the activity were frustrating or challenging? Can you or did you come up with a solution?*

Check for understanding
- *Why is it important to distinguish between minimally and highly processed foods?*
- *How can you tell if something is a whole food?*
- *How can you tell if something has been processed?*
- *How did your group decide that a food was more processed than another food?*

</div>

ADAPTATIONS

Ingredient List Variation: Play a version of the game in which half the students have a food product and the other half have ingredients lists, and students must find which product they think they are based on their ingredients list.

Fewer Materials Variation: Instead of cutting out Spectrum Sets, you can pass out each page of images, and have groups order them with pencil. Or have groups cut them out to create the poster.

At Home: Have students record snacks and meals they eat during the week, and label where each food falls on a whole versus highly processed spectrum.

ACADEMIC CONNECTIONS

English Language Arts Common Core State Standards

CCSS.ELA-LITERACY.RI.3.9

Compare and contrast the most important points and key details presented in two texts on the same topic.

PEANUT BUTTER INGREDIENTS LIST:

Roasted peanuts and sugar, contains 2% or less of molasses, fully hydrogenated vegetable oils (grapeseed and soybean), mono and diglycerides, salt

Matching Food Source Cards
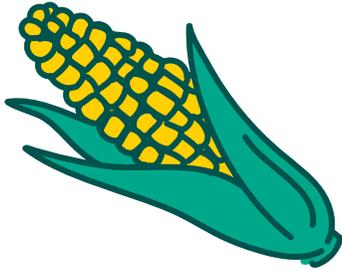
Corn on the cob

Popcorn
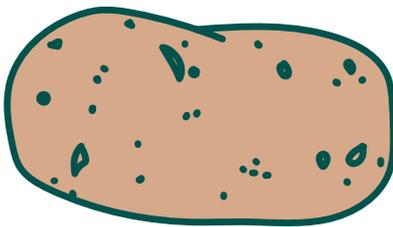
Potato
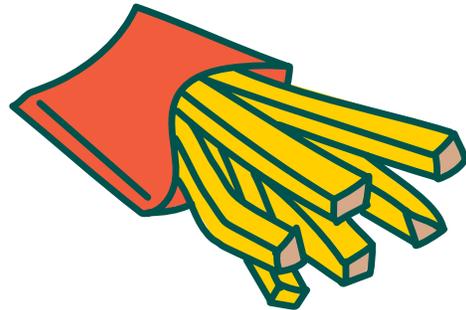
French fries
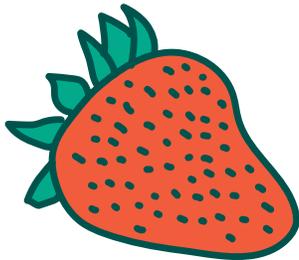
Strawberry

Strawberry jam
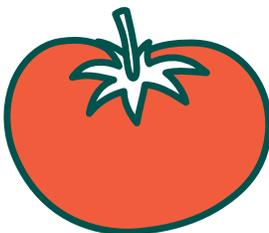
Tomato

Ketchup

Matching Food Source Cards

Wheat
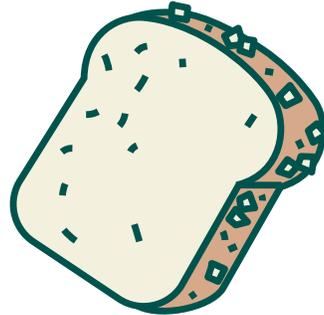
Bread
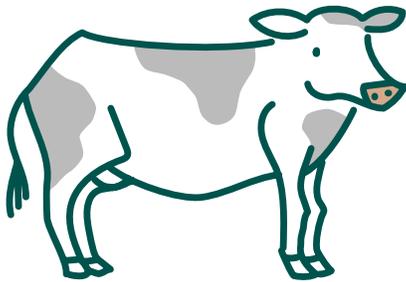
Cow
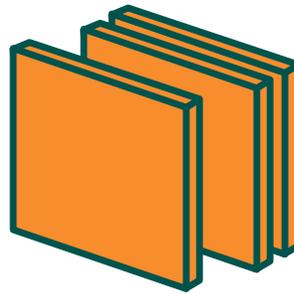
Cheese

