KIDS CARING FOR CHEETAHS LESSON

Through the use of technology this class will provide a platform for students, without regards to their geographic location, to learn about cheetahs at the Pittsburgh Zoo & PPG Aquarium. In addition to increasing knowledge program goals include fostering a meaningful connection to our cheetahs and thus encouraging further engagement in cheetah conservation.

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GUIDE SUMMARY

Students will access a live web cam and prerecorded videos to learn about cheetahs at the Pittsburgh Zoo & PPG Aquarium. This flexible lesson guide allows for educators to customize the experience to meet students’ academic levels.

Each lesson activity contains extension ideas indicated by:

- [CHEETAH CUB] for less difficult extensions
- [CHEETAH ADULT] for more advanced extensions

Topics include:
Basic Cheetah Facts
How Cheetahs Are Cared for at the Pittsburgh Zoo & PPG Aquarium
Common Behaviors
Enrichment
Conservation Threats
Pittsburgh Zoo & PPG Aquarium Conservation projects helping cheetahs in Africa
How To Get Involved

Support provided by Richard King Mellon Foundation
Cheetahs are large cats that live mostly in Africa (a small population lives in Iran). They are well known for being the fastest land animals in the world. Cheetahs are different from other large cats like lions, tigers, and leopards in many ways. The most distinguishing difference is cheetahs cannot roar (they growl, chirp, and purr).

Cheetahs can live in a range of habitats, but they prefer open grasslands and savannas. They are adapted for running really fast. Large open areas give them room to chase down their prey.

Cheetahs are long and lean and built for speed! Adults weigh between 75 and 125 pounds and are 5.5 to 7.5 feet long, including their tails.

Cheetahs have light brown to golden colored fur with distinctive black spots. These markings give them excellent camouflage and make them difficult for both prey and predators to detect. They also have black stripes that run from their eyes to their mouth. These lines are like built in sunglasses. They help to reduce the glare from the sun which is helpful since cheetahs prefer to hunt early in the morning or late in the day.

Cheetahs are carnivores and hunt for other animals such as small antelopes (Thompson’s gazelles and impalas), hares, birds, warthogs, and rodents. They sneak up as close as they can to their prey then use a burst of speed to make the catch. Cheetahs can only maintain their top running speed for less than 30 seconds. They are successful in catching prey about 50% of the time.

Cheetahs live 10-12 years in the wild, and up to 17 years at the Zoo.
Cheetahs are neither strictly social nor solitary. They can be a little of both. Females are solitary except when they have cubs. Cubs stay with their mothers for around 18 months, then they often stick together for a few more months to master their hunting skills. Some males are solitary but most often they live in small groups called coalitions. Usually brothers stay together to form these groups. Males prefer to have set territories whereas females travel within ranges that overlap multiple male groups’ territories.

Cheetah cubs weigh less than one pound at birth! They are born in litters of three-five cubs. Cubs are born blind and completely rely on their mother. They stay in a nest for six-eight weeks while they grow. Their mom moves them to different nests during this time to avoid being found by predators. After 1.5 to two months the cubs will start to follow their mom when she hunts for food. This is a dangerous time for cubs. They have long tufts of fur, called a mantle, along their neck and down their backs to help with camouflage, but they are sometimes still spotted by larger predators such as lions or hyenas.

Cheetah cubs are very active and practice their balancing, stalking and chasing skills with their littermates. They begin hunting on their own at one year old and will stay with their mom for about 18 months.
Cheetahs are well known for being the fastest land animals on the planet. They can reach a top speed of up to 70 miles per hour in only three seconds! How do they do it? Their bodies are designed for speed!

**SPECIAL ADAPTATIONS**

- **LARGE LUNGS AND HEART**
  to move oxygen through their bodies

- **LONG, FLEXIBLE SPINE**
  allows them to stretch out their stride

- **LONG TAIL**
  helps with balance, steering, and sharp mid-air turns

- **SHARP EYESIGHT**
  to spot predators in the distance

- **LARGE NOSTRILS**
  allow for increased oxygen intake

- **SHORT, BLUNT SEMI-RETRACTABLE CLAWS**
  are like built in cleats for traction

- **HARD FOOTPADS**
  are like tire treads for traction and sharp, fast turns

- **THIN FRAME**
  with long, slender limbs allows them to be sleek and aerodynamic
ZOLA born May 2012
Zola is Rey’s mother. She is more tawny in color compared to her daughter.

REY born November 2016
Rey is Zola’s daughter. She has a darker coloration than her mother, and she still retains a fluffy ruff of fur on the back of her neck that is typical for young cheetahs.
LIVING THE CHEETAH LIFE ACTIVITY

Zookeepers work hard to provide the best care for the cheetahs, and all of the animals, living at the Zoo. A zookeeper’s main responsibilities include cleaning animal spaces, providing fresh food and water, observing behavior, and providing enrichment and training.

Step 1:
Have the students brainstorm what a typical day is like for the cheetahs and the zookeepers providing their care.

What might a daily routine for the cheetah consist of?

What are some daily zookeeper tasks?

Step 2:
Play the “Living the Cheetah Life” video. The video shows just what a day is like for the cheetahs and their zookeepers.

What did you learn about taking care of cheetahs at the Zoo?

What would your favorite part of the day be?

Step 3:
Can You Spot the Cheetah?
View the live Pittsburgh Zoo’s Cheetah Web Cam.

Extensions:
Compare & contrast taking care of cheetahs at the zoo to taking care of pets at home. Make a chart or draw a picture showing similarities and differences.

