

Appendices

Appendix 1 Quiz about elephants

<https://www.wwf.org.uk/node/40486>

Q1. Where can you find wild elephants?

A. North America and Asia

B. Africa and Europe

C. Asia and Africa

D. Asia and Australia

Q2. How much food on average do elephants require per day?

A. Up to 100kg a day

B. Up to 300kg a day

C. Up to 250kg a day

D. Up to 150kg a day

Q3. What is the estimated total population of African elephants in the wild?

A.120,000

B.250,000

C.415,000

D.600,000

Q4. Since 1945, Asian elephants have declined by...?

A. At least 20%

B. At least 50%

C. At least 70%

D. At least 15%

Q5. How long can African elephants live for in the wild?

- A. Up to 20 years
- B. Up to 40 years
- C. Up to 60 years**
- D. Up to 80 years

Q6. How many muscles units does an elephant have in its trunk?

- A. Around 30
- B. Around 100
- C. Around 10,000
- D. Around 150,000**

Q7. What is the average weight of a male African elephant?

- A. 7,000kg
- B. 25,000kg
- C. 6,000kg**
- D. 200kg

Q8. What do they use their trunks for?

- A. Smell
- B. Carry food
- C. Communication
- D. All of the above**

Q9. How do they communicate with other elephants?

- A. Scent
- B. Body language

C. Vocalisation

D. All of the above

Q10. How thick is an elephant's skin in most places?

A. 1cm

B. 10cm

C. 6cm

D. 2.5cm

Q11. On average, how long are African elephants pregnant for?

A. 22 months

B. 30 months

C. 12 months

D. 6 months

Q12. When charging or sprinting elephants can run at up to...?

A. 10mph

B. 15mph

C. 20mph

D. 25mph

Appendix 2 Reading text 1: *Elephant*

(adapted from <https://www.worldwildlife.org/teaching-resources/>)

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**."
- 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 are extremely intelligent animals and have keen memory skills.

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 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 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. 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.

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. 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.

Appendix 3 Reading text 2: *Ivory trade*

(adapted from <https://www.worldwildlife.org/teaching-resources/>)



WILD CLASSROOM

ELEPHANTS

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.

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.



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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.

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.



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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.

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.



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ECONOMICS OF IVORY TRADE

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.

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.



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Trading Knowledge on Ivory Trade

HISTORY

Main Idea:

Supporting details:

1) _____

2) _____

3) _____

GEOGRAPHY

Main Idea:

Supporting details:

1) _____

2) _____

3) _____

Trading Knowledge on Ivory Trade

CIVICS

Main Idea:

Supporting details:

1) _____

2) _____

3) _____

ECONOMICS

Main Idea:

Supporting details:

1) _____

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