

Rubber Trees in Vietnam

TEACHER: *What do you see when you look at this picture?*

STUDENTS: *Noodles, play dough, foam, paint, rubber, etc.*

What you are looking at is natural rubber. Do you know where rubber comes from?

Trees, a factory

There are two kinds of rubber. One is natural and one is synthetic. Synthetic rubber is made of chemicals and comes from a factory. Natural rubber comes from trees! The sap of the rubber tree is a white liquid. It is called "latex." How do you think people get the liquid rubber out of the tree?

Make a hole; cut the tree down; etc.

The liquid rubber is stored under the bark of the tree. In order to collect the rubber, a thin layer of bark is scraped off of the tree using a special knife. This is called "tapping" the tree. The liquid rubber comes out of the cut and runs down the side of the tree into a collection bowl. It is kind of like when you have a cut on your skin. Your skin is similar to the tree bark (it helps to protect the tree), and the rubber is like blood (it helps to nourish the tree). If you take too much of the rubber from the tree at one time, it can hurt the tree. So, farmers have to be careful when tapping for rubber. Do you know another tree that people like to "tap?"

Sugar maple trees

Sugar maple trees also have a liquid that can be collected and turned into maple syrup. Do you know how people tap maple trees? Is it the same or different than rubber trees?

Different – people make holes in the trees

People tap rubber trees and maple trees in a different way. As you know, long thin cuts are made in the bark of the rubber tree in order to collect the latex. However, people drill small holes into maple trees, so they can collect the sap. Like maple trees, people have been using the liquid from rubber trees for many years. The first people to use rubber were the Olmecs of Central America. The name, Olmec, actually means "Rubber People." The Olmecs used natural rubber for making many things, including rubber soled shoes and balls for playing games.

Can you think of other things that are made of rubber?

Rubber gloves, rubber bands, balloons, inner tubes/tires, Band-Aids, erasers, etc.

You can find things made of rubber at home, school, or even on the playground! Take a quick walk around the classroom and see how many things you can find that are made of rubber.

(Allow the kids a minute or two to walk around the room and look for things made of rubber. Suggest that they use their fingers to keep track of the number of items they find.)

Hold up your hands and use your fingers to show how many rubber objects you found in our classroom.

(Have kids hold up their hands so they can share their results with each other.)

Great job on your rubber hunt! You can go on a rubber hunt at home and on the playground too!

Kindergarten Standards:

NYS Common Core Kindergarten Social Studies Standards

- K.9.a Children, families, and communities of today can be compared with those in the past.

Kindergarten ELA Power NYSCCLS (ICSD Power Standards in Bold)

Reading Standards for Informational Text: Kindergarten

- **Integration and Knowledge of Ideas**
 - 7. With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).**
 - 9. With prompting and support, identify basic similarities and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).**

Writing Standards: Kindergarten

- **Research to Build and Present Knowledge**
 - 8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.**

Speaking and Listening Standards: Kindergarten

- **Comprehension and Collaboration**
 - 1. Participate in collaborative conversations with diverse partners about *kindergarten topics and texts* with peers and adults in small and larger groups.**
 - a. Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion).**
 - b. Continue a conversation through multiple exchanges.**
 - c. Seek to understand and communicate with individuals from different cultural backgrounds.**
 2. Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.
 - 3. Ask and answer questions in order to seek help, get information, or clarify something that is not understood.**
- **Presentation of Knowledge and Ideas**
 - 6. Speak audibly and express thoughts, feelings, and ideas clearly.**

Language Standards: Kindergarten

- **Vocabulary Acquisition and Use**

6. Use words and phrases acquired through conversations, reading and being read to, and responding to texts.

Next Generation Science Standards for Kindergarten

K-ESS3 Earth and Human Activity

- ESS3.A: Natural Resources
 1. Living things need water, air, and resources from the land, and they live in places that have the things they need. Humans use natural resources for everything they do. (K-ESS3-1)