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.

LIVEWORKSHEETS

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 _____ _____.

LIVEWORKSHEETS