

Apollo Middle School: 6th Grade Summer Writing Assignment

Directions: Read the prompt below. Then, read the articles, “Speaking Bonobo,” “When Animals Communicate, They Are Not Using ‘Language,’” and “What Is Language?” then respond to the prompt.

Prompt: You have been asked to write an argumentative essay for your school’s blog in which you take a position on whether or not animals can learn and use language. Use the information presented in the “Animal Language” passage set to support your points. Make sure to include information from all the passages in your essay.

Manage your time carefully so that you can

- read the passages;
- plan your response;
- write your response; and
- revise and edit your response.

Be sure to

- include a claim;
- address counterclaims;
- use evidence from multiple sources; and
- avoid overly relying on one source.

Your response should be in the form of a multiparagraph essay.

Source 1: Speaking Bonobo

Speaking Bonobo

by Paul Raffaele

1 To better understand bonobo intelligence, I traveled to Des Moines, Iowa, to meet Kanzi, a 26-year-old male bonobo reputedly able to converse with humans. When Kanzi was an infant, American psychologist Sue Savage-Rumbaugh tried to teach his mother, Matata, to communicate using a keyboard labeled with geometric symbols. Matata never really got the hang of it, but Kanzi—who usually played in the background, seemingly oblivious, during his mother’s teaching sessions—picked up the language.

2 Savage-Rumbaugh and her colleagues kept adding symbols to Kanzi’s keyboard and laminated sheets of paper. First Kanzi used 6 symbols, then 18, finally 348. The symbols refer to familiar objects (yogurt, key, tummy, bowl), favored activities (chase, tickle), and even some concepts considered fairly abstract (now, bad).

Apollo Middle School: 6th Grade Summer Writing Assignment

3 Kanzi learned to combine these symbols in regular ways, or in what linguists call “protogrammar.” Once, Savage-Rumbaugh says, on an outing in a forest by the Georgia State University laboratory where he was raised, Kanzi touched the symbols for “marshmallow” and “fire.” Given matches and marshmallows, Kanzi snapped twigs for a fire, lit them with the matches and toasted the marshmallows on a stick.

4 Savage-Rumbaugh claims that in addition to the symbols Kanzi uses, he knows the meaning of up to 3,000 spoken English words. She tests his comprehension in part by having someone in another room pronounce words that Kanzi hears through a set of headphones. Kanzi then points to the appropriate symbol on his keyboard. But Savage-Rumbaugh says Kanzi also understands words that aren’t a part of his keyboard vocabulary; she says he can respond appropriately to commands such as “put the soap in the water” or “carry the TV outdoors.”

5 About a year ago, Kanzi and his sister, mother, nephew and four other bonobos moved into a \$10 million, 18-room house and laboratory complex at the Great Ape Trust, North America’s largest great ape sanctuary, five miles from downtown Des Moines. The bonobo compound boasts a 13,000-square-foot lab, drinking fountains, outdoor playgrounds, rooms linked by hydraulic doors that the animals operate themselves by pushing buttons, and a kitchen where they can use a microwave oven and get snacks from a vending machine (pressing the symbols for desired foods).

6 Kanzi and the other bonobos spend evenings sprawled on the floor, snacking on M & M’s, blueberries, onions and celery, as they watch DVDs they select by pressing buttons on a computer screen. Their favorites star apes and other creatures friendly with humans such as *Quest for Fire*, *Every Which Way But Loose*, *Greystoke: The Legend of Tarzan and Babe*.

7 Through a glass panel, Savage-Rumbaugh asks Kanzi if it’s OK for me to enter his enclosure. “The bonobos control who comes into their quarters,” she explains. Kanzi, still the alpha male of this group in his middle age, has the mien¹ of an aging patriarch—he’s balding and paunchy with serious, deep-set eyes. Squealing apparent agreement, he pushes a button, and I walk inside. A wire barrier still separates us. “Kanzi can cause you serious damage if he wants,” Savage-Rumbaugh adds.

8 Kanzi shows me his electronic lexigram touch pad, which is connected to a computer that displays—while a male voice speaks—the words he selects. But Kanzi’s finger slips off the keys. “We’re trying to solve this problem,” says Savage-Rumbaugh.

Apollo Middle School: 6th Grade Summer Writing Assignment

9 She and her colleagues have been testing the bonobos' ability to express their thoughts vocally, rather than by pushing buttons. In one experiment she described to me, she placed Kanzi and Panbanisha, his sister, in separate rooms where they could hear but not see each other. Through lexigrams, Savage-Rumbaugh explained to Kanzi that he would be given yogurt. He was then asked to communicate this information to Panbanisha. "Kanzi vocalized, then Panbanisha vocalized in return and selected 'yogurt' on the keyboard in front of her," Savage-Rumbaugh tells me.

