

Animal Intelligence/Cognition

Some questions to ponder as we view the videotapes:

- What is intelligence?

- Is there evidence that animals can think? What are they thinking? What do they understand?

- How much are animals like us?

- Can animals learn? What evidence is there that animals learn? Do animals learn differently from human children? Are there variations in learning abilities in animals as with humans?

- Are animals intelligent? Are animals smart? What evidence can you provide? Are dolphins, rats, dogs, cat, primates, birds, intelligent? Compare and contrast.

- An interesting research project would be to find out how the government and military are using dolphins, pigeons and other animals in top secret missions.

- Students often ask: What's the purpose of training animals? How is this going to benefit humans?

- Can you name animals and their specific behaviors that indicate they display intelligent behavior. Is there evidence of language?
- Is personality related to intelligence?
- Can animals experience psychological problems, just as humans?
- Do animals show empathy and compassion?
- Why is there such a human-animal bond?
- How are animals and humans useful to each other? Is there an interdependence between humans and animals? What is it and how is it so?

Notes and Questions

- Sue Savage-Rumbaugh says that the overarching goal of the research undertaken by her Center was to develop technologies and teaching strategies designed to facilitate the learning of language by persons with mental retardation. In looking at her work with Kanzi, do you think that such work can find clues as to how to communicate with mentally retarded persons?
- How do the research approaches differ with each researcher teaching language and cognition to their animal subjects? Which approach do you think makes the most sense and why? Is it useful for these animals to know and comprehend the English language?
- Research now reveals that most of the apes that are being taught language are bilingual or trilingual. Can you identify this in the apes being presented on the videos?
- The machine that has been devised to display the "lexigrams" is the language called "Yerkish." Kanzi, a male bonobo, learned Yerkish entirely by watching human trainers and his own mother use the system. Now Kanzi can understand between two and three thousand spoken English words, as well as all of the 250-plus keys on the Yerkish keyboard.

- It is reported that Kanzi and others seem to understand many of the complexities of human language. Bonobos use Yerkish to discuss things they will do hours in the future, as well as things they did yesterday. They know, for example, the word "later," and use this term to convey activities they plan on doing at another time.
- From viewing the videos, please make note of the natural insights that these animals have as compared to humans.
- What other indicators are present that reveals that these animals have cognitive abilities?
- Do any of these animals express emotion? What specific emotions are expressed?