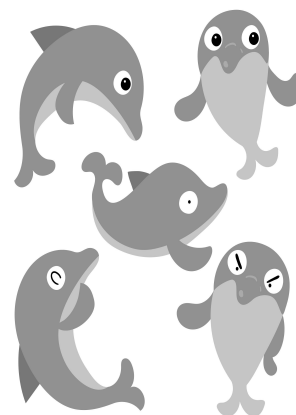


# Explained: Animal Intelligence (Netflix Series)



## 1. Before watching the video, discuss the following questions:

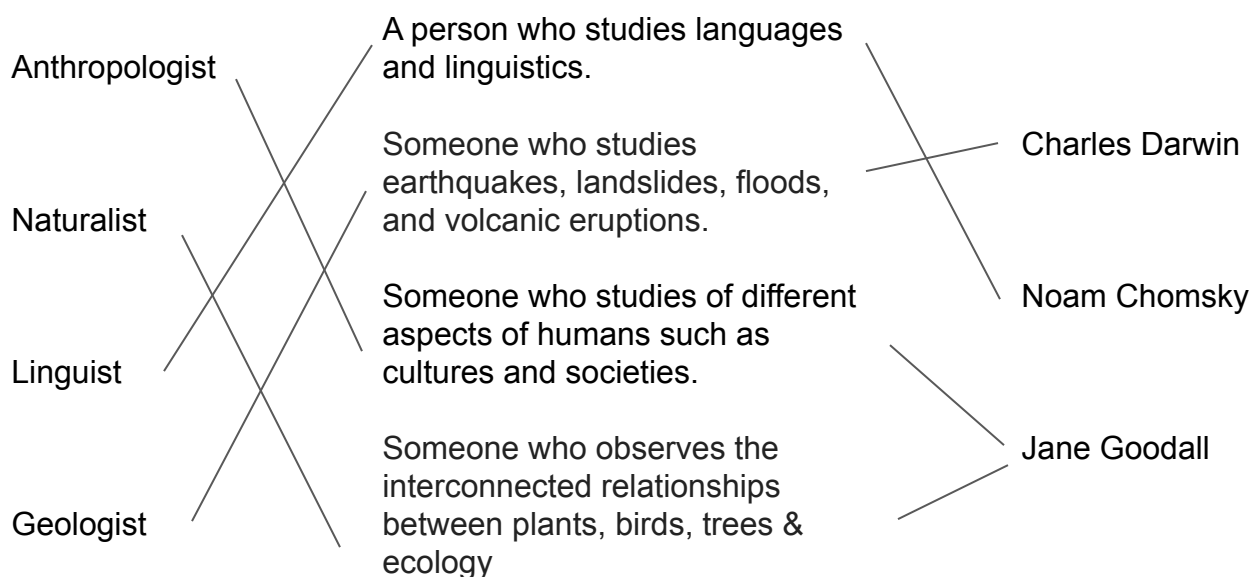
- How do you measure human intelligence? What does being smart mean?
- Are there any animals smarter than a human? Which one(s)?
- Can animals be taught how to do human activities?



## 2. Short Answer: Answer the following questions.

- What is a mirror self-recognition test and what animals can pass this test?  
A mirror self-recognition test is an experiment conducted by marking an animal's forehead with a red spot. Researchers are interested in whether the animal recognizes itself and the new red spot on its face. Humans, monkeys, dolphins, and disputably, a fish have passed this test.
- How do animals communicate with each other?  
Bees dance and whales sing to one another.
- What is symbolic communication?  
Symbolic communication is the use of hand signals to refer to other objects or ideas.

## 3. Below are some interesting careers related to the study of humans, animals, and our environment. Please draw lines to connect job title to its description, and finally, to a notable person in that field. An example is done for you.



## 4. Please fill in the sentences from the word bank:

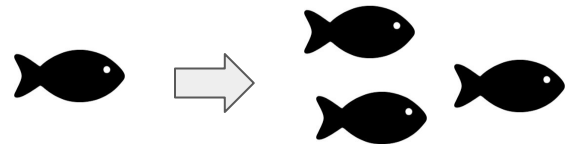
Psychology    Intertwined    Ratios    Condition  
 Perceptual    Stimuli    Converging    Empathy

- Human babies can sometimes become overwhelmed when we present them with too many stimuli such as toys, gadgets, and stuffies.
- We use a system of rewards and punishment to condition animals to act a certain way.
- Some animals show empathy towards other animals; for example, a chimpanzee may yawn after it sees another chimpanzee yawn.
- Understanding the thoughts, feelings, and behaviors of a human being are fascinating aspects of studying psychology.
- All animals have their own unique perceptual capabilities; in other words, they look at the world using senses different from humans.
- The survival of many wildlife species are deeply intertwined, they must work together in order to find food and shelter.
- After many years of animal intelligence studies, researchers are converging towards one theory.
- Human beings show one of the largest brain-to-body ratios.

## 5. Here are some collective names of animals:

Colony    Pod    School    Bed  
 Flock    Troop    Pack  
 Parade    Nest    Pride

## 6. To make some animals in English plural, we do not add "s". What is the plural form of these animals?



- A parade of elephants
- A pod of whales
- A pride of lions
- A bed of oysters
- A troop of monkeys
- A colony of rabbits
- A pack of wolves
- A flock of ducks
- A nest of turtles
- A school of fish

- Fish fish
- Elk elk or elks
- Calf calves
- Deer deer
- Ox oxen
- Sheep sheep
- Goose geese
- Buffalo buffalo
- Moose moose
- Octopus octopi

## 7. Provide reasons for or against the following statements. Please explain in 3 - 4 sentences.

1. Does the number of brain neurons determine how intelligent you are?  
Not quite. One theory suggests that intelligence is correlated with the number of brain neurons. For example, elephants have 260 billion neurons whereas humans only have 100 billion neurons. Even though elephants have more neurons, they can't seem to outsmart humans.
2. How do primates develop social intelligence?  
Primates learn to live in an environment with dominant personalities such as Alpha males and Alpha females. To survive, they develop the ability to live harmoniously with others in complicated social structures.
3. Are humans the only living species on Earth capable of solving problems?  
One definition of intelligence is the ability to solve a problem to achieve a goal. Jane Goodall discovered widespread tool usage by a wide variety of animals. Animals such as New Caledonian crows and other birds can make and modify tools to achieve their goals to survive.
4. Do any animals show an ability to plan for the future?  
Yes, some animals learn from memories and can learn to make plans for the future. Clark's Nutcracker is a bird that can hide up to 30,000 seeds in 6000 locations and find them again during the next season. Similarly, octopi show intelligence by using coconut shells as tools. They even store these tools to use in the future, a sign of being a planner!
5. When whales teach their offsprings new songs that they hear from other pods, what forms of intelligence are they showing?  
Whales show an ability to pass cultural learnings to other whales. They share responsibility and take care of future generations. (Answers may vary)
6. What are some examples of the perceptual capabilities of animals?  
Some animals have strong navigational skills, and some have strong sensory skills. For example, bats use echolocation to hunt for insects. On the other hand, salmon have internal magnetic compasses that help them navigate rivers each year.
7. How are some countries recognizing animals' rights and freedoms?  
The Spanish parliament granted human rights to apes recently, which protected them from experimentation and captivity. Similarly, the Indian government also banned dolphin shows because marine mammals demonstrated high levels of intelligence compared to other species.