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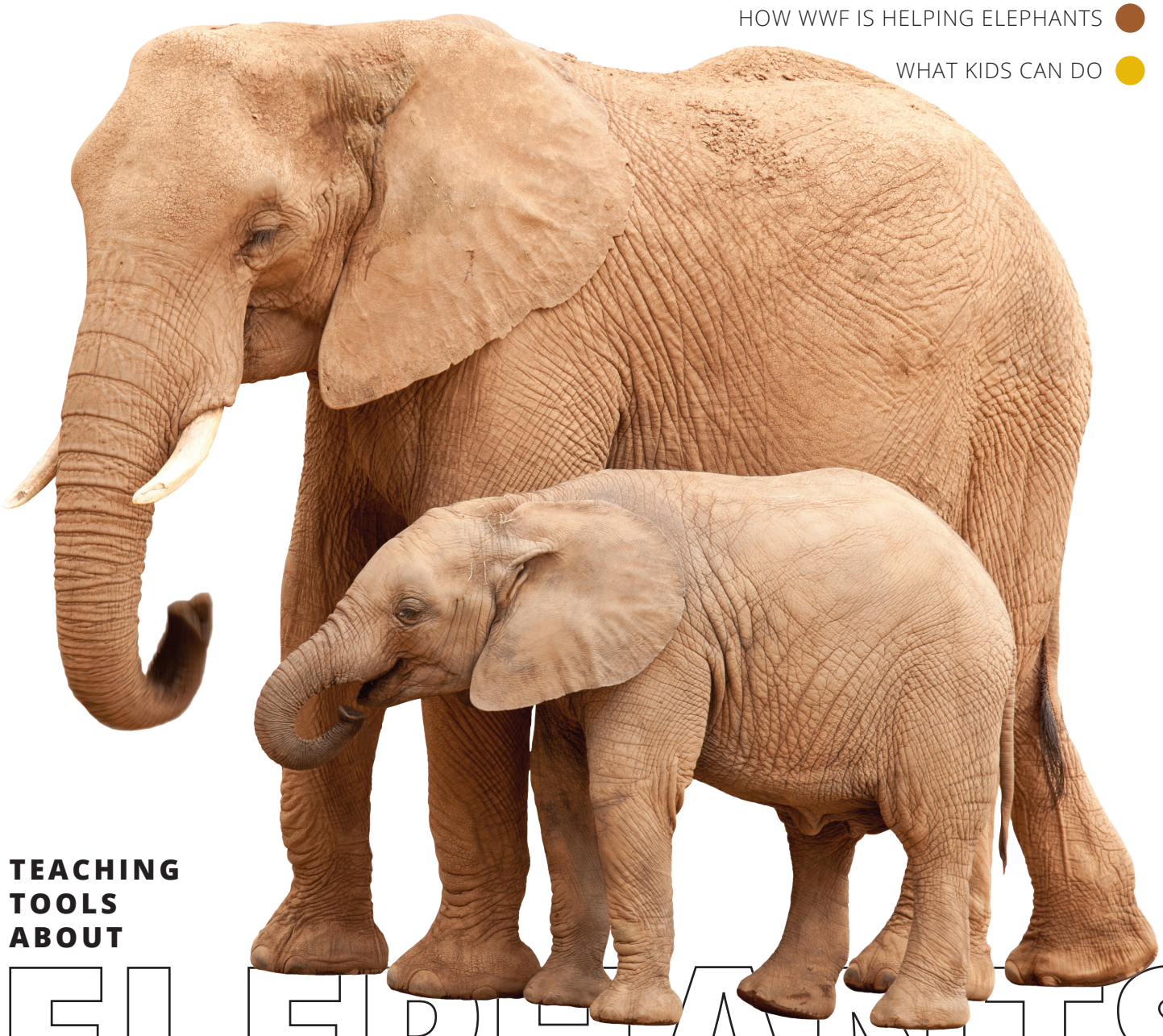


TEACHING TOOLS ABOUT

ELEPHANTS

WWF

WILD CLASSROOM

EDUCATOR'S RESOURCE GUIDE

WWF's Wild Classroom connects educators and parents with the tools and resources they need to help kids explore and understand the world around them. Visit wildclassroom.org to choose from a growing library of animal- and nature-related teacher's guides, fact sheets, and activity plans that you can use to enhance your science, writing, art, and other lessons.

Together we can inspire the next generation to build a future where people and nature thrive!

ELEPHANTS

Elephant Fun Facts

- An elephant's trunk is an extension of the upper lip and nose, and it serves many other purposes too —as a hand to pick up objects; a horn to trumpet a warning; an arm to use for touching and to raise in greeting; a snorkel to breathe through when swimming; and a hose for drinking water or bathing.
- An elephant trunk has up to 150,000 muscle units (by comparison, a human has around 600 muscles in his/her entire body).
- Tusks are massive, deeply rooted teeth that perform a variety of functions for the elephant, such as digging, lifting objects, gathering food, stripping bark from trees to eat, protecting the trunk, and defense.
- Elephants are either left- or right-tusked. The tusk they use most often is usually smaller because of wear and tear.
- Elephants are herbivores and can eat up to 600 pounds of vegetation a day. They can spend up to 18 hours a day eating grasses, leaves, roots, bark, and fruit.
- Elephants need a lot of water to survive. They consume 50 to 60 gallons of water a day.
- Elephants can live to be between 60 and 70 years old in the wild.
- Female elephants are more social than males. They form herds of related females that are led by the oldest female, the "matriarch."
- Elephant herds follow the same, seasonal migration routes year after year in search of food and water. It is the role of the matriarch to lead the herd along these routes.
- Healthy adult elephants have no natural predators; the threats to their survival all stem from human activities.
- Elephants show emotions similar to humans' and understand what other elephants are feeling. African elephants have been observed caring for wounded individuals and mourning their dead.

- In order to protect themselves from getting sunburned, elephants throw sand on their back and head.
- Elephants can detect the Earth's vibrations with sensory cells in their feet. Elephants can hear warnings sent through the ground from other elephants. They can sense the time between signals to determine the direction of the vibration. Elephants have been known to detect a thunderstorm from miles away and head toward it, hoping to find water.
- Elephants are extremely intelligent animals and have keen memory skills. They are also one of the few animals capable of recognizing their own reflection.

Elephant Q & A

What is an elephant's extinction risk?

Asian elephants are endangered. African elephants are currently listed as vulnerable.

How many elephants are in the wild?

Over 350,000 elephants still roam Africa's savannahs, but populations are decreasing in many areas. There are fewer than 80,000 African forest elephants and between 41,410–52,345 Asian elephants remaining in the wild.

Where do elephants live?

African elephants are found roaming across 37 different countries in Africa, with about half of the total population in the Kavango-Zambezi Transfrontier Conservation Area (KAZA), which is the world's largest terrestrial transboundary conservation area, covering a territory roughly the size of France and spanning parts of five southern African countries: Angola, Botswana, Namibia, Zambia, and Zimbabwe. Asian elephants are found in 13 countries in Asia, with more than half of the total population found in India.

What is an elephant's weight?

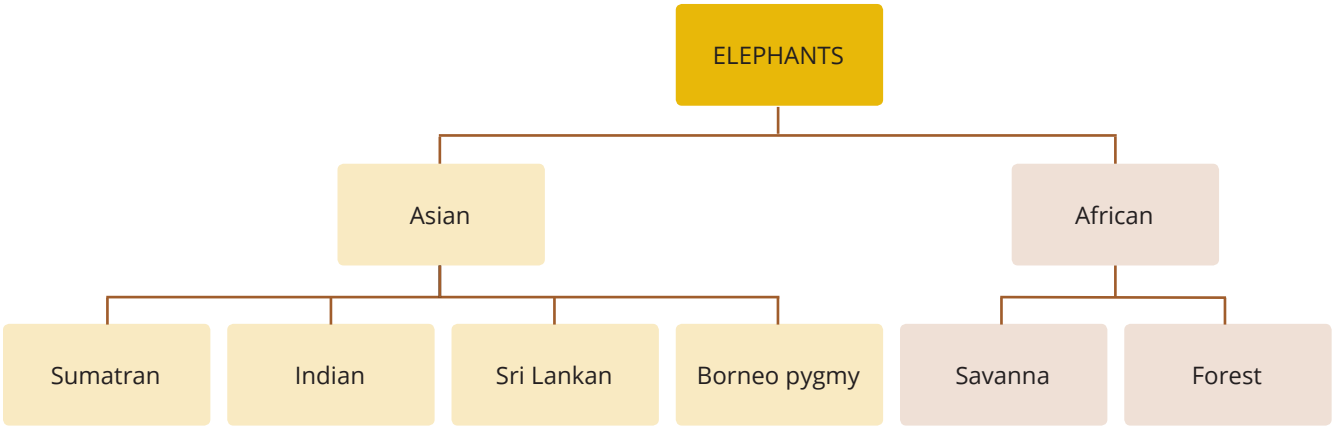
Elephants are the largest land mammals on Earth, weighing four to six tons.

How big is an elephant?

18 to 24 feet

How many subspecies of elephant are there?

There are two primary species: Asian elephants and African elephants. Among Asian elephants, there are four subspecies—Sumatran, Indian, Sri Lankan, and Borneo pygmy. Among African elephants, there are at least two subspecies, namely the savanna elephant and the forest elephant.



How are Asian elephants different from African elephants?

Aside from where they live, there are more than 10 physical differences between Asian and African elephants. Some of them are included here:

Asian elephants are much smaller in size and have smaller ears. African elephants, in addition to being larger, have fanlike ears shaped like the African continent. Only a small percentage of male Asian elephants have tusks, but all male and female African elephants have tusks. Asian elephants have five toenails on their forefeet and African elephants have four. Asian elephants have a single upper lip at the tip of the trunk; African elephants have two lips at the end of the trunk.

How do elephants raise their young?

