Ape Cognition

Lincoln Park Zoo is home to the Lester E. Fisher Center for the Study and Conservation of Apes. The Fisher Center has researchers and scientists working in the Republic of the Congo, a country in central Africa, to learn more about gorillas and chimpanzees. Some scientists also study the apes that live at Lincoln Park Zoo. These studies help us learn more about apes and discover new ways to provide excellent animal care.

Cognitive Studies

These studies are called **cognitive studies**, which means they are focused on how the gorillas and chimpanzees think, learn, remember, and interact with their



environment. If you've ever been to Lincoln Park Zoo, you might have seen one of these studies in action! The apes solve different puzzles on a touchscreen computer. Each time they solve a puzzle correctly, they receive a favorite food reward, such as grapes or blueberries. These food rewards are an

important part of the apes' vet-approved diets. If the puzzle is solved correctly, there is a dinging sound, like a bell. If the puzzle is solved incorrectly, there is a buzzer sound. The food reward and sound help the apes learn how the puzzle works.

Solving the puzzles is always **voluntary** for the apes, meaning they can choose to solve the puzzle or not. Just like people, every ape is different. They each learn at a different pace, have different favorite food rewards, and may solve puzzles often or not at all. Researchers are always respectful of each ape's decision and choices.

Enrichment

These puzzles are not just for fun! Each puzzle is designed to help us learn more about the apes, including information about their personality and preferences. This information is useful for animal care staff, and helps us to make sure that we continue to provide the best possible care for each individual animal at Lincoln Park Zoo.

Cognitive studies are also a form of **enrichment** for the apes. This means that the puzzles provide them with choices and challenges designed especially for apes. These studies have shown that apes are very thoughtful about their environment, activities, and even their own troop members!

Ape Cognition

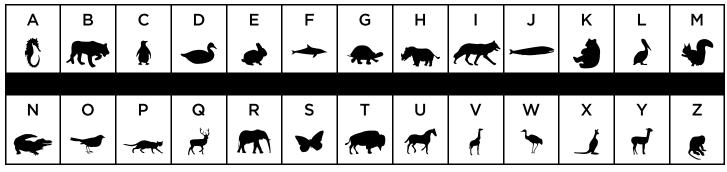
We can think of these cognitive study puzzles like a code. The apes must make sense of the images in front of them and the choices they make will help them learn how to solve other puzzles in the future.

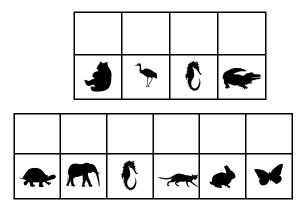
The first step in any study is to help the ape learn what the puzzle means. For example, a picture of a food item appears on the computer. If the ape touches the picture, they receive that food item as a reward. This helps the ape make a connection between the picture of the food on the screen and the food reward they receive. Next, the screen shows a choice between two food items and the ape chooses which one they prefer. Over time, researchers will learn each ape's favorite food!

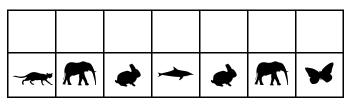
Now it's your turn to solve a puzzle! Below is a coded message. Can you solve it?

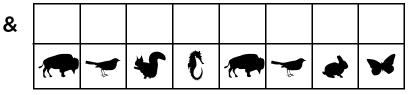
Directions: Each letter of the alphabet has been replaced with an animal.

Use the symbols to crack the code.



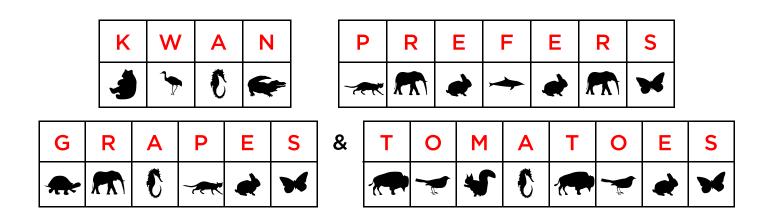






Ape Cognition

Answer Key



Additional Information

Kwan is the adult male silverback of the family troop at Lincoln Park Zoo. He is the father of Amare (a young male in a separate troop at the zoo), Patty, Nayembi, Bella, Mondika, and Djeke. Western lowland gorillas live in family groups or bachelor troops. Family troops consist of an adult male silverback, multiple adult females, and their offspring. Young males and females stay with their family troop until they reach maturity, and then leave for bachelor troops or other family troops. Bachelor troops consist of multiple young males. When gorillas are old enough to leave their family troops, but not old enough to have a family of their own, they sometimes form bachelor troops. This is a great opportunity for young males to practice exercising their dominance and prepare for their role as the leader of a family.

During study sessions, the researchers first offer the session to the dominant male silverback to respect his role in the troop hierarchy. Kwan typically approaches the touchscreen area first or very quickly displaces the other apes at the location to assert his dominance. The researchers will work with the other gorillas in their behind-the-scenes space, where their session will not be interrupted by the silverback.