

Name: \_\_\_\_\_

Date: \_\_\_\_\_ Period: \_\_\_\_\_

## Animal Behavior

Crash Course Biology #25

1. A stimulus can be either \_\_\_\_\_ (like the sound of a treat bag to a cat) or \_\_\_\_\_ (like the feeling of hunger).
2. \_\_\_\_\_ acts on advantageous behaviors and physical traits.
3. Behavior is really a product of a pair of factors:
  - \_\_\_\_\_ - or the physical structure of an animal
  - \_\_\_\_\_ - or the function of that morphology
4. The traits that make up an animal's morphology and physiology are often \_\_\_\_\_, and selection acts on those traits.
5. Not all behavior is coded in an animal's genes; some behaviors are \_\_\_\_\_. Even then, natural selection has favored \_\_\_\_\_ structures that are capable of learning.
6. Most behaviors have some \_\_\_\_\_ underpinning, and we call those behaviors \_\_\_\_\_.
7. To answer questions about evolutionary advantages, we have to figure out what \_\_\_\_\_ causes these behaviors, and what \_\_\_\_\_ the behaviors serve.
8. An animal behavior scientist is called an \_\_\_\_\_.
9. Niko Tinbergen developed a set of four questions aimed at understanding animal behavior:
  - How a behavior occurs
    - 1) What \_\_\_\_\_ causes it?
    - 2) What does the animal's body do in \_\_\_\_\_ to that stimulus?

These are the causes that are closest to the specific behavior, so are called the \_\_\_\_\_.
  - Why natural selection has favored the particular behavior
    - 3) What about this behavior helps this animal \_\_\_\_\_ and/or \_\_\_\_\_?
    - 4) What is the evolutionary \_\_\_\_\_ of this behavior?

These, as you can tell, are bigger picture questions, and they show us the \_\_\_\_\_ of the behavior.

10. Niko Tinbergen, Karl von Frisch, & Konrad Lorenz shared the \_\_\_\_\_ in 1973 for their studies of animal behavior.
11. Lorenz was known for his studies of \_\_\_\_\_ with graylag geese. With the geese, the imprinting stimulus was any nearby object \_\_\_\_\_ from the young.
12. Behaviors associated with finding and eating food is \_\_\_\_\_.
13. Natural selection acts on behaviors that allow animals to exploit food sources while using the least amount of \_\_\_\_\_ possible. This is known as the \_\_\_\_\_.
14. Some behaviors are adapted to allow an animal to \_\_\_\_\_ more by being better at finding \_\_\_\_\_.
15. \_\_\_\_\_ is about determining who in what group gets to mate.
16. Often, males of a species will find and defend a desirable habitat to raise young in, and females will choose a male based on their \_\_\_\_\_.
17. Other times, females might choose based on a behavior such as a mating \_\_\_\_\_ or other ritual.
18. Taking care of needs of other is known as \_\_\_\_\_.
19. William Hamilton came up with an \_\_\_\_\_ to explain how altruism fits with natural selection, which is best understood at the level of larger communities especially extended animal \_\_\_\_\_.
20. Altruism can evolve if the \_\_\_\_\_ of behavior is greater than the \_\_\_\_\_ on the individual,
21. The idea that a behavior helped the individual's relatives enough to make it worth it is called \_\_\_\_\_.