Elephants have the longest pregnancy of any mammal, lasting 22 months. A calf is born to a female once every four to five years and will be cared for by the mother and other females in the herd for several years. At around four years old, the calf will start to make its first independent moves. Females often remain with the family unit for their entire life; males tend to leave the matriarchal group by the time they are around 10–14 years old and either live in smaller groups with other males or by themselves.

Why Elephants Matter

Elephants contribute to the health of their habitats.

When elephants eat seed-bearing plants and fruits, the seeds often pass through their digestive tract undigested. This helps spread these plants across landscapes. African elephants, in particular, are known for their vast consumption of a variety of seeds and their ability to disperse them over large areas, contributing to tree diversity. Elephants are, essentially, the gardeners of the forest. In the tropical forests of Asia and Africa, elephants create pathways that other animals also use, as well as clearings and gaps in the canopy that allow trees to redevelop. In the savannas, elephants reduce tree densities, creating an environment favorable to a variety of other plants and animals. In addition, when there isn't any surface water, elephants will dig for water. This provides other animals access to water as well. Elephants are considered to be the engineers of the ecosystems they live in. All of these factors contribute to healthy, flourishing landscapes that provide habitat for a rich diversity of other species.

Elephants improve the lives of people in their communities.

By protecting species like elephants, we're also protecting the environment and ensuring the presence of critical elements like clean water, air, soil, food, and energy. The availability of these essentials improves the health of humans and other animals living in these areas and provides a positive outlook for future generations. Elephants, and other wildlife, are also popular with tourists who travel to observe them in the wild. This can be an important source of income for communities that live alongside them.

Elephants have a large role in culture.

Elephants are important cultural icons, especially in Asia. In Hinduism, the powerful god honored before all sacred rituals is the elephant-headed Lord Ganesha, who is also called the Remover of Obstacles and is the god of wisdom.

The Threats Elephants Face

In Africa, the most urgent threat facing elephants today is large-scale poaching to supply the illegal ivory trade. In Asia and Africa, the most significant long-term threat facing elephants is habitat loss, which leads to human-elephant conflict. Elephants in Asia are now also facing the increasing threat of poaching not only for ivory from tusked males, but for skin used for various purposes.

Poaching and illegal wildlife trade

Behind every piece of ivory—either a full tusk or carved trinket—is a dead elephant. Poachers kill about 20,000 African elephants every year, one every 25 minutes, for their tusks. The tusks are then traded illegally and often end up carved and sold as decorative pieces. The international trade of ivory has been banned since 1989, but there are still markets in a number of countries to meet continuing consumer demand. Even though the trade is illegal, there are still a significant number of people interested in buying ivory for the wealth and artistic beauty they claim it represents. And as long as there is a demand, elephants will remain at risk. Since only male Asian elephants have tusks, poaching of males has resulted in the existence of more females in some areas and the majority of males being tuskless. A large number of Asian elephants are also taken from the wild for live elephant trade and are primarily kept in captivity for the tourism industry.

African elephant on the savanna.

Habitat loss

As human populations and industry continue to expand into critical elephant habitat, elephants have less room to roam than ever before. Land is converted for agriculture, specifically to make room for the farming of products like rice and oil palm—a highly desirable crop that is used in many food products. Habitat is also being disrupted for human uses such as houses, roads, and pipelines. Elephant herds rely on traveling historic migratory routes that have been key to their ancestors' survival for generations. As habitat is lost to development, these routes are blocked, forcing elephants to travel elsewhere in search of the resources they need (food, water, mates).

Human-wildlife conflict

As growing expanses of elephant habitat are converted for human uses, elephants and people are increasingly coming into contact with one another. Elephants enter farmers' fields and damage valuable crops, sometimes damaging property and injuring or killing people in the process. In retaliation, the farmers occasionally kill these elephants to protect their property and their families. In India alone, each year an average of 100 elephants and 400 people are killed as a result of human-elephant conflict, and about half a million families are affected by crop-raiding elephants.

Climate change

Elephants have a number of traits that make them vulnerable to a changing climate. They are sensitive to high temperatures and susceptible to a variety of diseases. Elephants also need to drink up to 60 gallons of water a day. As the climate changes, temperatures in Africa are rising and rain is becoming less frequent. With less fresh water available, elephants and humans are competing for the same limited resources, often resulting in conflict.

African elephant herd, Botswana.

How WWF Is Helping Elephants and Wildlife

WWF works to conserve elephants by supporting an end to poaching and illegal ivory trade, improving elephant protection and management, and reducing human-elephant conflict.

Putting a stop to poaching and illegal wildlife trade

WWF helps train and equip teams of wildlife rangers who serve as law enforcement to monitor and protect elephants and their environment. Organized troops lead patrols, looking for elephants and signs of poachers, such as snares and other traps. Rangers also help educate local people on the laws concerning poaching and help authorities catch criminals. WWF works with governments to establish protected areas to conserve forests and the elephants that call them home. TRAFFIC, the wildlife trade monitoring network, partners with WWF to identify where and how ivory is being illegally traded and sold, and to control the trade.

Empowering and educating communities to reduce conflict

WWF works with local communities to efficiently utilize their natural resources in a way that helps both wildlife and humans. To help protect crops, WWF works with communities to install electric fences and other barriers in strategic locations to prevent elephant invasions; trains community members to serve as response teams to safely drive elephants away from their crop fields and homes; and uses deterrents such as “chili bombs,” a mixture of dried elephant dung and hot chili, to repel elephants. WWF is also testing new technologies like early detection tools to detect elephants, which gives communities advance warning to protect their crop fields.

Protecting habitats

To secure a future for elephants, WWF improves existing protected areas while also establishing and securing elephant migration corridors in areas such as in KAZA, the largest conservation area in the world that spans multiple African countries. WWF is working to restore wildlife corridors (areas that animals travel through) in Africa and Asia so that elephants can continue to migrate along their traditional routes without encountering human settlements. WWF helps governments develop elephant conservation strategies, building their capacity to effectively catch criminals and keep elephants safe.

Strengthen efforts of species conservation

WWF works to inspire and strengthen regional, national, and international policy and funding for species conservation to protect and recover populations. WWF is also calling on governments, agriculture industries, and conservation organizations to work together to prevent deforestation and to protect the unique habitats of these elephants.

What Kids Can Do

Use eco-friendly products

Get familiar with products that come from elephant habitats and check the label to make sure they're certified as being sustainable (harvested in a way that did not permanently damage the natural resources that they came from). Examples include paper and wooden goods, as well as items that contain palm oil. Using sustainable products can help limit the amount of forest habitat lost to plantations that are managed irresponsibly.

Be aware of illegal wildlife trade

Poaching and illegal wildlife trade are major threats to the future of elephants. Never buy any products that come from elephants, tigers, rhinos, sea turtles, or other endangered species. This includes raw or carved ivory that comes from elephant tusks and teeth, and elephant skin. If you think you see something for sale online or in person that could be made from ivory, be sure to ask questions about where the item came from and what it's made of.

Spread the word

Kids can talk to their parents and friends about what they have learned about elephants and the ivory trade and ask them to do the things on this list too! The more knowledgeable people become about recognizing threats like wildlife crime, the more likely they are to stand up and take action to save species like elephants from extinction.

Start a fundraiser to help elephants and nature

By organizing a fundraiser with WWF's Panda Nation, you're empowering your students to protect the wildlife and wild places they've been studying. It's a great opportunity to teach the importance of philanthropy and the difference we can make when we work together. Get started at pandanation.org.

More Elephant Teaching Tools

Elephant fill-in-the-blank word puzzle

At the end of this guide, you'll find a word puzzle (with an answer key) based on the educational content covered in this guide.

Elephant learning activities

Within the Elephant Toolkit, you'll find six fun, engaging activities designed to help students learn about elephants and their habitats:

Be the Voice—Language Arts
Students will create a public service announcement that will raise awareness about wildlife crime and speak up for animals that have no voice.

Trade Knowledge, Not Ivory—Social Studies
To understand the ins and outs of illegal ivory trade, students will perform mini research projects and engage in a team teaching exercise to learn aspects of geography, civics, history, and economics from each other.

How Did the Elephant Cross the Road?—Physical Education
Students will work together to transport an object safely from one area to another—representing the benefits of wildlife corridors to species such as elephants.

How to Outsmart an Elephant—Science
This activity challenges students to use scientific investigation skills to design an experiment to test possible elephant deterrent techniques.

The Ranger Diaries—Language Arts
After reading a short article about wildlife rangers, students will compose a journal entry as if they were a ranger, reflecting on their day's work protecting elephants.

Watch Your Noodles for Elephants' Sake—Arts Education
Students will create a collage to represent the impact a common household ingredient has on elephants' survival.

Elephant posters

Create an inviting learning space with these free, downloadable posters of elephants (along with fun facts).

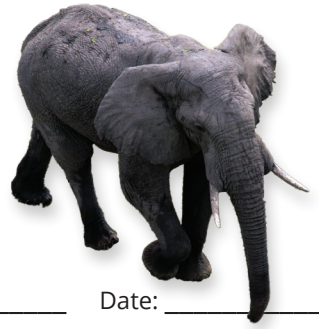
WWF Together app

For more fun, interactive tools and information about elephants and other wildlife, download the WWF Together app.

Asian elephants, Sri Lanka.

WILD CLASSROOM

ELEPHANTS



Name: _____ Date: _____

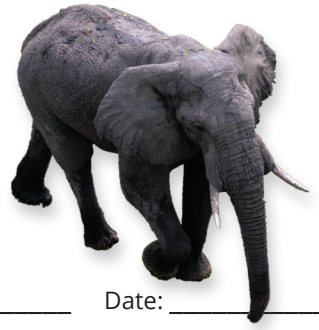
ELEPHANT WORD PUZZLE

Complete the puzzle with words related to elephants. Use your elephant fact sheets to help you.