Oats

Granola bar
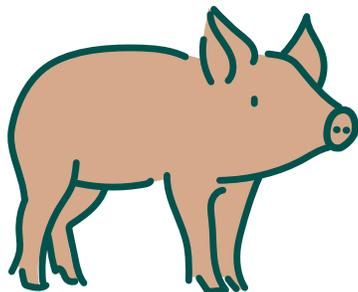
Pig
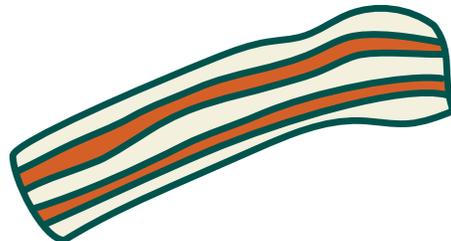
Bacon

Matching Food Source Cards
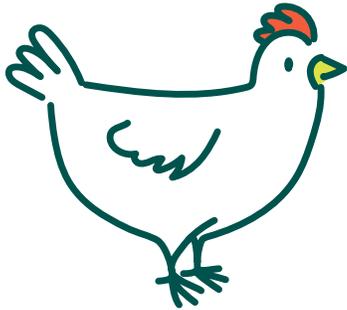
Chicken
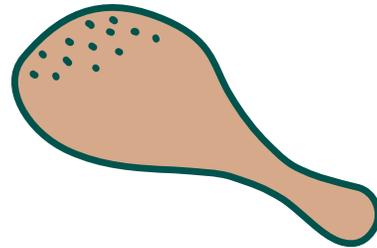
Drumstick
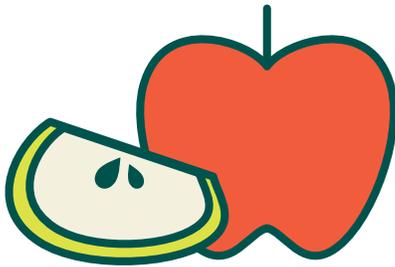
Apples

Applesauce
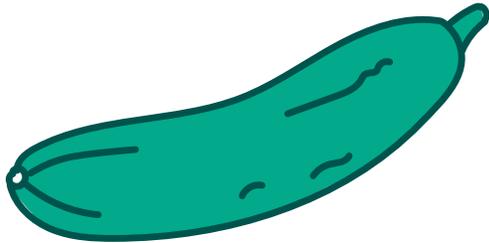
Pickle

Cucumber
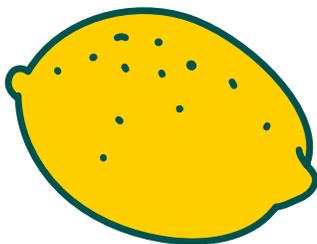
Lemon

Lemonade

Matching Food Source Cards
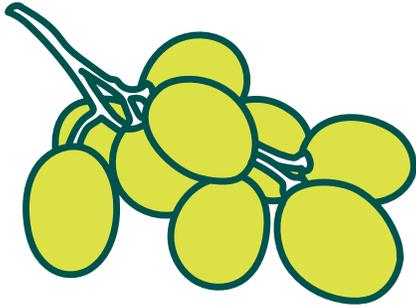
Grape
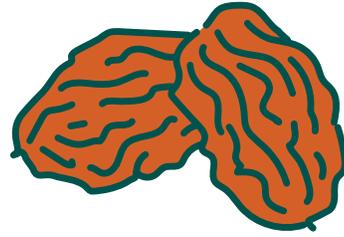
Raisins
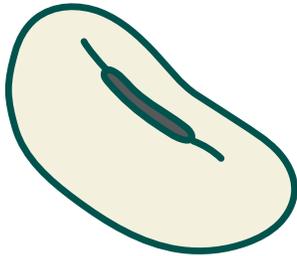
Soy bean

