



Conservation Challenge Game

Virtual Classroom Extension

Objectives

These activities are designed to start your at-home students in recognizing themselves as scientists and in thinking critically about problem-solving. The goal is to teach concepts through discovery and to encourage using scientific thought processes, including scientific argumentation. Feel free to adapt the lessons provided to better suit your students' abilities. Take these ideas, make them your own, and your at-home students will have a greater chance of success.

Materials

Print outs at the end of this lesson plan, tokens to represent donations (four are needed for each player).

Background Information

Argumentation is the process of using logic and reasoning to explain and defend the validity of one's position. It consists of a claim, which is a statement that explains or describes something about the world. This statement needs to be backed up by evidence that supports the claim and reasoning that explains how the evidence supports the claim. While this process involves higher-level thinking, it is a skill that students can begin to practice in early elementary school and continue to develop into adulthood.

Cleveland Metroparks Zoo has been working to protect wildlife around the world for more than two decades. We are confronting the most vital, complex and emerging threats to species survival in the wild. Our wildlife conservation efforts protect species today and benefit wildlife, human communities and the habitats we share into the future. The six key Future for Wildlife conservation projects the Zoo supports are Gorilla, Giraffe, Andean Bear, Asian Turtle, Lion & Cheetah, and Illegal Wildlife Trade.

Procedure

1. In the Conservation Challenge game, players will each be given one of Cleveland Metroparks Zoo's six Future for Wildlife projects (detailed in the handouts at the end of this lesson plan). Players will explain their conservation project to the other players in order to convince the other players to donate to their project. The goal is to get as many donations as possible.
2. The educational goal of this game is to help your students understand how Cleveland Metroparks Zoo helps secure a future for wildlife around the world, while demonstrating the important role that everyone can play in making a difference for wildlife. This game will also help develop students' scientific argumentation skills as they will need to use evidence to create a compelling reasoning for their claim.
3. This game can be played with all ages. Upper elementary, middle school, and high school students may have an easier time due to the need to read information. Students in lower elementary can play but may require additional assistance. Adults are encouraged to play with their students. This game can be played with three-six players. If there are more than six players, feel free to create teams.

4. Begin the game by explaining the difference between a fact and an opinion. A fact is a verifiable piece of information. This means that you have evidence to demonstrate the truth of the statement. For instance, the statement, “koalas are marsupials” is a fact because there is biological evidence that supports that fact. You can see the pouch that makes a koala a marsupial. An opinion is a statement that cannot be verified, and people can either agree or disagree. It is based on an individual’s beliefs as opposed to verifiable information. An example of an opinion is, “koalas are the cutest animal.” Some people may agree with this statement, while others disagree. With opinions, there is not a “right” or “wrong” answer.
5. Each player should choose a Cleveland Metroparks Zoo Future for Wildlife Project at the back of this lesson plan. Each Future for Wildlife project has a description of the challenge that the species face (The Challenge), What the Zoo is doing to support conservation of those species (What the Zoo Does), and how the public can make a difference for those species (Make a Difference).
6. Each player should also be given four tokens that each represent \$1.00 in donations. Some ideas for tokens could be pennies, scraps of paper, pretend money from other board games, poker chips, small pebbles, etc.
7. Decide which player will go first.
8. Round One begins with the first player explaining the information in “the challenge” section of their project sheet. They can either read the information provided verbatim or restate it in their own words. Then they need to explain why they feel it is important to donate to their project based on the information they just gave.
9. The player to the left will then repeat step eight with their own project. Each player will get the chance to describe “The Challenge” and explain why their project should get donations based on that information. Older players should help younger players read the information.
10. Once all players have gone, everyone can take one of their donation tokens and place it in front of the project they feel should get the money. They are not allowed to donate to their own project.
11. Each player should go around and explain why they donated to the project of their choice. They should explain what **facts** they used to make their decisions and what **opinions** they used to make their decision.
12. Each player should count how many donations their project made and record it in the score sheet for round one. Donated tokens can be set aside.
13. Round Two will proceed in the same way as Round One, however, instead of discussing the challenge, players will choose one paragraph from the “What the Zoo Does” section to read and/or share. Players may choose any paragraph from that section of their choice.
14. When it is time for the players to donate their tokens, they should make their donations based only on the information from Round Two, not the information from Round One.
15. Players will again explain the **facts** and **opinions** used to support their decisions.
16. Round Three will proceed in the same way using a second paragraph from the “What the Zoo Does” section. If a player’s project has more than two paragraphs in this section, they can choose whichever they wish.
17. Round Four will proceed in the same way, except that the players will use the information from the “Make a Difference” section of their project.
18. Once all rounds have been completed, find the total donations for each conservation project by adding the scores of each round. The project that earned the most donations at the end of the game is the winner.
19. In the event of a tie, the projects with the tie can use all information from each round to make a final argument. Other players will then vote on which project is the winner.
20. After the winner has been decided, review the information in the “Make a Difference” section of that project. As a group, decide how you will help make a difference for that project. Choose one of the items on the project sheet, or visit <https://www.clevelandmetroparks.com/zoo/wildlife-we-protect/make-a->

[difference](#) for more ideas of ways you can contribute to this project. Create a plan on how you will follow through with that action.