1. Elephants have no natural _____; humans are their only threat. **P** ___ ___ ___ ___ ___ ___ ___ ___
2. Elephants are _____ and can eat up to 600 pounds of vegetation a day. ___ ___ **R** ___ ___ ___ ___ ___ ___ ___
3. Elephants show _____ similar to humans'. ___ ___ **O** ___ ___ ___ ___ ___
4. The oldest female in an elephant herd is called the _____. ___ ___ **T** ___ ___ ___ ___ ___ ___
5. Elephants can detect the Earth's vibrations with sensory cells in their ___. ___ **E** ___ ___
6. There are two primary _____ of elephants: Asian and African. ___ ___ ___ **C** ___ ___ ___
7. _____ are massive, deeply rooted elephant teeth. **T** ___ ___ ___ ___
8. Asian elephants have smaller _____ than African elephants. **E** ___ ___ ___
9. Elephants are the largest land _____ on Earth. ___ ___ ___ ___ ___ **L** ___
10. Elephants have keen _____ skills. ___ **E** ___ ___ ___ ___
11. Elephants have the longest _____ of any mammal, lasting 22 months. **P** ___ ___ ___ ___ ___ ___ ___ ___
12. More than _____ of all Asian elephants are found in India. **H** ___ ___ ___
13. Elephant herds follow the same _____ routes every year. ___ ___ ___ ___ **A** ___ ___ ___ ___
14. To protect themselves from sunburn, elephants throw ____ on their backs. ___ ___ **N** ___
15. Elephants consume 50 to 60 gallons of ____ a day. ___ ___ **T** ___ ___
16. An elephant trunk has up to 150,000 _____ units. ___ ___ **S** ___ ___ ___

WILD CLASSROOM

ELEPHANTS



Name: _____ Date: _____

ELEPHANT WORD PUZZLE | ANSWER KEY

Complete the puzzle with words related to elephants. Use your elephant fact sheets to help you.

1. Elephants have no natural _____; humans are their only threat. — P R E D A T O R S
2. Elephants are _____ and can eat up to 600 pounds of vegetation a day. — H E R B I V O R E S
3. Elephants show _____ similar to humans'. — E M O T I O N S
4. The oldest female in an elephant herd is called the _____. — M A T R I A R C H
5. Elephants can detect the Earth's vibrations with sensory cells in their ___. — F E E T
6. There are two primary _____ of elephants: Asian and African. — S P E C I E S
7. _____ are massive, deeply rooted elephant teeth. — T U S K S
8. Asian elephants have smaller _____ than African elephants. — E A R S
9. Elephants are the largest land _____ on Earth. — M A M M A L S
10. Elephants have keen _____ skills. — M E M O R Y
11. Elephants have the longest _____ of any mammal, lasting 22 months. — P R E G N A N C Y
12. More than _____ of all Asian elephants are found in India. — H A L F
13. Elephant herds follow the same _____ routes every year. — M I G R A T I O N
14. To protect themselves from sunburn, elephants throw ____ on their backs. — S A N D
15. Elephants consume 50 to 60 gallons of ____ a day. — W A T E R
16. An elephant trunk has up to 150,000 _____ units. — M U S C L E

Learning Activity:

The Ranger Diaries

Activity Type	Nonfiction reading and creative writing
Focus Areas	Language arts, technology
Time Required	30–45 minutes

Overview

Students will read an article about one of WWF's recent elephant conservation projects and learn about the responsibilities and challenges wildlife rangers face as they protect wildlife like elephants. Afterward, students will write a journal entry as if they were a wildlife ranger, reflecting on their daily tasks and obstacles they encounter. This activity will build creative writing skills while incorporating factual components they've learned regarding the duties of a wildlife ranger.

Objective

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

- Explain what a wildlife ranger does and why their job is important.
- Read informational text and compose a narrative based on the information.
- Describe various techniques rangers are using to protect wildlife from poachers.

Baby African elephants play close to their mother, Etosha National Park, Namibia.

Subject and Standards

Common Core Standards: English Language Arts

- RI. 3.2: Determine the main idea of a text; recount the key details and explain how they support the main idea.
- RI. 3.4/4.4/5.4: Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 3/4/5 topic or subject area.
- RI. 3.7: Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).
- W. 3.3/4.3/5.3: Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.
- W. 3.8: Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.
- W. 4.4/5.4: Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience.
- W. 4.9/5.9: Draw evidence from literary or informational texts to support analysis, reflection, and research.

Materials Needed

- Paper
- Pencil
- Copies of "Collaring Elephants in Kenya" article (attached to this activity)

Vocabulary

- **Endangered:** a species considered to be facing a very high risk of extinction in the wild
- **Infrared:** rays like light but lying outside the visible spectrum at its red end
- **Poaching:** hunting or fishing unlawfully
- **Ranger:** a person whose job it is to manage and protect parks, forests, or wildlife
- **Thermal:** relating to heat
- **Wildlife crime:** the illegal hunting, trafficking, and selling of wildlife or wildlife parts

Flying Squad teams in Tesso Nilo National Park, Indonesia.

Activity Procedure

Part 1: Introduction and Preparation

- Start by asking students what they think of when they hear the word "ranger." Many may be familiar with park rangers, those responsible for managing and protecting the natural resources found in a park. If no students mention wildlife rangers, introduce them to this important role in which men and women manage and protect endangered species—including elephants and tigers—many of which are targeted by poachers for the illegal wildlife trade. Discuss with students the typical job responsibilities of a wildlife ranger.

  – Rangers monitor wildlife through observation and data collection so that species population numbers and extinction status are kept up to date. Recently, WWF has helped rangers track elephants by providing collar technology. These collars are worn around elephants' necks and transmit data about elephants' movements to rangers. This information is useful in recording changes in their migration, as well as helping elephants avoid danger. For example, if data collected from a collared elephant indicates it is heading toward a human settlement, rangers can alert the communities and prevent conflict.

  – Rangers conduct antipoaching patrols, walking through large areas of landscape and searching for evidence of poaching activity. WWF has developed technology that enables rangers to detect poachers from afar. Thermal and infrared cameras are placed throughout wildlife parks and on ranger trucks. These cameras can detect body heat from humans and animals when they're in range of the camera. Paired with the cameras is software that is able to determine whether the heat comes from a human or an animal. If the heat detected is coming from a human, the computer alerts the ranger team, which then heads out to confront and catch the person.

  – Rangers also assist with injured animals, finding them the help they need to be rehabilitated and/or kept out of the hands of poachers.

Part 2: Activity

In this activity, students will read an article that describes the collaring technology rangers are using to collect information on elephant movements. Students will then incorporate this information, along with what they learned in the introduction about wildlife rangers, to compose a journal entry.

- Provide copies of the attached story, "Collaring Elephants in Kenya." You may choose to have students read the article independently or as a group.
- Once students have read the article, task them with imagining they are an elephant wildlife ranger and have them create a fictional journal entry summarizing their day working in the field. Students should be creative with their descriptions of what they did throughout the day and how it was challenging and/or rewarding, by incorporating what they've learned from the article and prior discussion. Before composing their journal entry, encourage students to organize their thoughts by creating an outline of what a ranger does and why their job is important.

Part 3: Discussion and Assessment

- Invite students to share their journal entries and compare how each chose to report their day on ranger duty.
- Ask students to recall what they read in the article about technologies being used to monitor elephants. Challenge students to propose ideas as to how they would stop poachers if they were wildlife rangers. The advancement of technology continues to improve wildlife monitoring practices; encourage them to be creative when considering new possibilities.
- Propose these questions to students: Would you want to be a wildlife ranger? Why or why not? Hold a discussion weighing the challenges and rewards of working as a ranger.

Extended Learning Options

- Show students the video New Technology Stops Poachers in Their Tracks to show how rangers use infrared technology to catch poachers. You can also show the clip A Wildlife Ranger's Encounter With Poachers so that students can hear the perspective of a real-life wildlife ranger on their work in the field.
- 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 efforts being made to protect elephants.
- Start a class fundraiser to help wildlife rangers using WWF's online fundraising tool, Panda Nation. Learn more at pandanation.org.

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:** WWF Develops a New Technology to Stop Poachers in Their Tracks—explains the use of cameras and software to detect human activity in wildlife protected areas
- **Article:** Tracking Elephant Migrations—original article about collaring technology that the reading was derived from
- **Article:** Collaring Elephants in One of Africa's Last Great Wildernesses—describes further the collaring technology used to track elephant movements
- **Article:** U.S. Ambassador Lives a Day in the Life of an Elephant Ranger—U.S. Ambassador to Thailand Kristie Kenney experiences a day on the job with wildlife rangers
- **Web Feature:** Back a Ranger—outlines the requirements and needs of rangers and how you can help support them
- **Web Feature:** WILDLABS.NET—a website allowing people to share ideas of technology-enabled solutions to combat conservation challenges

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

African elephants cooling off in a river.

COLLARING ELEPHANTS IN KENYA

WWF—along with rangers from the Kenyan Wildlife Service—recently set out to place collars on elephants in the Maasai Mara National Reserve in Kenya. But this is no ordinary collar like your dog wears; these collars contain GPS satellite tracking that allows scientists to follow the elephants as they move across their habitat. Being able to identify popular elephant areas helps rangers better protect the elephants. These collars tell rangers whether an elephant is active, stationary, or injured, which will allow the rangers to respond more quickly and effectively to poaching incidents and human-elephant conflicts.

Collaring an African elephant that can weigh up to seven tons is not easy! Read below about the steps of this difficult task.

7:00 AM

After half an hour of tracking elephants in the humid morning, the team finds the herd they've been seeking. A 20-year-old matriarch elephant is chosen as the best choice for collaring because she's likely to travel far distances to breed.

7:30 AM

A veterinarian prepares the drug used to temporarily immobilize the elephant. The drug makes the elephant go to sleep within 15 minutes. The team must act quickly to attach the collar, or the elephant could suffocate under its own weight.

7:45 AM

One person measures the elephant's tusk, while another measures its neck. Others ensure the animal remains hydrated and healthy.

7:55 AM

The team checks that the GPS collar, which weighs about 22 pounds, is producing a signal and working properly. Team members then fit the collar around the elephant's neck and bolt it securely in place.