10 With these and other ape-language experiments, says Savage-Rumbaugh, "the mythology of human uniqueness is coming under challenge. If apes can learn language, which we once thought unique to humans, then it suggests that ability is not innate in just us."

11 But many linguists argue that these bonobos are simply very skilled at getting what they want, and that their abilities do not constitute language. "I do not believe that there has ever been an example anywhere of a nonhuman expressing an opinion, or asking a question. Not ever," says Geoffrey Pullum, a linguist at the University of California at Santa Cruz. "It would be wonderful if animals could say things about the world, as opposed to just signaling a direct emotional state or need. But they just don't."

12 Whatever the dimension of Kanzi's abilities, he and I did manage to communicate. I'd told Savage-Rumbaugh about some of my adventures, and she invited me to perform a Maori war dance. I beat my chest, slapped my thighs and hollered. The bonobos sat quiet and motionless for a few seconds, then all but Kanzi snapped into a frenzy, the noise deafening as they screamed, bared their teeth and pounded on the walls and floor of their enclosure. Still calm, Kanzi waved an arm at Savage-Rumbaugh, as if asking her to come closer, then let loose with a stream of squeaks and squeals. "Kanzi says he knows you're not threatening them," Savage-Rumbaugh said to me, "and he'd like you to do it again just for him, in a room out back, so the others won't get upset."

13 I'm skeptical, but I follow the researcher through the 100 complex, out of Kanzi's sight. I find him, all alone, standing behind protective bars. Seeing me, he slapped his chest and thighs, mimicking my war dance, as if inviting me to perform an encore. I obliged, of course, and Kanzi joined in with gusto.

[Source 2: When Animals Communicate, They Are Not Using "Language".](#)

When Animals Communicate, They Are Not Using “Language”

by Mia Lewis

1 Over the years, a number of research studies have shown that it is possible to teach an animal to communicate using sign language or specially designed computer keyboards. Bonobos or other primates raised in captivity and trained from birth may over the course of many years learn signs or symbols representing hundreds of words. They may even be able to string a couple of them together to make basic phrases. Dogs, and even birds, can be trained to recognize and respond to many words and signals.

2 But does any of this constitute the ability to use language? Many linguists, zoologists, and other scientists say no. They believe that the ability to use language is unique to humans. We have something in our brains that enables us to learn and use language in a way that animals never can.

3 Skeptical scientists insist that when chimpanzees or other animals are taught to use words or signs, more often than not they are simply performing a kind of trick in order to receive a reward—usually food. That is why the animals do not then go on to create more words of their own, or string them together into complex sentences. A human baby, on the other hand, rapidly progresses from saying single words to being able to form complex sentences.

4 One famous linguist compares the animals that participate in human language studies to Olympic athletes. “Humans can fly about 30 feet—that’s what they do in the Olympics,” Noam Chomsky said in an interview. In other words, just because you can train a gymnast to fly through the air, that does not mean humans can fly. Likewise, the chimps in these studies aren’t really using language, and the studies don’t tell us anything about actual animal communication. “If higher apes were incapable of anything beyond the trivialities that have been shown in these experiments, they would have been extinct millions of years ago,” Dr. Chomsky said.

5 Of course animals communicate with each other using various means—sounds, signals, even smells and vibrations. And as research technologies improve, scientists discover more and more about the complexity and sophistication of these communications. But all the same, those communication methods are not the same as language. They lack one or more of the many attributes that make up human language, such as the following:

Apollo Middle School: 6th Grade Summer Writing Assignment

- Displacement: the ability to communicate ideas about things not present in time or space;
- Discreteness: discrete units of sound being combined to make up meaning;
- Productivity: the ability to combine the words in a language to produce an infinite number of meanings.

6 Even if it isn't "language," the natural communication in animal species is more interesting and important to study than the tricks they can be taught. After all, what chimpanzees communicate to each other in the wild—without language—must go far beyond the 200–300 words they can be taught in a laboratory setting.

[Source 3: What is Language? \(Infographic\)](#)

What is Language?

Language is more than talking and hearing.
It is what we share when we do things together.
It is how we create a common ground.
It is how we collect shared meaning.

1. Communication
A message that goes in one direction.
A speaker speaks.
A listener listens.

2. Conversation
A message that goes two ways.
The speaker and the listener have understanding.

3. Collaboration
Taking part in thinking, planning, and deciding.
The speaker and the listener share a process.

4. Co-creation
Taking part in doing and making.
The speaker and the listener share an activity.

The infographic includes illustrations: a cat in the top left; a person pointing to a cat's face in a thought bubble; two people at a whiteboard; a person kneeling with a microscope and another standing; and a person climbing a tree with a bucket hanging from a rope.

Apollo Middle School: 6th Grade Summer Writing Assignment