Ohio's Learning Standards

English Language Arts Content Standards
Grade 4 Speaking and Listening Standards: Comprehension and Collaboration SL.4.3 Identify the reasons and evidence a speaker provides to support particular points.
Grade 6 Speaking and Listening Standards: Presentation of Knowledge and Ideas SL.6.4 Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.



Conservation Challenge Game Score Sheet

	Gorilla	Giraffe	Andean Bear	Asian Turtle	Lion & Cheetah	Illegal Wildlife Trade
Round 1						
Round 2						
Round 3						
Round 4						
Total						



Gorilla

The Challenge:

Gorillas are powerful yet shy and intelligent. Eastern gorillas (Grauer's and mountain gorillas) are severely affected by human activity. They are hunted and their habitat is being lost to mining and agriculture. Only 1,000 mountain gorillas remain in two populations in Rwanda, Uganda, and the Democratic Republic of Congo (DRC). Fewer than 3,500 Grauer's gorillas remain in DRC.

What the Zoo Does:

1. Cleveland Metroparks Zoo partners with the Dian Fossey Gorilla Fund International (DFGFI) to train young Rwandan scientists. DFGFI's Memoirs Program, in partnership with the Zoo (Case Western Reserve University) and the University of Rwanda, supports and conducts university student training at Karisoke™ Research Center to develop the next generation of scientists. Zoo staff has trained 28 Rwandan biology students in conservation science through this program since 2014.
2. Dian Fossey Gorilla Fund International (DFGFI) is protecting 150 gorillas in the Nkuba-Biruwe Conservation Area using monitoring and protection programs modeled after Karisoke™ Research Center's proven programs. The Zoo is working with DFGFI and local communities to double the number of Grauer's gorillas protected in this region by 2020.

Make a Difference:

You can make a difference for gorilla by:

- Recycling your cell phones and other small electronics through Eco-Cell, which reduces the demand for mineral mining in gorilla habitat and supports gorilla conservation efforts. Bring your retired devices to the Zoo and drop them in our Eco-Cell collection box!
- Advocate: Share what you're doing to make a difference for gorillas through social media, and encourage others to join you.



Giraffe

The Challenge:

Giraffe are one of the most recognized and beloved animals on the planet. Surprisingly, their numbers are declining across Africa, and the population has decreased by around 30% in the last 15 years. Poaching, habitat loss, and disease continue to threaten existing giraffe populations.

What the Zoo Does:

1. The Giraffe Conservation Foundation (GCF) East African Giraffe Coordinator works cooperatively with regional partners to provide the first-ever focal point for giraffe research and conservation across the region. In just a few years, this has facilitated the development of the first-ever National Giraffe Conservation Strategy and Action Plan in Uganda, the establishment of dedicated giraffe Working Groups in Kenya and draft of the first-ever National Country Profile of giraffe in Tanzania.
2. In the past three years, 17 giraffe were moved from an area threatened by oil drilling, to a more secure location in the south end of Murchison Falls National Park, and 15 were translocated to create a second sub-population in Lake Mburo National Park in south western Uganda.
3. The Zoo is collaborating with Giraffe Conservation Foundation (GCF), Michigan State University, and other partners to investigate an emerging giraffe skin disease and the potential threats it may present to giraffe populations. This work is the first collaborative and large-scale investigation into this disease and its potential impacts.

Make a Difference:

You can make a difference for giraffe by:

- Purchasing Snare to Wares items at the Zoo Conservation Shop. This art initiative recovers wire snares set to catch wildlife and turns the wire into beautiful sculptures that are sold to help protect wildlife.
- Donating to the Giraffe conservation project to support conservation and research efforts.



Andean Bear

The Challenge:

Elusive yet charismatic, Andean bears live in the most biologically diverse region on earth and represent an umbrella species - their population status is an indicator of the overall health of their ecosystem. Experts predict that that Andean Bears will be considered endangered in the next 20 years. Research on bear distribution and populations is needed to design effective conservation strategies for this

threatened species.

What the Zoo Does:

1. Tools and methodologies developed by the Andean Bear Conservation Alliance (ABCA) to study and monitor Andean bear populations are being used in 15 protected areas in Colombia, Ecuador, Peru, and Bolivia, and are the national monitoring standard in the Colombian National Park System.
2. Dozens of training workshops have been conducted for National Parks staff in Colombia, Ecuador and Peru, on the development of Andean bear population distribution and monitoring projects utilizing Andean Bear Conservation Alliance (ABCA) monitoring tools.
3. Andean Bear Conservation Alliance (ABCA) supported monitoring programs are being implemented in 9 priority Andean bear conservation landscapes and will produce the key information needed for Andean bear conservation and management plans.