8:15 AM

WWF-Kenya elephant officer David Leto tests a GPS device.

8:30 AM

The successfully collared elephant, nicknamed "Kiambi," rejoins her herd.

The collar attached to Kiambi's neck will allow rangers to track her movements, which will help them protect her and her herd. Other technology that helps rangers protect wildlife includes:

- **Drones** flying above and **infrared cameras** positioned throughout elephant areas allow rangers to catch poachers from far away and in the dark.
- **Detection devices** alert people (especially farmers) to the sound of elephants approaching their community, which helps avoid human-elephant conflict.
- **Solar-powered lights** have also been installed around communities that typically have wildlife visitors to deter them and reduce human conflict.

WILD CLASSROOM ELEPHANTS

Learning Activity:

How Did the Elephant Cross the Road?

Activity Type	Game
Focus Area	Physical education
Time Required	20–30 minutes

Overview

Species like elephants need large areas to roam and do not recognize human-made boundaries like roads or housing. Wildlife corridors are essential for the safe migration of these animals and the safety of people within their communities. Students will participate in a game that requires them to work together to get an object safely from one area to another, similar to the way a wildlife corridor works for an elephant.

Objective

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

- Define the purposes of a wildlife corridor.
- Identify KAZA as the largest protected area in the world crossing multiple countries.
- Demonstrate the advantages and challenges of working together to reach a common goal.

Subject and Standards

Shape America National PE Standards—Highly Effective Physical Education

- Standard 1: The physically literate individual demonstrates competency in a variety of motor skills and movement patterns.
- Standard 2: The physically literate individual applies knowledge of concepts, principles, strategies, and tactics related to movement and performance.
- Standard 5: The physically literate individual recognizes the value of physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.

Materials Needed

- Hula-Hoop(s)
- Large open area

Vocabulary

- **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
- **Human-wildlife conflict:** tension between people and animals over living space and food, caused by expanding human populations and shrinking natural habitats
- **Infrastructure:** resources such as buildings and equipment required for an activity
- **Migration:** the act of passing periodically from one region or climate to another for feeding or breeding
- **Wildlife corridor:** vital pathways that allow regular travel, seasonal migration, and population dispersal of different species

Elephants in Mudumu National Park, in the Kavango-Zambezi Transfrontier Conservation Area (KAZA), Namibia.

Activity Procedure

Part 1: Introduction and Preparation

- Use the following information to introduce students to wildlife corridors and why they are important.
  - Species like elephants require large areas to roam. Elephants follow the same migration routes every year in search of basic needs such as water, food, and mates. These migrations (along with those of many other species) depend on wildlife corridors—paths that allow species to travel, migrate, and disperse. Wildlife corridors can exist naturally within landscapes, such as connecting mountain ranges or riverbanks that join wetlands. They can also be artificial, like wildlife overpasses on roads, constructed intentionally to funnel wildlife out of harm's way. Wildlife corridors connect areas of habitat that would otherwise be fragmented by human activity and allow uninterrupted paths for species to pass through.
  - Unfortunately, with human populations expanding, these corridors are being destroyed and fragmented to make way for infrastructure like roads and buildings. Elephants and other animals don't recognize these barriers and will attempt to follow their normal routines. This can cause problems when these large animals struggle to find their way and occasionally come into contact with humans (which threatens both elephant and human lives).
  - It's important for wildlife corridors to be protected so that species like elephants can move about their homes freely. WWF is working hard to establish protection around wildlife corridors, including setting up camera traps to monitor the animals moving through and regulating traffic (wildlife and vehicular) to prevent collisions.
- Provide students with an example of a significant conservation effort to protect wildlife corridors by discussing KAZA, a protected region in Africa that spans the countries of Angola, Botswana, Namibia, Zambia, and Zimbabwe. KAZA is the largest protected region in the world that crosses multiple borders. The area is roughly the size of France and encompasses six large wildlife corridors. The goal of KAZA is to unite these five countries in a shared effort to protect wildlife and the communities that surround them. Bringing together five countries, each with its own laws, interests, and business practices, is not easy, but those involved are committed to working together for the sake of conserving wildlife.

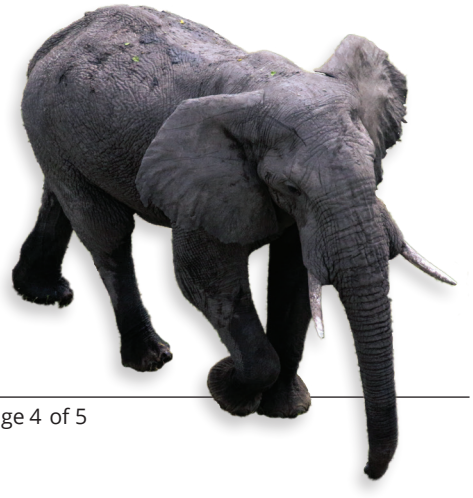
Part 2: Activity

To demonstrate how wildlife corridors work, students will participate in a game where they will work together to get an elephant safely from one area to another.

- Take students to an open area and have them stand in a single-file line next to each other. Instruct them to hold hands and spread their arms and legs out, as if they were doing a jumping jack, to create space between them and their neighbors. Explain to the students that they represent a wildlife corridor in KAZA.
- Begin the game by passing the Hula-Hoop to the first student in the corridor line. The Hula-Hoop represents the elephant. Without letting go of their neighbor's hand, that student will have to wiggle their arms, legs, and body through the Hula-Hoop as they pass it down the line to the next student. This continues down the corridor until the Hula-Hoop reaches the last student, indicating the elephant has reached its destination safely. If the students let go or lose the grip of their neighbor's hand, the corridor is broken up, the elephant has lost its way, and the Hula-Hoop will have to start back at the beginning.

Part 3: Discussion and Assessment

- Conclude the activity by asking students to make the connection between what they did in the game and wildlife corridors. The goal of the game was to move the Hula-Hoop from one area to another, without having the path broken up. The same holds true for wildlife corridors—their purpose is to provide safe passage for animals when their path would typically be fragmented, usually by human activity. Have them elaborate on the challenges of the game and how they had to make individual adjustments for the sake of the ultimate goal. Relate this to KAZA by comparing the joint efforts of the five African countries to protect wildlife corridors to the students working together to pass the Hula-Hoop.
- Share with students other benefits of establishing protected areas like KAZA. In addition to helping wildlife, KAZA also helps communities by promoting tourism opportunities. By maintaining the pristine beauty of the area and an abundance of healthy wildlife, tourists are more inclined to visit, generating income for the local people.



Extended Learning Options

- At your discretion, you may choose to make the game competitive by breaking the class into groups that race each other. You could also have multiple Hula-Hoops crossing through the corridor, representing an entire elephant herd.
- Assign a follow-up activity that encourages students to research other wildlife corridors around the world, how they're implemented, and what species they help protect.
- Use a tablet or smartphone (if available) to download the WWF Together app. Encourage students to explore the elephant section to learn more about the importance of conserving elephant habitat and migration routes.
- 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.

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:** The Right to Roam: Elephant Encounters at a Wildlife Corridor—a scientist's eyewitness account of elephants benefiting from a wildlife corridor
- **Article:** What Kind of Animals Live in KAZA? And Four Other KAZA Facts—brief overview of how KAZA works
- **Article:** Five Countries Work Toward a Common Goal in Southern Africa—filled with graphics that show the KAZA countries and their united goals
- **Article:** Calling KAZA Home: The Animals of Southern Africa—outlines the animals in addition to elephants that KAZA is helping to conserve
- **Article:** A Promising Future for Africa's Wildlife—an in-depth look into how KAZA came about
- **Video:** Welcome to KAZA—a short video showing why this conservation treaty is important to wildlife
- **Web Feature:** WWF Featured Species: African Elephant—provides facts and information about African elephants and their habitats

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

Learning Activity:

Trade Knowledge, Not Ivory

Activity Type	Summarizing text and peer teaching
Focus Areas	Social studies, language arts
Time Required	60 minutes

Overview

Thousands of elephants are killed every year for their ivory tusks, which are then smuggled into numerous countries across the world and fashioned into jewelry and other trinkets. While commercial international trade in elephant ivory has been illegal since 1989, open ivory markets still exist due to a continued demand, primarily in Asia. Students will perform mini research projects to become knowledgeable about the geography, economics, history, and civics behind ivory trade, and then will be responsible for teaching that content to their peers. By understanding the logistics of the trade, students can better understand why it is a problem and what we can do to try to eliminate it.

Objective

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

- Build communication skills through peer teaching/learning.
- Read informational text and fluently summarize the content to others.
- Explain the illegal ivory trade network in terms of geography, economics, history, and civics.

African elephant herd, Botswana.

Subject and Standards

C3 Framework for Social Studies State Standards

- D2. Civ.10.3-5: Identify the beliefs, experiences, perspectives, and values that underlie their own and others' points of view about civic issues.
- D2. Civ.12.3-5: Explain how rules and laws change society and how people change rules and laws.
- D2. Eco.2.3-5: Identify positive and negative incentives that influence the decisions people make.
- D2. Eco.7.3-5: Explain how profits influence sellers in markets.
- D2. Geo.4.3-5: Explain how culture influences the way people modify and adapt to their environments.
- D2. Geo.7.3-5: Explain how cultural and environmental characteristics affect the distribution and movement of people, goods, and ideas.
- D2. His.3.3-5: Generate questions about individuals and groups who have shaped significant historical changes and continuities.

Common Core Standards: English Language Arts

- RI. 4.1: Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.
- RI. 4.2: Determine the main idea of a text and explain how it is supported by key details; summarize the text.
- RI. 4.10: By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range.
- SL. 3.1/4.1/5.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3/4/5 topics and texts, building on others' ideas and expressing their own clearly.
- SL. 3.4: Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.
- SL. 4.6: Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task and situation.
- SL. 5.3: Summarize the points a speaker makes and explain how each claim is supported by reasons and evidence.

