

You're Wearing Plants!

Grades: K - 6

Time: 60 mins.



Lesson summary:

Students will discover that many products that we use everyday, come from trees or plants.

What's the big idea?

- What around us is made from plants?
- What around us is not made from plants?

Outcomes or purpose:

- Students will recognize that trees and plants are used to make things we use every day, like food, clothing, furniture and other resources.
- Students will be able to classify products that are made from plants and not made from plants and trees.
- Students will be able to record products made from plants and trees.

Teacher background:

We know that a lot of our food comes from plants but it is important to know that there are other useful things that also come from plants. One example is clothing: much of it is made from cotton. We can find out what things are made of by looking at tags or labels and by reading the sides of boxes.

Materials needed: (Dependent on what you have available)

- Assemble paired examples of raw plant materials and the products made of them:
 - Cotton balls & a cotton shirt
 - Wheat grains & a leaf of bread
 - Aloe vera plant and Aloe-vera gel
 - Corn & corn tortillas/chips
 - Tomatoes & a bottle of ketchup/pasta sauce
 - Wood and paper
 - Olives and olive oil

Note: If you don't have these objects, show pictures instead.

- A Shopping bag
- Assemble other objects that are made from plants such as:
 - Bamboo chopsticks
 - Tea bags
 - Sisal or jute rope or twine
 - Toothpicks
 - Wicker baskets
 - Aspirin in a child- proof bottle (made from the bark of a willow tree)
 - Rubber bands
 - Toilet paper

- A paper hat
- Cloth diapers
- Newspaper
- Ground cinnamon
- Sugar (made from sugarcane or beets)
- Shampoo (made from wheat)
- Sunscreen (canola)
- Ground pepper



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Materials cont...:

• Assemble other objects that are not made from plants such as:

- Paper clips
- Coins
- Plastic toys
- Shells
- Rocks or pebbles
- Glass jars
- Marbles
- CD's
- A metal or plastic fork

- Salt

- Canadian bill (made from plastic, American bills are made of flax fibre)

• Two hoola hoops (or you can designate two areas by outlining a circle with tape on the floor, or by using two empty totes or boxes)

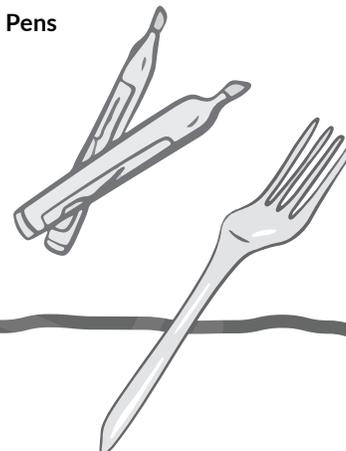
• Two index cards or two sheets of paper

• Markers

• "Where are the Plants?" Recording sheet

• Paper journal to record findings

• Pens



Step by step instructions: Setup

1.

Wear clothing made of cotton for the demonstration.

2.

Fill the shopping bag with the items from the first list: Cotton balls, cotton T-shirt, wheat grains, loaf of bread, Aloe vera plant, Aloe-Vera gel, corn, corn tortillas/chips, tomatoes, ketchup or pasta sauce, etc.

3.

Print off a sheet for each student titled: "Where Are the Plants?" or use a notebook for each student instead.

4.

Make two labels with the index cards or paper and markers. One should read "Made from plants" and the other "Not made from plants"

5.

Attach each label to one of the hula hoops or designated areas.



Plants Produce Oxygen!

Step by step instructions: Lesson Instructions

PART 1

1. Tell the students: "Today I am wearing plants!" Ask if anyone can tell you what you mean by that statement.
2. Show students the cotton ball. Pass it around the circle so they can feel it. Tell them that everything you are wearing is made of cotton. Let students know that they are probably wearing a plant, too, if they are wearing cotton. Explain to students that the tag on their clothing will tell them what their clothes are made out of.
3. Show students the items in the shopping bag one by one. Ask students how these items are connected. Accept all responses.
4. Tell students that the bread, tortillas, ketchup, T-Shirt, and gel are all made from plants. Invite volunteers to match the plant with the correct product. Explain to students how the plants are turned into the products. Split an Aloe vera leaf and let them feel the gel.
5. Tell students that there are many products that are made from trees and plants. Distribute the objects made from plants and not made from plants to students at random.
6. Point to the two areas labelled "Made from plants" and "Not made from plants". Tell students that their object may be made from a plant or it may not be made from a plant. Ask students to take a moment to really examine their object because they will be asked to put it in one of the two groups.
7. Ask students one by one to bring up their object and classify it. Discuss any misconceptions and explain how the plants are used as a product.

PART 2

1. Tell students that there are many products in the classroom/house that are made from trees and plants. Distribute the Where are the Plants? sheets or ask them to use a notebook. Explain to students that, as scientists, they will investigate the classroom/house to find the objects made of plants and draw pictures of them.
2. Send students around the room to record where they find objects made from plants. Encourage students to discuss and help each other. They can label their pictures as well.
3. Gather students back together to share their discoveries and why we use these items.

Plants Produce Oxygen!

Discussion questions

- What surprised you that was made from plants?
- What was your favourite item made from plants?
- What surprised you that was NOT made from plants?
- Think of your favourite plant. Try to think of one that wasn't discussed already. Make discoveries if there are any products made from this plant.
- Think about all the activities in the last 24 hrs and have children list them. Which plant products would they have encountered?

Expand the learning:

- Research and look up pictures of the plants where the items come from. For example cinnamon plants, willow trees, cotton plants, rubber trees, flax crops, pepper plants (black pepper), sugar cane or sugar beets, wheat, canola, and more.
- Draw a picture of your favourite plant that you discussed.
- Make a plant collage.
- Observe items in your home, department, grocery store. Check to see if they have a label or information on what it is made from.
- Investigate the question "If an item isn't made from plants and isn't made from plastics, metals, etc (human made material) what else could it be made out of? Students may want to investigate items made from animal by-products.