Make a Difference:

You can make a difference for Andean bears by:

- Choosing certified shade-grown coffee, which is grown and harvested in ways that do not harm Andean bear habitat. Purchase our special Andean bear certified shade-grown coffee at the Zoo's Conservation Shop.



Asian Turtle

The Challenge:

Nearly 1/3 of all freshwater turtle and tortoise species are found in Asia and nearly 80% of these are threatened by large-scale, unsustainable trade for sale in food markets and traditional medicine.

What the Zoo Does:

1. Seizures, confiscations and voluntary surrenders of protected tortoises and fresh water turtles have significantly increased as a result of Asian Turtle Program's (ATP) collaborative efforts and law enforcement training in the region.

The ATP now receives frequent reports from local people regarding illegally obtained and held animals and animals offered for sale, helping to facilitate threatened species being recovered and moved to turtle conservation centers or released.

2. Public education programs, awareness campaigns and community activities focus on the value and importance of protecting Vietnam's turtles. University student workshops and internships train the next generation of young turtle scientists and professionals in Vietnam. Community education and awareness events and activities in 4 provinces have engaged thousands of community members and over 805 village members and 4,910 school students at key sites, and hundreds of young men have participated in community football matches focused around turtle awareness.
3. Key habitat sites and protected areas for critically endangered species are being identified, studied and protected. A community-based Species Habitat Conservation Area (SHCA) for the critically endangered Vietnamese pond turtle, the first of its kind in Vietnam, is currently under development.

Make a Difference:

- You can make a difference for Asian turtles and help us stop wildlife trafficking by being a responsible consumer. Never buy wildlife or products made from protected wildlife or their parts - or support vendors who sell them.
- Advocate: Share what you're doing to make a difference for Asian turtles through social media, and encourage others to join you.



Lion & Cheetah

The Challenge:

Lion and cheetah populations have decreased by more than 40% in the last 20 years, and are likely to halve again in the next two decades unless a major conservation effort is mounted to save them. Central to protecting lions and cheetahs is supporting the human communities that share their home in places like Tanzania's Ruaha landscape, a globally important region for carnivore conservation.

What the Zoo Does:

1. Cleveland Metroparks Zoo partners with Ruaha Carnivore Project (RCP) to address human-carnivore conflicts to help local communities and carnivores coexist. Livestock guarding dogs, community Lion Guardians and livestock corrals help local villages protect their livelihoods, and as a result attacks on livestock have decreased by 95% and lion killing in the area has decreased by more than 80%.
2. Making Education, health care and other important community benefits available helps decrease the cost of living alongside carnivores. More than half of local people now say they see benefits from carnivores, up from only two percent prior to Ruaha Carnivore Project (RCP) programs in the region.
3. Satellite collaring and camera trapping efforts engage local communities in carnivore monitoring and represent the first systematic data ever collected and published on large carnivore distribution, diversity and ecology in the important Ruaha landscape.

Make a Difference:

You can make a difference for lions and cheetahs by:

- Being a citizen scientist and helping identify wildlife in camera trap images from Ruaha National Park in Tanzania on Snapshot Ruaha.
- Save your broken or used holiday lights and extension cords throughout the year. Bring them to the Zoo over the winter holiday for recycling as part of the Lights for Lions program.



Illegal Wildlife Trade

The Challenge:

The illegal wildlife trade is consuming wildlife at alarming rates and is a grave threat to the survival of the earth's species. This escalating trade, a black market turned 'big business', is estimated to be worth more than \$15 billion a year. Elephant ivory and rhino horn might come to mind, but a myriad of plant and animal species are taken from their wild habitats and sold as pets, parts, products and more. Controlled by dangerous

international criminal networks, this illegal trade has been linked to terrorism and the trafficking of drugs, arms and people.

What the Zoo is Doing:

1. In partnership with Education for Nature-Vietnam (ENV) and other partners in Indonesia and Malaysia we are working with law enforcement agencies and conservation organizations to gather intelligence and investigate illegal wildlife trade cases. ENV's National Wildlife Crime Hotline and its outreach and awareness campaigns actively engage the public in combating wildlife crime and reducing demand for wildlife products. Advocacy efforts promote stronger legislation and legal protection for wildlife.
2. The US Wildlife Trafficking Alliance is a coalition of leading non-profit organizations, companies, foundations and media interests working together to reduce the purchase and sale of illegal wildlife products. Goals include raising public awareness on the wildlife trafficking crisis, reducing demand for wildlife products, and mobilizing companies to adopt best practices and educate consumers.
3. African Wildlife Foundation's Canine Detection Unity employ specially trained detection dogs to help stop trafficking by sniffing out illegal wildlife products like ivory and rhino horn at ports and check points. This increases seizure rates, deters traffickers and intercepts wildlife products headed for transit countries and destined for consumer markets.

Make a Difference:

- Never buy wildlife or products made from protected wildlife or their parts - or support vendors who sell them. Encourage others to do the same. Learn more at #BuyInformed.
- Look for and report illegal or suspicious activity related to wildlife being kept, sold, or traded - if you see something, say something!