Materials Needed

- Copies of student worksheets and reference sheets (included in this activity)
- Pencil
- Internet access (optional)
- Elephant Educator's Resource Guide (for reference)

Vocabulary

- **Endangered:** a species considered to be facing a very high risk of extinction in the wild
- **Extinct:** when there is no reasonable doubt that the last individual of this species has died
- **Poaching:** hunting or fishing unlawfully
- **Supply and demand:** the amount of goods available for people to buy compared to the amount people want to buy; the less a product is produced, the more money can be charged
- **Vulnerable:** a species considered to be facing a high risk of extinction in the wild
- **Wildlife crime:** the illegal hunting, trafficking, and selling of wildlife or wildlife parts

African elephants, Kenya.

Activity Procedure

Part 1: Introduction and Preparation

- Use the following information to lead a class discussion on wildlife crime and the illegal trade of elephant ivory. You can also find additional information in the Elephant Educator's Resource Guide.
  - Wildlife crime threatens some of the world's most imperiled species. Some of the species at risk are tigers (poached for their skins and bones), rhinos (poached for their horns), and elephants (poached for their tusks). Poaching for ivory tusks is the most urgent threat facing African elephants. African elephants are currently considered vulnerable, meaning they are close to being listed as endangered and facing extinction. Once the elephant is killed, its tusks—deeply rooted teeth—are removed and sold to markets, many of which are in Asia. Most of the ivory is carved into figurines and small ornaments, but it can also be made into items like jewelry, chopsticks, and combs. Killing elephants for ivory was once legal, but when population numbers plummeted, a ban was placed on the international trading of ivory in hopes of bringing elephants back from the brink of extinction. However, despite being illegal, undercover markets still exist to meet consumer demand. As long as people still want to buy ivory (and therefore there is still money to be made from ivory), elephants will continue to be at risk.
- In this activity, students will each be responsible for reading about different aspects of the illegal ivory trade. Review with students some strategies as they read the text. They will be asked to determine the main idea and summarize their topic. Remind them that when summarizing, it's important to include key details referenced in the material to support the main idea. The final step will ask each student to explain their topic to their peers. This method of sharing information will result in students having a better understanding of the overall scope of the illegal ivory trade.
- The reading materials focus on each of the four disciplines of social studies and will be divided by discipline among the students. Review these so that students will familiarize themselves with the types of information they'll be reading.
  - *Geography:* how events in one place affect other places; how location impacts people's actions
  - *Civics:* how government addresses problems; how people help shape the laws within their community
  - *Economics:* understanding cost and benefits; how decisions are made to have people and societies make money
  - *History:* change over time; understanding the significance of why and how events occurred

Part 2: Activity

- If possible, divide the students into groups of four. Each member of the group will represent one of the four disciplines of social studies and will be responsible for that topic within the group.
- Distribute copies of the "Trading Knowledge on Ivory Trade" student summary sheet (one per student), as well as the reading material (one copy of each discipline per group). Each of the four students will be responsible for a different discipline.
- Allow students sufficient time to read and reflect on their respective information—approximately 10–20 minutes, depending on the skill level of the class. Remind them that they will have to explain their reading material to the other three members of their group. Once they feel they have read it thoroughly for comprehension, have them fill out the corresponding box on their worksheet. Instructions are provided as a reminder to determine the main theme of their assigned reading and to provide three supporting details.
- Once students have read and summarized their social studies topic, have them alternate explaining what they read to the rest of their group. It will help to set a visual timer (approx. 5 minutes per student) so that students can be responsible for delivering their message clearly and concisely in the allotted time. As each student teaches their group about their topic, group members will fill in the main idea and supporting details of that social studies topic in the corresponding box on their worksheet.

Asian elephants, Sri Lanka.

Part 3: Discussion and Assessment

- As a review, invite student volunteers to present their findings from each discipline to the entire class.
- Now that students have a complete picture and better understanding of the illegal ivory trade, how do we stop it? Discuss with students current efforts to combat wildlife crime and the illegal ivory trade. WWF and TRAFFIC (the wildlife trade monitoring network) are working hard to put an end to this threat to elephants by confiscating illegal ivory products, equipping regions to effectively stop poachers and people participating in ivory trade, and educating consumers about the importance of not buying ivory. WWF also strives to fully understand why people continue to buy ivory, with the goal of redirecting the demand to an alternative that doesn't impact elephants. Encourage students to provide suggestions of ways to encourage people to stop buying ivory. When making suggestions, remind them to consider what they've learned regarding the social studies behind illegal ivory trade.
- Discuss with students the ways they can do their part to help stop wildlife crime and protect elephants. Encourage them to spread the word about the importance of never purchasing items made from endangered animals. When shopping, they should keep an eye out for items that look like they were made with wildlife parts, such as shells, skins, eggs, jewelry, figurines, hairbrushes, or combs. If something looks suspicious, advise students to question the merchant as to where the item came from and what it's made of.

African elephants, Kenya.

Extended Learning Options

- Rather than have them discuss content within smaller groups, you may choose to arrange students into four groups total, with each group assigned one topic to summarize and present to the rest of the class. Also, depending on the number of participants, you may opt to have students responsible for more than one topic.
- Assign a follow-up activity asking students to compose a letter to a family member or friend about wildlife crime and the illegal ivory trade. The letter should be informative as well as persuasive in communicating the importance of being knowledgeable about the ivory trade and ways to stop it.
- If technology is available, students can conduct internet research on their topics, rather than or in addition to reading the provided handouts.
- Use a tablet or smartphone (if available) to download the WWF Together app. Encourage students to explore the elephant section to learn more about wildlife crime and the illegal ivory trade.
- 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.

Elephant sprays water over its head, South Africa.

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:** What Is Ivory and Why Does It Belong on Elephants—explains why elephants need their tusks and why taking them is illegal
- **Article:** New Us Ivory Regulations Mark a Victory In the Fight to Save Elephants—marks the significance of the shutting down of ivory trade within US borders
- **Article:** Traffic: The Wildlife Trade Monitoring Network—describes the work of TRAFFIC to protect endangered species from illegal trade
- **Article:** New US Elephant Ivory Market Study Helps Agencies Better Regulate Trade—results from a study by WWF, TRAFFIC, and the International Fund for Animal Welfare on elephant ivory trade in the United States
- **Web Feature:** Buyer Beware—provides tips on how to avoid purchasing illegal animal products
- **Web Feature:** Stop Wildlife Crime—sign a petition to the US government to stop commercial ivory trade
- **Web Feature:** Illegal Wildlife Trade—an overview describing how illegal wildlife trade impacts various species
- **Article:** Why do people buy ivory?—explains the continued demand for ivory that poses threats to elephants
- **Web Feature:** Stopping Elephant Ivory Demand—how WWF is working to address the underlying motivations of ivory buyers in order to stop elephant poaching
- **Article:** A Global Coalition Forms to Stop Online Wildlife Crime—how companies are teaming up to spot the sale and trade of illegal wildlife products online

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

Name: _____ Date: _____

Trading Knowledge on Ivory Trade

HISTORY

Main idea:

_____

_____

_____

_____

_____

Supporting details:

1)_____

_____

2)_____

_____

3)_____

_____

GEOGRAPHY

Main idea:

_____

_____

_____

_____

_____

Supporting details:

1)_____

_____

2)_____

_____

3)_____

_____

Name: _____ Date: _____

Trading Knowledge on Ivory Trade

CIVICS

Main idea:

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Supporting details:

1)_____

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2)_____

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3)_____

_____

ECONOMICS

Main idea:

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Supporting details:

1)_____

_____

2)_____

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3)_____

_____

Name: _____ Date: _____

Trading Knowledge on Ivory Trade Sample Answer Sheet

HISTORY

Main idea:

Hunting elephants for their ivory tusks was legal up until 1989, when they almost became extinct.

Supporting details:

1) Elephant tusks used to be made into many items, such as piano keys and trinkets.
2) So many elephants were killed to make ivory products that eventually international ivory trade was banned.
3) Ivory carving has been a part of Chinese culture for many generations because it was a respected form of art. This is one of the reasons people continue to buy ivory.

GEOGRAPHY

Main idea:

The majority of ivory is taken from elephants in Africa and sold to people in Asia.

Supporting details:

1) All African elephants have tusks, and their population is larger, so they are targeted for the illegal ivory trade more than Asian elephants.
2) Some countries, including the United States and China, have even restricted ivory trade within their own borders.
3) Ivory is still popular in areas of East Asia, so although illegal, ivory trade is still occurring.

Name: _____ Date: _____

Trading Knowledge on Ivory Trade Sample Answer Sheet

CIVICS

Main idea:

International ivory trading is illegal and if caught participating, you could go to jail.

Supporting details:

1) African elephants that live in protected areas are monitored by wildlife rangers.
2) Poachers are caught by rangers, who use technology and sniffer dogs to catch them from far away.
3) If you're caught participating in elephant poaching or ivory trade, you could go to jail and have to pay a lot of money.

ECONOMICS

Main idea:

To protect elephants from ivory trade, the demand for ivory has to stop.

Supporting details:

1) People still buy ivory because they think it's pretty; it's been a tradition; and/or they associate it with being wealthy.
2) Because ivory trading is illegal unless the item is an antique, criminals are now selling ivory online to make it harder to get caught.
3) Criminals continue to participate in ivory trade because ivory is still being sold at high prices.

HISTORY OF IVORY TRADE

Elephant populations once flourished throughout Asia and Africa. In the early 1900s, the hunting of elephants for their ivory tusks became increasingly popular. Products made from ivory included piano keys, jewelry, and carved trinkets. Ivory from elephants was sold to countries all over the world.

© WWF-US/Keith Arnold

By the 1980s, the elephant population had decreased dramatically. In 1989, after determining how few elephants remained in the wild, the Convention on International Trade in Endangered Species (a worldwide agreement between governments to protect animals and plants that are being traded) placed a ban on the international trade of ivory.

