



Learning Activity:

Watch Your Noodles for Elephants' Sake

Activity Type	Arts and crafts
Focus Areas	Arts education, social studies
Time Required	45–60 minutes

Overview

Palm oil is the most widely consumed vegetable oil on the planet, found in about half of all packaged products, from pizza and ice cream to shampoo and detergent. In order to keep up with the demand for these products, tropical forests are being destroyed and converted into oil palm plantations. This impacts Asian elephants and other wildlife that depend on these forest habitats to survive. Students will create an elephant collage filled with pictures of palm oil products to learn the connection between these everyday items and how their actions, both positive and negative, can impact areas and species in faraway places.

Objective

At the completion of the activity, students should be able to:

- Recognize palm oil products and understand the impact their production has on our planet.
- Create an artistic representation of how palm oil production affects elephants.
- Describe what people can do to ensure their palm oil products are not harming elephant habitats.



Asian elephants, Sri Lanka.



● Subject and Standards

National Core Arts Standards

- Creating
 - Anchor Standard #1: Generate and conceptualize artistic ideas and work.
 - Anchor Standard #2: Organize and develop artistic ideas and work.
- Responding
 - Anchor Standard #7: Perceive and analyze artistic work.
 - Anchor Standard #8: Interpret intent and meaning in artistic work.
- Connecting
 - Anchor Standard #11: Relate artistic ideas and works with societal, cultural, and historical context to deepen understanding.

C3 Framework for Social Studies State Standards

- D2. Eco.1.3-5: Compare the benefits and costs of individual choices.
- D2. Eco.3.3-5: Identify examples of the variety of resources (human capital, physical capital, and natural resources) that are used to produce goods and services.

● Materials Needed

- Advertisements of products from magazines and/or newspaper circulars
- Copies of elephant outline (included in this activity) printed on large paper
- Scissors
- Glue



Vocabulary

- **Biofuel:** a fuel made from natural materials
- **Deforestation:** the conversion of forest to another land use or the long-term reduction of the tree canopy cover; this includes conversion of natural forest to tree plantations, agriculture, pasture, water reservoirs, and urban areas
- **Endangered:** a species considered to be facing a very high risk of extinction in the wild
- **Forest fragmentation:** breaking down large contiguous forests into smaller parts
- **Habitat:** a natural environment in which plants and animals live, breed, and get their food, water, and shelter
- **Habitat loss:** the disappearance of natural environments (required for plants' and animals' survival) due to harvesting for human consumption and/or clearing to make way for agriculture, housing, roads, pipelines, and other forms of industrial development
- **Sustainable:** of, relating to, or being a method of harvesting or using a natural resource so that the resource is not depleted or permanently damaged; an effective and innovative way to efficiently use natural resources and ensure their continued supply



Asian elephant cooling off in a river, India.



● Activity Procedure

Part 1: Introduction and Preparation

- Lead a class discussion on palm oil and its impact on wildlife and habitats. Start the discussion by showing students a picture of an Asian elephant and a picture of instant noodles. Ask if they can think of how these two things are connected.














- Answer: To make noodles “instant,” they are flash fried in palm oil to evenly dry the strands. Palm oil is derived from oil palm trees found in tropical rain forests, the same forests that are home to many endangered species, including Asian elephants.
- Explain to students that palm oil isn’t just used for cooking noodles; it’s also used in food products, detergents, cosmetics, and biofuel. In order to support the mass production of these palm oil products, forests are cleared to make way for oil palm plantations. This can be done sustainably, meaning the forests are not completely wiped out in order to harvest these oil palm trees. However, in some cases, forests are cleared in a damaging, irresponsible, or illegal way that causes them to become extremely fragmented or destroyed. Elephants living within these forests no longer have a home, increasing the likelihood of elephant-human conflict as they wander onto farms and other developed areas.



Part 2: Activity

In this activity, students will make a collage representing the connection between palm oil products and elephants to generate awareness about the impact of this oil production on critical habitats.

- Distribute materials to students including copies of the elephant outline (included in this activity), a set of magazines and/or newspapers containing product ads, scissors, and glue. Also, have the following chart outlining products that contain palm oil displayed in the classroom (or make copies available). Take a few minutes to review this chart with students.

