

Collaborative Inquiry Project Grades 7-8

Teacher & Chaperone Guide

Thank you for registering your group for Cleveland Metroparks Zoo's Collaborative Inquiry Project. The following information is provided to ensure you have the necessary information to complete this program. Should you have any questions, please reach out to the Zoo's Registration Office at (216) 635-3391. We hope you have fun and enjoy your time at the Zoo.

This self-guided activity is designed to challenge students to work together and think in a scientific manner. They will make observations, work with and manipulate data, and draw their own conclusions as they learn through discovery.

Students will participate in the scientific inquiry process, requiring them to learn, reason, and think creatively. While working through each activity in this program, students will:

- Learn why heredity is an essential part of a successful zoo breeding program
- Explore genetic variation and learn why it is an important part of caring for animals
- Observe and record elephant behavior using an ethogram
- Develop a hypothesis based off of observations and critical thinking

IMPORTANT: This is a self-guided exploration for you and your students. The goal is for you to guide your students through a critical thinking process and for them to develop reasonable explanations to the data they gather. There are no definitive right and wrong answers in this process. Please assure your students that science is a way of thinking and finding wrong conclusions is just as important as finding conclusions that prove to be true.

BEFORE YOU ARRIVE

Purchase Zoo admission. Admission to the Zoo is not included with your program. Schools are eligible for discounted admission with advance reservations by contacting <u>programregistration@clevelandmetroparks.com</u> or (216) 635-3391.

WHERE TO GO

When you arrive at the Zoo, proceed to the Registered Groups window at the Box Office in the Zoo Ticket Plaza. This is where you will confirm your reservation and admission. Please have a printed copy of your Zoo Admission Invoice with the bar code for each of your chaperones. Once you check-in at the box office, they will activate the bar codes and you can proceed through the Zoo entrance. You are welcome to store lunches/coolers for your group at the Roaring Lion Café or Palava Hut, both near the entrance, at your discretion so long as these sites are not reserved for an event. These are shared-use facilities for the general public. The Zoo is not responsible for lost or stolen items.

The Collaborative Inquiry Project will begin at African Elephant Crossing. Upon entry to the Zoo, please proceed to this exhibit. Look for the Sydell L. Miller Elephant Care and Visitor Center and locate the wooden crate just inside the double doors on the right entrance of the building. The code to unlock this crate will be provided by email a week prior to the visit. Remove the bags inside the crate with your group name and begin your journey. There may be additional bags inside the crate reserved by another group. If you run into any issues, please call the Zoo's Registration Office at (216) 635-3391.

GETTING STARTED

This program is designed to be self-guided and can be completed in one large group, or broken up into smaller groups. You should receive one activity bag of materials for approximately every ten students in your group. If you have enough teachers/chaperones for each to lead a small group, or be responsible for each activity bag, it is ideal but not required. Each activity bag will contain three iPads and two printed teacher guide booklets, all of which will guide the leader step by step though each activity in this Collaborative Inquiry Project. There will be clipboards with student data sheets to help guide the group through each activity and serve as a space where students will record their findings.

DURING THE PROGRAM

Once you have determined the best way to conduct this program (in one, or multiple groups), distribute the activity bags and materials accordingly. If working in smaller groups, each group can begin with a different activity and rotate through all areas. Use the GPS units and coordinates to navigate to each activity location around the Zoo. There is no set way each activity needs to be completed in the course of this program. Activities are as follows:

- Heredity
- **Genetic Variation**
- Animal Behavior.

The program is designed to take two to three hours to complete, depending on group size.

ENDING THE PROGRAM

As each group finishes, have them check their bag to ensure each of the following is there before turning it in:

iPad

LEARN:

- GPS units
- clip boards
- rhino cards
- teacher guides
- pencil case

binoculars Please take the student data sheets with you for a post activity discussion in the classroom. Once the whole group has finished the program and each bag and its contents are accounted for, place all bags back into the wooden crate and

lock it. If you run into any issues, please call the Zoo's Registration Office at (216) 635-3391.

ADDITIONAL INFORMATION

To prepare for your field trip, please take advantage of the following Zoo resources:

Cleveland Metroparks Zoo's website – FutureForWildlife.org

DISCOVER: Animals & Wildlife Conservation Check out the Animals tab to learn more about the animals you hope to visit during your field experience. Click on Wildlife Conservation to learn how you and your students can take action and join our community that's working to secure a future for wildlife.

> Education The Online Resource Library, under Education\Science & Research is where you can find more in-depth animal information, pictures, and videos. It's a wonderful resource for students doing research on particular animal species. A variety of student activities can also be found in the Online Resource Library under Lesson Plans.

EXPLORE: Plan Your Visit

With 183 acres to explore, we want you to get the most out of your visit to the Zoo. Use the Zoo Map under the Tickets & Attractions tab to plan which habitats you would like your students to see.