Interest in ivory products in the United States diminished, but demand in Asia remained steady, particularly in China, where ivory has been a part of the culture for generations. Ivory carving throughout history was considered a respectable form of artistry, requiring a lot of skill and commanding extremely high prices. Many still feel strongly about the ivory tradition and therefore continue to purchase ivory. As long as there continues to be a demand for ivory, elephants will still be at risk.

© WWF/Folke Wulf

GEOGRAPHY OF IVORY TRADE

All African elephants, male and female, have tusks, but because of generations of rampant poaching, only a small percentage of male Asian elephants have tusks.

© Jamie Cotten/IFAW/ WWF-US

About half of the total population of African elephants can be found in KAZA, the world's largest conservation area stretching across multiple countries. KAZA spans Angola, Botswana, Namibia, Zambia, and Zimbabwe. Some of the other countries where African elephants are found include Cameroon, Gabon, Congo, Central African Republic (CAR), Democratic Republic of the Congo (DRC), Kenya, Tanzania, and Mozambique. The majority of Asian elephants are found in India, but some can also be found in Thailand, Cambodia, Vietnam, Borneo, Sumatra, Sri Lanka, and Nepal.

© WWF/Mike Goldwater

Since the international ban on ivory trade went into effect in 1989, many countries have even shut down the majority of ivory trade within their own borders, including two of the largest ivory trading countries in the world—the United States and China. Hong Kong has also committed to banning domestic ivory trade by 2021. The hope is that eventually governments from all countries will ban ivory so that traffickers no longer have markets to sell it and elephants are no longer at risk.

Unfortunately, since ivory is still popular in areas of East Asia, the trade continues; countries such as Vietnam and Thailand have large illegal ivory markets. In addition, ivory traders have become more clever at concealing their illegal business by selling ivory online, disguising it as plastic, fake ivory, or bone. In order to finally put an end to the illegal ivory trade, it's important to learn why people continue to buy it so that they can be educated and redirected toward making better choices that don't threaten the survival of elephants.

CIVICS OF IVORY TRADE

Today, elephants are legally protected in their range by government law enforcement. Wildlife rangers (who are essentially wildlife police) monitor elephant herds traveling through protected areas and watch for signs of poachers.

© Ola Jennersten/WWF-Sweden

Rangers are now using advanced technology, like drones and thermal cameras, that will help them catch poachers in the dark and from far away. They are also using sniffer dogs—dogs that go through specialized training to sniff out evidence and track poachers down before they escape with elephant ivory. Poachers who are caught hunting and killing elephants for their tusks can be sentenced to many years in prison, with a hefty fine to pay.

But not all ivory is illegal. In the United States, people may continue to own items (such as furniture, instruments, and antiques) made with ivory before the ban went into effect in 1989. However, in order to sell old ivory, there are very complicated legal guidelines to follow, including providing proof of where it came from. Anyone caught participating in illegal ivory trade and/or possessing illegal ivory products will go to jail.

© WWF/James Morgan

ECONOMICS OF IVORY TRADE

© Jamie Cotten/IFAW/WWF-US

The law of supply and demand says that without demand, there is no need for a supply. So, in order to permanently wipe out elephant poaching, we have to eliminate the need and desire for elephant products.

As ivory is trafficked around and out of Africa, the price increases dramatically. In Africa, one pound of ivory can bring poachers up to $400; by the time it gets to Asia, the price can increase tenfold to $4,000.

Because of its artistic value (people think it's pretty), its connection to culture (skilled artists have been carving ivory for many years), and its reputation as a status symbol (it's associated with being wealthy), ivory is still popular in parts of Asia. Although the demand for ivory seemed to decrease once international sale and trade became illegal, many people still continue to purchase it, not worried about the consequences.

Illegal ivory can be found for sale in markets throughout Asia. However, now that laws are in effect and markets are being closely monitored, a lot of the illegal ivory trading occurs online. TRAFFIC (the wildlife trade monitoring network) has discovered thousands of online advertisements of endangered species items for sale, many of them ivory products.

© WWF-US/Keith Arnold

Since three of the world's largest ivory markets—the United States in 2016, China in 2017, and Hong Kong in 2021—have committed to ending their role in Africa's elephant poaching crisis, their leadership can inspire other countries around the world to join in the fight to save elephants.

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.

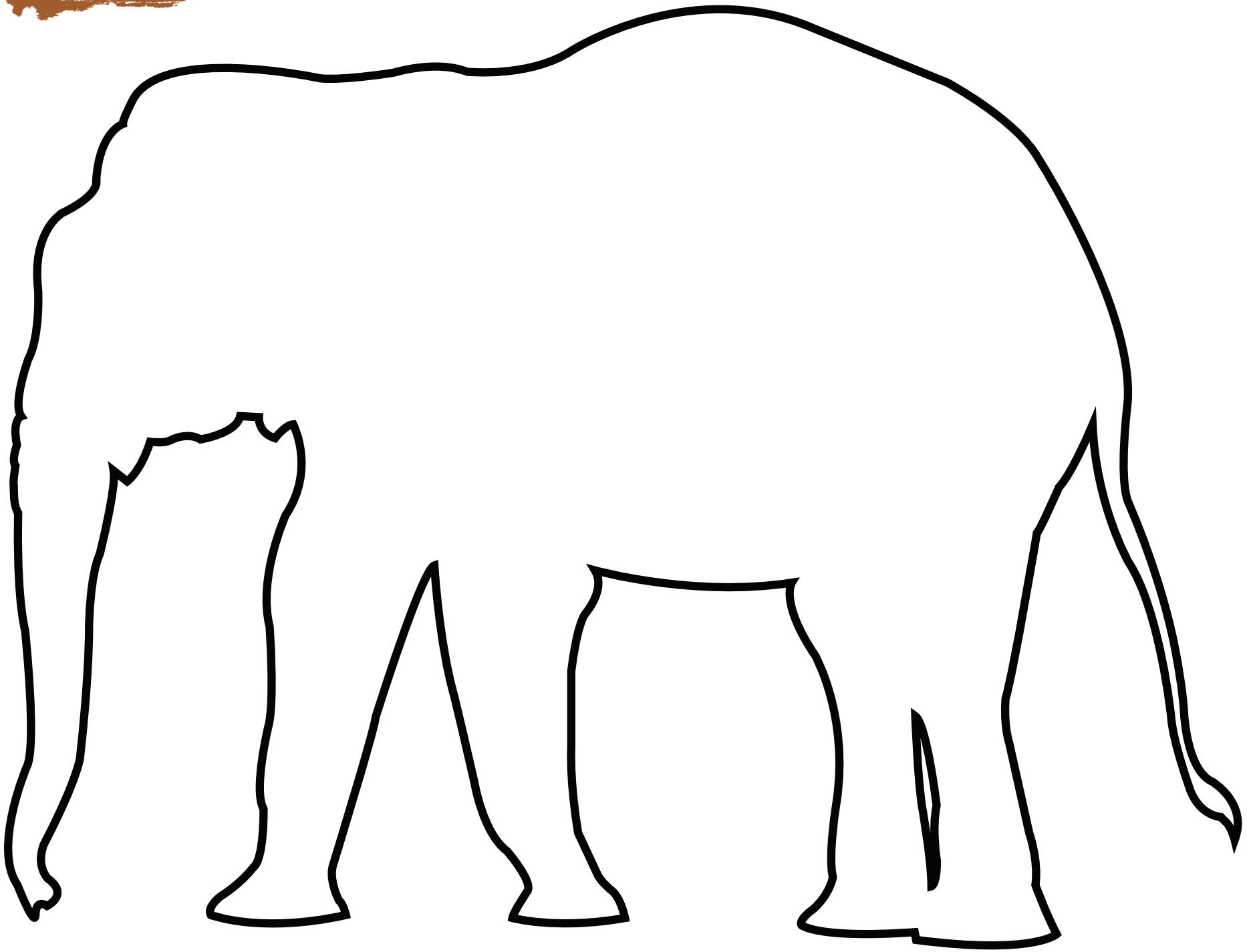
Oil palm fruit, Malaysia.

WWF

WILD CLASSROOM

ELEPHANTS

Name _____



WILD CLASSROOM ELEPHANTS

Learning Activity:

How to Outsmart an Elephant

Activity Type	Planning investigations and engineering design
Focus Area	Science
Time Required	30–45 minutes

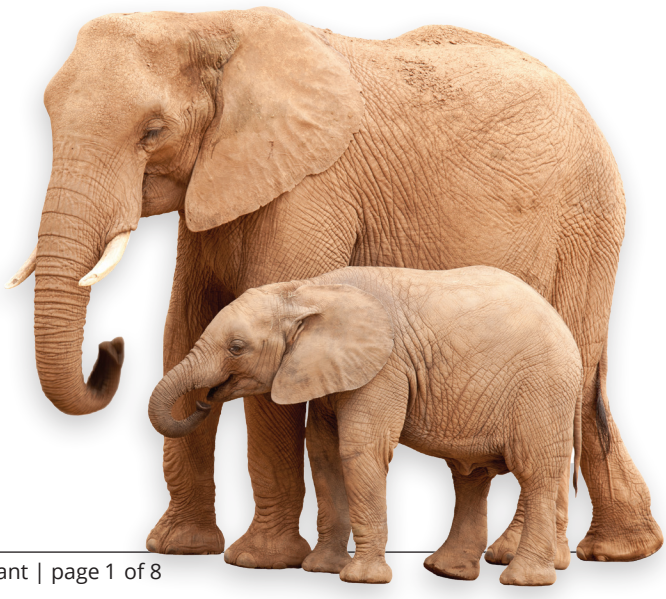
Overview

As elephant habitats are destroyed to make way for human uses, elephants are forced to relocate—often to human-inhabited areas—to search for food. Local farmers have implemented a variety of clever tools to ward off these hungry elephants from their crops. This activity asks students to use scientific investigative skills to explore an elephant deterrent technique by designing a theoretical experiment around testing it. If technology is available, students can use the WWF Together app to learn more about the species and explore this unique preventive tactic to reduce human-elephant conflict.