Soy sauce

SOY SAUCE
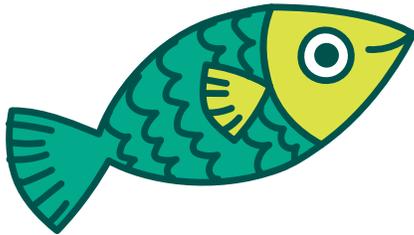
Fish

Sashimi
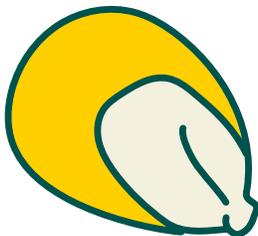
Corn
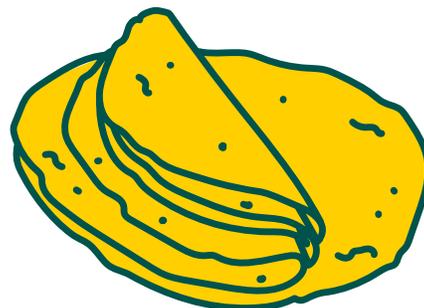
Corn tortillas

Processed Spectrum Sets
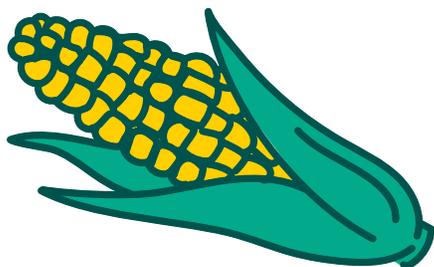
Corn on the cob

Canned corn
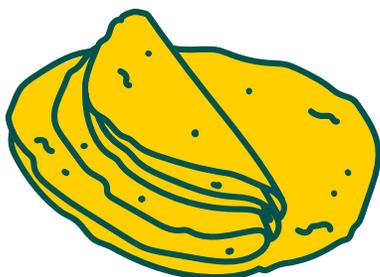
Corn tortillas
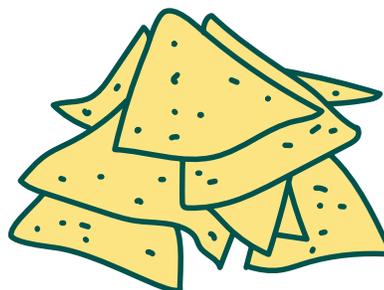
Corn chips

Soda

Processed Spectrum Sets
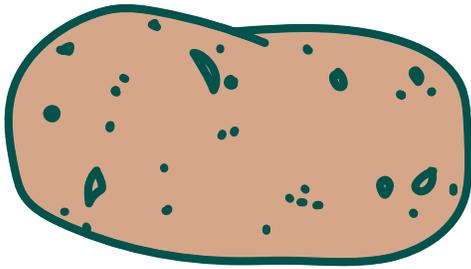
Potato
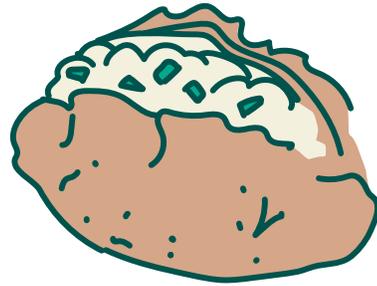
Baked potato
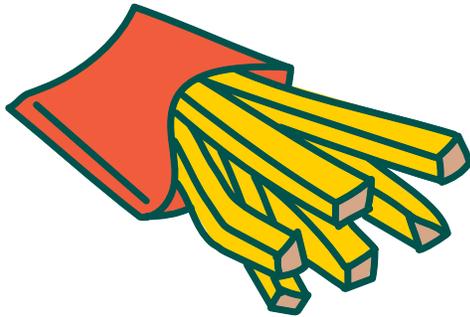
French fries
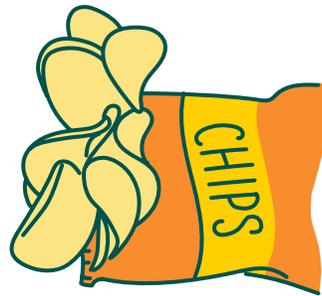
Potato chips