Research the training and skills required to become a zookeeper.
OH BEHAVE! ACTIVITY

Taking a closer look at cheetah behaviors and learning the importance of studying those behaviors.

**Step 1:**

What is behavior? The way in which an animal (or person) acts

Have the students name some behaviors. Tell them not to overthink this! Running, walking, climbing, sitting, etc. are all behaviors.

Distinguish between behaviors and emotions. An emotion is how you are feeling. We cannot really tell how an animal is feeling, but we can observe behaviors that may give us some insight.

Studying behavior requires strong observation skills. Observing means to notice or take note of something.

Observations can be made with all of your senses. Have the students think of observations they could make throughout the day at school using their different senses.

What observations can you make while at the zoo? (See, hear, and smell many animals, touch the goats or stingrays, taste treats from the concessions, etc.)

Why is studying animal behavior important? Have the students make a list reasons they think studying animal behavior is important. For example:

- Studying animals helps us to learn about them (habitat, diet, social structure, etc.)
- Can provide information to help animals in the wild
- Helps us design proper habitats, care plans, and enrichment
- It is interesting and fun!

**Step 2:**

Watch the Cheetah Behavior Video.

Tell your students they are going to practice observing cheetah behaviors. When the video begins they should take note of what the cheetahs are doing. You can simply have the students watch and make observations or they can call out behaviors as they see them. The beginning of the video is footage of cheetah behaviors meant for the students to observe. After the observation portion a zoo keeper will explain common cheetah behaviors.

Discussion:

- Were they surprised by what they saw? Why or why not?
- This video was filmed on a sunny summer morning when the temperature was 65°F. How might changing these variables affect the cheetahs’ behavior?

**Extensions:**

Use the photos on page 7 to compare & contrast Zola to Rey. How might a young cheetah’s behavior differ from an adult’s behavior?

Before watching the Cheetah Behavior video use the Scientific Method to predict the cheetahs’ behaviors. Research common cheetah behaviors and write a hypothesis of what you expect to see.
CHEETAH PLAY TIME ACTIVITY
Learn about animal enrichment and its benefits.

**Step 1:**
What does enrichment mean?
Enrichment provides physically and mentally stimulating toys, activities, foods, habitats, and/or sensory items meant to contribute to an animals’ overall wellbeing.

Ask the students what kind of enrichment they think cheetahs may enjoy. Often keepers take an animal’s physical adaptions into consideration when choosing enrichment. For example cheetahs are fast and enjoy chasing things so something that gets them running would be a good choice. They also have a great sense of smell. They enjoy new and interesting scents in their habitat.

Brainstorm how the cheetahs’ behavior may change when enrichment is offered?

**Step 2:**
Watch the [Cheetah Enrichment Video](#).

**Step 3:**
Discussion:
- How did the cheetahs’ behavior change when enrichment was offered?
- Are they surprised by what they saw?
- How is providing enrichment beneficial?
- Do you think the keepers ever try an enrichment item that the cheetahs end up not liking? Of course! We can’t predict with certainty how an animal will react to enrichment. The keepers will try different types of enrichment and make note of how an animal reacts.

**Extension:**
- What kind of enrichment do you give your pets?
- What toys and games do you like to play with for fun?
- If you were a zookeeper what new enrichment might you offer the cheetahs?
HOW YOU CAN HELP CHEETAHS! ACTIVITY

With fewer than 7,100 cheetahs left in the wild they are currently listed as Vulnerable. Cheetahs can be found in only 9% of their historic range and populations are predicted to decline by 53% over the next 15 years.

**Major threats include**

**Human-wildlife conflict:** Over 75% of remaining wild cheetahs live on rural farmlands alongside human communities. When predators, including cheetahs, threaten a farmer’s livestock it is also a threat to that farmer’s livelihood. Thinking there is no alternative, farmers will often kill predators.

**Loss of habitat and prey species**

Poaching and illegal wildlife trafficking: Cubs are smuggled into the exotic pet trade.

**How the Pittsburgh Zoo & PPG Aquarium helps**

Here at the Zoo, we partner with multiple conversation organizations like the Cheetah Conservation Fund, Cheetah Conservation Botswana, and the Endangered Wildlife Trust through the PPG Sustainability Fund Program to help cheetahs in the wild. All three organizations have instituted successful programs placing livestock guarding dogs (Anatolian & Kangal shepherds) with farmers as puppies. The dogs bond with the herd and use their presence and loud bark to scare away potential predators. This program has been highly effective at reducing predation rates (80-100% reduction in livestock losses) and thereby reducing the inclination by farmers to trap or shoot cheetahs. Please check out additional information and resources at the websites listed below.

**Step 1:**

Play the Cheetah Conservation Video. Learning is the most important thing you can do to help cheetahs. Visit the Zoo or watch the Cheetah Web Cam to keep learning!

**Extensions:**

- Visit the Cheetah Conservation Fund’s Kids page to learn more.
- Adopt a Pittsburgh Zoo & PPG Aquarium cheetah through the Adopt-An-Animal program.
- Fundraise for new enrichment items for the cheetahs at the Pittsburgh Zoo & PPG Aquarium.
- Become a Cheetah Conservation Fund Kid.

**Step 2:**

Tell us how you’re making a difference! If your students choose an extension project we want to hear from you. Email learn@pittsburghzoo.org with your project information.

**Conservation Partners**

- cheetahconservationbotswana.org
- cheetah.org
- ewt.org.za