Objective

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

- Define causes and effects of human-elephant conflict.
- Design a scientific experiment following the scientific method of investigation.
- Describe and suggest other means of reducing human-elephant conflict.



Subject and Standards

Next Generation Science Standards

- 3-5-ETS1-1 Engineering Design
  - Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.
- 3-5-ETS1-2 Engineering Design
  - Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.
- 3-5-ETS1-3 Engineering Design
  - Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.
- 5-ESS3-1 Earth and Human Activity
  - Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

Materials Needed

- Copies of the attached "Elephant Repellent" lab sheet
- Pencil

African elephant herd, Tanzania.

Vocabulary

- **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
- **Human-wildlife conflict:** tension between people and animals over living space and food, caused by expanding human populations and shrinking natural habitats
- **Infrastructure:** resources such as buildings and equipment required for an activity
- **Replicate:** repeat
- **Variable:** a factor that may take on any set of values

African elephants, Maasai Mara National Reserve, Kenya.

Activity Procedure

Part 1: Introduction and Preparation

- Provide students with an overview of the causes and effects of human-wildlife conflict. Use the definition provided, along with the information below, to describe to students how conflict can arise between humans and animals like elephants.
  - As human populations continue to grow, more and more natural habitat, such as forest, is lost to development including roads, housing, and farmland. As the forests that elephants call home are broken up and fragmented, elephants are forced to travel away from their traditional migration routes and look elsewhere for their essential needs including food, water, and mates. This often leads to elephants entering human-inhabited areas, such as farms filled with tempting crops. When hungry elephants discover crop fields, they will walk through, eating as they go, sometimes destroying an entire annual crop in one night. Farmers and local people who have worked tirelessly to maintain these crops become angry at the elephants, because they rely on the crops for income and food for their families. Because they view elephants as pests or worse, sometimes communities have little interest in protecting them, and elephants can be killed in retaliation.
- After discussing the information above, talk with students about ways local farmers could try to protect themselves and their property from elephants. Encourage students to think of their own solutions to this problem, reminding them that elephants are very intelligent creatures and will use their ingenuity to get what they need regardless of the obstacles. For instance, when regular fences weren't effectively keeping elephants out, farmers tried using electric fences. However, in some cases, elephants were still able to get through the electric fences and reach the crops. When farmers realized that electric fences weren't successful, they tested a new method to outsmart the elephants. They made "chili bombs," a mixture of dried elephant dung, water, and chili pepper. When ignited, the bomb emits a pungent smell that elephants do not like, keeping them away from the crops. Farmers place lit chili bombs all around their farmland and also smear their ropes and fences with the mixture to deter elephants as they approach. Pose these questions to students: How do you think this repellent was invented? How did people know what ingredients to mix to repel elephants? Do you think it worked on the first try?

Part 2: Activity

In this activity, students will design a hypothetical experiment that might have taken place to discover how "chili bombs" are an effective elephant repellent. Designing this investigation will allow students to gain insight into how scientific advancements are made by simply following the steps of the scientific method.

- If students are unfamiliar with them, review the steps of the scientific method. In any scientific investigation, the first step is identifying the problem and asking a question. The next step is to develop a hypothesis or a possible solution to the problem. When designing the procedure to test the hypothesis, a science experiment is considered most credible when multiple variables are tested.
  - Depending on comprehension levels, introduce students to the term "variable." When testing a hypothesis, it helps to also test different approaches to use as comparison. It may help to compare this scenario to creating a new cookie recipe. How do you know what ingredients to include and how much to add? Do you think the very first person to ever bake a cookie got it right on the first try? Just as with cooking or baking, a successful outcome is sometimes the result of many trials and errors. Students should consider this when designing their experiment—what other tactics did farmers try? Do you think they tried other recipes for the repellent? In this scenario, many farmers had been using regular fences to protect their crops, then upgraded to electric fences. Neither of these tactics proved effective, since elephants still managed to get past the fences into the crop fields. That's most likely when the idea of creating a repellent was considered. So, one sample experiment could use a plain fence, an electric fence, and a fence smeared with repellent as variables. Another example could have farmers trying several "bomb-like" mixtures before discovering the chili pepper as the one that solved the problem.

  Once a procedure is complete, the results are analyzed to determine which (if any) of the variables proved effective. This will determine the conclusions.
- Distribute copies of the "Elephant Repellent" lab sheet included in this activity. The conclusion is already filled in, since the chili pepper repellent recipe has already proven successful. The objective is for the students to work backward to complete the rest of the experiment, in a way they imagine this ingenious approach was originally designed.

Part 3: Discussion and Assessment

- Invite students to share how they designed their experiment and compare different approaches.
- Discuss other efforts WWF has made to allow elephants the space they need while avoiding humans. Wildlife rangers and local communities are trained to use modern methods and tools to reduce human-elephant conflict. This includes providing more fences to areas in need and training elephants and local people to establish elephant "flying squads" that drive wild elephants away from farms and back into the forests.
- Use smartphones or tablets (if available) and have students participate in the smearing interactive under the elephant tab on the WWF Together app.
- As with any science experiment or invention, the discovery of the elephant repellent originated in defining a problem to be solved. Evaluate student comprehension of scientific investigation by challenging them to propose a problem in their own lives they'd like to solve and how they'd go about testing a solution.

Extended Learning Options

- For a more advanced activity, you may choose to have students generate their own hypothesis of a new, untested idea of how to ward off elephants from crops and design an experiment to test it.
- Depending on student comprehension levels, introduce them to the terms "independent variable" and "dependent variable." In this experiment, the independent variable (what's being tested) would be the various repellent methods. The dependent variable (determined by the independent variable) would be how far the elephants stay from the crops.
- 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.

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:** Using Chili Bombs to Protect Both Elephants and Farmers—step-by-step explanation of devising a chili bomb
- **Article:** Human-Elephant Conflict in Zambia—a wildlife officer tells of her efforts to reduce human-elephant conflict
- **Article:** Using Chilies to Protect Maize Fields and Elephants—describes one family's experience reducing their encounters with elephants by using chilies
- **Article:** Helping People and Wildlife Thrive Together—shares several efforts by WWF to reduce human-wildlife conflict
- **Article:** What's the difference between Asian and African elephants? And 8 other elephant facts—interesting elephant facts and what WWF is doing to protect them
- **Web Feature:** WWF Featured Species: Elephant—provides facts and information about elephants and their habitats

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

A man demonstrates how to make a chili bomb to scare off elephants in Assam, India.

Name: _____ Date: _____

ELEPHANT REPELLENT

Pretend you were one of the farmers who discovered the chili pepper repellent against elephants. Write out your experiment so that others could replicate it in the future. The conclusion is filled in for you.

Identify the **PROBLEM:**

_____

_____

_____

_____

_____

Ask a **QUESTION:**

_____

_____

_____

_____

_____

Form a **HYPOTHESIS:**

_____

_____

_____

_____

_____

Design an **EXPERIMENT (list steps!):**

Variable 1:_____

Variable 2:_____

Variable 3:_____

Analyze **RESULTS:**

_____

_____

_____

_____

Draw a **CONCLUSION:**

Elephants will be repelled by chili pepper because they do not like the smell.

WILD CLASSROOM

ELEPHANTS

Learning Activity:

Be the Voice

Activity Type	Persuasive language and advocacy
Focus Areas	Language arts, art
Time Required	45–60 minutes

Overview

After learning about the different components of wildlife crime and its impacts on elephants specifically, students will create a public service announcement urging people to stop purchasing ivory products and support a ban on ivory trade. By producing evidence-backed, resonating messages through visual aids and demonstrations, students will illustrate how to speak up for the animals that have no voice and encourage people to change their behaviors.

Objective

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

- Define and describe wildlife crime and illegal wildlife trade.
- Defend an argument as to why ivory belongs on elephants and not sold as a trinket.
- Learn to create a motivating message and convey it in a visual way.

African elephant herd, Botswana.

Subject and Standards

Common Core Standards: English Language Arts

- L. 3.3/4.3/5.3: Use knowledge of language and its conventions when writing, speaking, reading, or listening.
- SL. 3.1/4.1/5.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3/4/5 topics and texts, building on others' ideas and expressing their own clearly.
- SL. 3.2: Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
- SL. 4.3: Identify the reasons and evidence a speaker provides to support particular points.
- SL. 5.3: Summarize the points a speaker makes and explain how each claim is supported by reasons and evidence.
- SL. 5.6: Adapt speech to a variety of contexts and tasks, using formal English when appropriate to task and situation.
- W. 3.1/4.1/5.1: Write opinion pieces on topics or texts, supporting a point of view with reasons.
- W. 4.4/5.4: Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience.

National Core Arts Standards

- 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.

Materials Needed

- Poster paper
- Pencil
- Coloring utensils
- Recording device (optional)
- Internet access and video projection (optional)
- Elephant Educator's Resource Guide (for reference)

Vocabulary

- **Poaching:** illegal hunting
- **Public service announcement (PSA):** a message for a specific audience aimed at raising awareness and changing attitudes and behavior
- **Wildlife crime:** the illegal hunting, trafficking, and selling of wildlife or wildlife parts

African elephants cooling off in a river.

Activity Procedure

Part 1: Introduction and Preparation

- Begin by presenting the "Five Ws and H" of wildlife crime to students, having them first break down the "what" by defining the term. It may be helpful to have this information available to students while working on the activity.

WHAT is wildlife crime?

The term "wildlife" refers to both fauna and flora, so it can include animals such as birds, fish, and mammals, but also plants and timber.

Crime, in this case, implies any act that goes against the laws in place to protect these wildlife species.

In most cases of wildlife crime, animals are poached for their parts and traded for money. Not all wildlife trade is illegal. Many wild plants and animals are legitimately caught or collected and then sold as food, pets, or ornaments. It becomes an issue when it's done illegally and can threaten the survival of the species.