PRODUCT	WHY PALM OIL?
 LIPSTICK	Palm oil is used in lipstick as it holds color well, doesn't melt at high temperatures, and has a smooth application and virtually no taste.
 PIZZA DOUGH	Palm oil is added to both frozen and fresh pizza dough to stop it from sticking together and to enhance texture.
 INSTANT NOODLES	Palm oil is up to 20% of the weight of a pack of instant noodles. It's used to precook the noodles so that all you have to do is add hot water.
 SHAMPOO	Palm oil is used as a conditioning agent that helps restore the natural oils of the hair that are stripped away by most shampoos.
 ICE CREAM	Palm oil makes ice cream smooth and creamy.
 DETERGENT	Palm oil is refined to create soaps, washing powder, and other cleaning products.
 MARGARINE	Palm oil is used in margarine because it is solid at room temperature and is free of trans fats.
 CHOCOLATE	Palm oil helps create a smooth and shiny appearance in some chocolate and keeps it from melting.
 COOKIES	Semisolid at room temperature, palm oil is used to give baked goods a creamy taste and texture.
 PACKAGED BREAD	Palm oil is now widely used to make bread because it is solid at room temperature, easy to bake with, and inexpensive.
 SOAP	Palm oil is used for its ability to remove oil and dirt from hair and skin as well as to moisturize.
 BIODIESEL	Palm oil can be used to produce biodiesel and biofuel.



- Students will go through the ads and magazines to look for pictures of these items to cut and paste into their elephant outline. The finished product should be a clearly defined elephant, filled in with items whose unsustainable production threatens their habitat.

Part 3: Discussion and Assessment

- Have students reflect on their completed collages by summarizing what the artwork represents. This activity demonstrates a series of causes and effects. A growing human population and the versatility of palm oil cause an increasing demand for the crop. The demand causes the creation of more plantations, some of which are not managed properly. Improperly managed plantations destroy forests, forcing elephants from their habitat and threatening their survival. Have the students explain the meaning of their collage to others, in terms of cause and effect.
- Many products that use palm oil aren't clearly labeled; palm oil and its by-products can appear under many different names. Inform students that next time they go shopping, they should look for ingredients that indicate the product contains palm oil, such as:
 - Vegetable oil
 - Vegetable fat
 - Palm kernel/palm kernel oil
 - Palm fruit oil
 - Palmate
 - Palmitate
 - Palm olein
 - Glyceryl
 - Stearate/stearic acid
 - And many more!

Although some products contain unsustainably grown palm oil, there are products that are produced in a responsible manner from ingredients grown in an environment that was cared for and left healthy. These products are sometimes marked with a logo from the Roundtable on Sustainable Palm Oil (RSPO), an organization cofounded by WWF that designed a set of environmental standards for responsible palm oil production in order to protect the place of origin of these products.



Extended Learning Options

- Have students draw the elephant outline if you prefer, rather than using the provided template, to add additional artistic criteria to the project.
- Assign students to research other impacts of palm oil production besides habitat loss. Deforestation causes air pollution, contributing to climate change, and palm oil mills cause water pollution by releasing wastewater directly into freshwater that humans and wildlife rely on. Students can also research other species, in addition to elephants, affected by the conversion of forests to oil palm plantations.
- Urge students to spread the word about palm oil by encouraging family and friends to look for the labels indicating the products they're purchasing are certified as containing sustainable palm oil.
- Use a tablet or smartphone (if available) to download the [WWF Together app](#). Encourage students to explore the elephant segment to learn more about the threat of habitat loss to elephants.
- Start a class fundraiser to protect elephants and other wildlife and their habitats using WWF's online fundraising tool, Panda Nation. Learn more at [pandanation.org](#).



Asian elephants in Kaziranga National Park, India.



● Additional Background Info

You can use the information found at the links below to enhance your discussion with the class, or you may want to share some links directly with students if you determine they are grade-level appropriate.

- **Article:** [Producing Better Palm Oil for People, Profits, and The Planet](#)—examines how WWF is helping to produce palm oil more sustainably to benefit people and wildlife
- **Article:** [Use Your Noodle](#)—explains the impact of instant noodles on the environment
- **Article:** [Palm Oil: The Hidden Truth Lurking in Your Home](#)—lists examples of household items made from palm oil and how you should reconsider your shopping habits to conserve forests
- **Article:** [Which Everyday Products Contain Palm Oil?](#)—interactive page that peels back the labels of many common items that contain palm oil
- **Article:** [Sumatran Elephants and Instant Noodles: What's The Connection?](#)—introduces readers to how palm oil products relate to elephant survival
- **Video:** [Unseen](#)—short satirical clip about finding products made from sustainable palm oil
- **Web Feature:** [Palm Oil](#)—provides an overview of the plant, its uses, and the dangerously high rates at which forests are being converted to keep up with growing demand
- **Video:** [How to ensure sustainable palm oil](#)—a video that explains how to shop smarter to help protect elephants
- **Web Feature:** [WWF Featured Species: Asian elephant](#)—provides facts and information about Asian elephants and their habitats

For more fun classroom activities with a focus on wild species and conservation, visit wildclassroom.org.



Oil palm fruit, Malaysia.



ELEPHANTS

Name _____