Sour cream and onion potato chips

Processed Spectrum Sets

Cheese
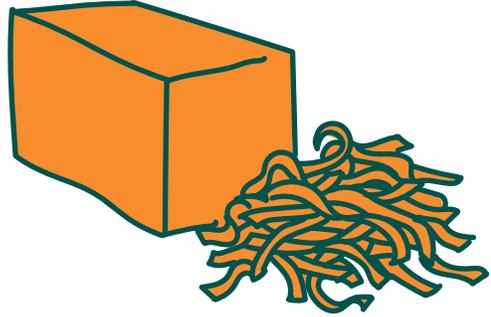
Gratted cheese
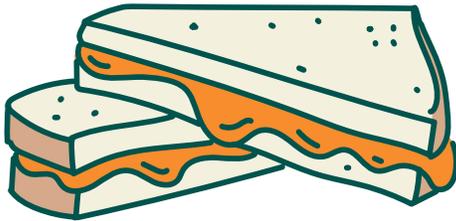
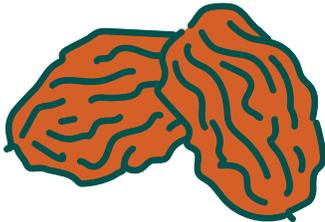**Grilled cheese sandwich**
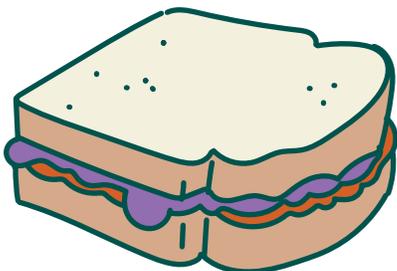
Cheese dip
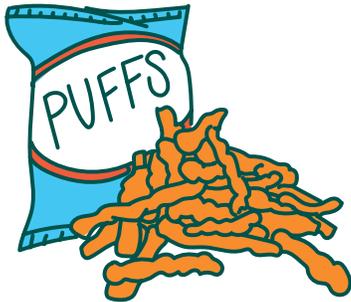
Cheese puffs

Processed Spectrum Sets
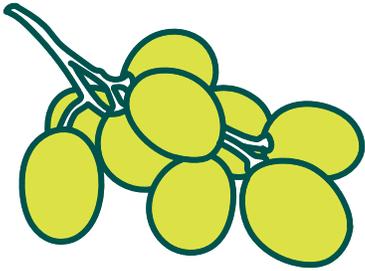
Grapes
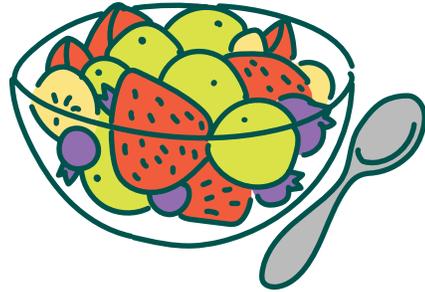
Fruit salad

Raisins

Grape jelly

Peanut butter and jelly sandwich

Processed Spectrum Sets

Oats
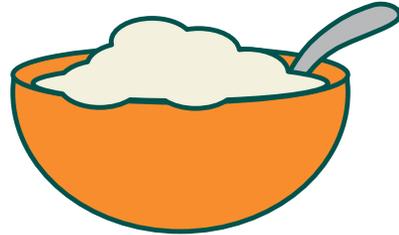
Oatmeal
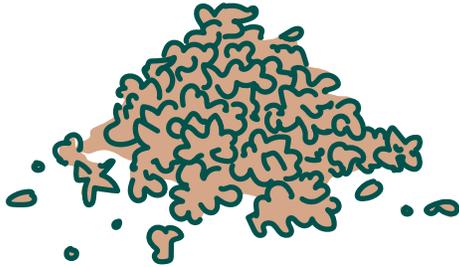
Granola

Granola bar

Oat cereal