WHO is at risk?

Elephants: Tens of thousands of elephants are killed every year for their tusks, which then become a part of the illegal international trade for ivory and are made into trinkets such as jewelry and ornaments.

Tigers: Poaching is a huge threat to tigers whose skin, bones, whiskers, and tails are traded in the illegal wildlife markets to be used as medicine or household décor.

Rhinos: At least two rhinos are killed every day for their horns, which are mistakenly believed to cure diseases and improve health.

WHY does it happen?

The causes of illegal wildlife trade come from a continued demand for wildlife products and a lack of laws regulating the trade.

While wildlife products, like rugs made from tiger skins and jewelry made from elephant tusks, continue to hold status and purpose among consumers, they will continue to be seen as valuable. This, combined with weak law systems, allows these acts to keep happening.

WHERE is it happening?

There are certain areas in the world where this illegal behavior is particularly threatening. These hotspots include the United States, China's international borders, trade hubs in Southeast Asia and Africa, the eastern borders of the European Union, some markets in Mexico, and parts of the Caribbean, Indonesia, New Guinea, and the Solomon Islands.

WHEN does it happen?

Illegal wildlife trade has unfortunately existed for many years, but organizations like WWF and TRAFFIC (the wildlife trade monitoring network) are working hard to put an end to it and save these affected species before it's too late.

HOW do we stop it?

If these wildlife products are no longer in demand, the animals will no longer be a target for their parts, which will increase their chance of survival. WWF set out to fully understand the reasons that drive consumers to purchase ivory, so that we could redirect the demand and save elephants. Step one was to identify the needs that people are trying to meet by buying ivory. Step two was to acknowledge those needs through messages and step three was to redirect those needs by offering an alternative that doesn't impact elephants.

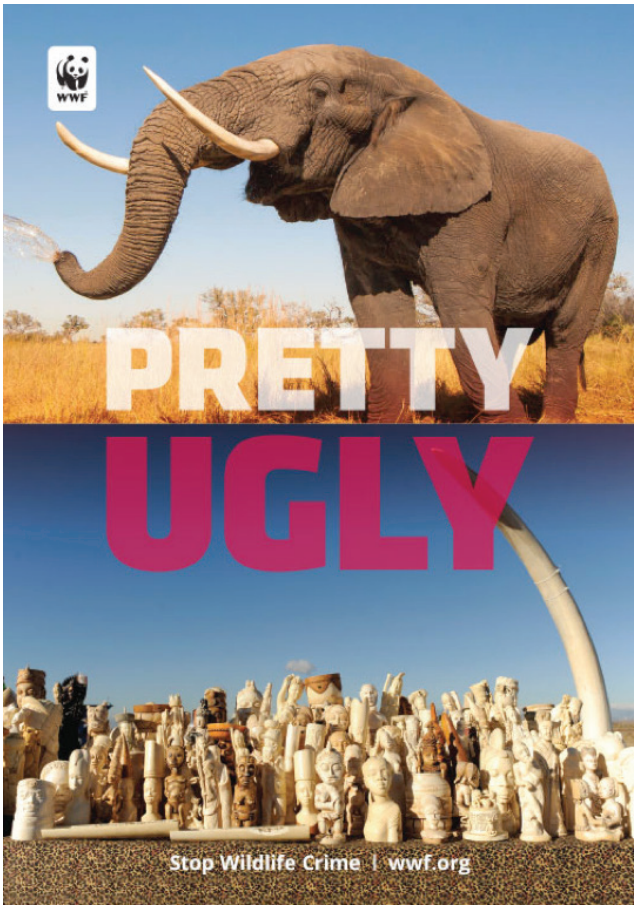
- One way of reaching a targeted audience is through powerful, motivating messages, such as public service announcements. Define public service announcements (PSAs) to students using the definition provided. Students may recognize current commercials they hear on the radio or see on television as examples of PSAs.

Part 2: Activity

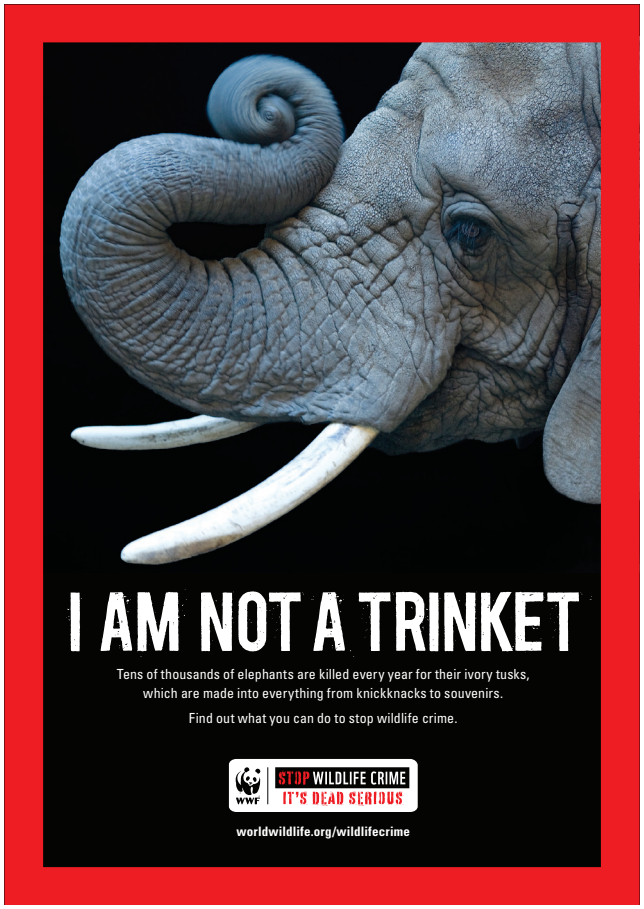
In this activity, students will create a public service announcement (PSA) discouraging the selling/purchasing of ivory products and promoting the protection of elephants. The PSAs can be in the form of a visual advertisement such as a poster or a pamphlet or as a performed, recorded commercial skit. The goal of the PSA will be to grab people's attention and to persuade them to protect elephants and stop contributing to the ivory trade.

- Show the following examples of print and video WWF PSAs about wildlife crime. Have students analyze the advertisements—what were the main idea and objective of the ad? What tactics were used to convey that main idea? What examples were provided to support the idea? Do you think the PSA did its job? Why do you think people may be persuaded by this ad? Do you feel more passionate about the main idea after having seen it?

Stop Wildlife Crime WWF PSA (video) print ad shown below



I Am Not a Trinket PSA (video) print ad shown below



- You may have students work individually or in groups on their PSAs. Encourage them to plan their design approach by remembering the following points:
  - The PSA must be creative, engaging, and attention-grabbing.
  - Who is your audience and what appeals to them?
  - What is the main idea or call to action you want your audience to remember after seeing the PSA?
  - Include reasons and evidence that support your argument. Students can reference the "Five Ws" of wildlife crime from the beginning of the activity, or you can create handouts of information from the Elephant Educator's Resource Guide. If your classroom has internet access, students can look at the websites listed at the end of this activity to learn more about wildlife crime.
- Once students have created their PSAs, have them present their prints and/or commercials to the class. Tip: It may be rewarding to record student presentations so that students can watch their performance as part of the analysis process.

Part 3: Discussion and Assessment

- As a group, reflect on each PSA. Have each student/group explain why they thought their presentation would resonate with an audience of ivory buyers.
- Inform students of other actions WWF and TRAFFIC are taking to stop wildlife crime. In addition to persuading consumers to make more informed choices, WWF and TRAFFIC identify illegal wildlife trade routes and how wildlife trade affects each species. They also work hard to strengthen laws and enforce stricter penalties, in hopes of shutting down the illegal wildlife trade market.
- Conclude the activity by discussing with students what they can do to help stop illegal ivory trade and save elephants. When shopping, they should always keep an eye out for items that look like they were made from endangered species. This includes products made from parts of elephants, sea turtles, tigers, and rhinos. If they see something suspicious, they should ask the merchant where it came from and what it's made of. Students can also help by spreading the word to family and friends so that they too can become knowledgeable about the threat ivory trade poses to elephants.

Extended Learning Options

- Assign a supplemental project to design a PSA specifically advocating against crime toward another endangered species, such as tigers or rhinos. Students can research other PSAs that advocate against wildlife crime and other threats to wildlife as a reference. Extend the project further by encouraging students to explore other environmental issues they are passionate about and want to raise awareness of.
- Have students compose a letter to a friend or family member persuading that person to join in taking a stand against illegal ivory trade in order to save elephants.
- 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 fight against ivory trade.
- 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.

Sumatran elephants playing in Tesso Nilo National Park, Riau, Indonesia.

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:** What Is Ivory and Why Does It Belong on Elephants—explains why elephants need their tusks and why ivory hunting is illegal
- **Article:** Stop Wildlife Crime: It's Dead Serious—sign the pledge to urge governments to stop commercial ivory trade
- **Article:** New US Elephant Ivory Market Study Helps Agencies Better Regulate Trade—breaks down the results of a survey to evaluate the distribution of illegal ivory products throughout the United States
- **Article:** WWF Supporters Rally to Stop Elephant Poaching in Myanmar—an empowering story of motivated citizens joining forces to stop elephant poachers in Myanmar
- **Video:** I Am Not a Rug: WWF Stop Wildlife Crime PSA With Splash! Animals—short PSA advocating against wildlife crime, featuring an artist's portrayal of a tiger
- **Web Feature:** Traffic: The Wildlife Trade Monitoring Network—provides details on the work of TRAFFIC and its combined efforts with WWF to stop illegal wildlife trade
- **Web Feature:** Illegal Wildlife Trade—outlines the causes and impacts of illegal wildlife trade, as well as what WWF is doing to stop it
- **Article:** Why do people buy ivory?—explains the continued demand for ivory that poses threats elephants
- **Web Feature:** Stopping Elephant Ivory Demand—how WWF is working to address the underlying motivations of ivory buyers in order to stop elephant poaching

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