

Name _____ Date _____ Period _____

Video Worksheet: "Dogs and More Dogs"

BIOLOGY: Evolution

Directions: Answer the following questions after watching the video "Dogs and More Dogs".

1. What is special about the species of the dog that makes it so interesting to investigate?
2. There are two major hypotheses about how dogs evolved from wolves. They are:
3. What was the observation in the Tijuana dump that relates to the controversy?
4. Natural selection is the best way to explain physical difference between dogs and wolves. What are the major differences?
5. Wolves could not have floppy ears, patchy coats and curled up tails, since it wouldn't have helped them survive. So where did these features originate from? What does the experiment in Siberia show?
6. When looking at DNA from ancient bones at the Museum of Natural History, Dr. Leonard looked for accumulation of mutations as a time scale. She found that the domestication occurred a long, long time ago, which was unexpected for such a fast-evolving organism, even back to the Neanderthals. How was this explained?

7. Consider the Saluki. What are its advantages?

8. How were we involved in the evolution of the saluki dog?

9. How can we generalize about the variety of dogs we see today from this point of view?

10. What are the parts of the DNA that are involved in this evolutionary process?

11. Chasing sheep without eating them goes against the dog's instinct. How can we get dogs like Charlie?

12. What are the steps of behavior in the hunting process?

13. What is the problem with breeding show dogs? How is it explained at the level of the genes? What are the possible solutions?

14. How are dogs studies helping our medical research?

15. What is the conclusion from the behavioral problems of the Husky dogs?