Case Study 1: Dogs Breeds

Your teacher will assign you to a team of 3 to 5 people to research the breeding history of different dog breeds. Your team should choose at least one breed from data set 1, one breed from data set 2, and one breed from data set 3.

Data Set 1: Modern Breeds

- Packet 1A: http://en.wikipedia.org/wiki/Redbone_Coonhound
- Packet 1B: http://en.wikipedia.org/wiki/Jack_Russel_Terrier

Data Set 2: Older Breeds

- Packet 2C: http://en.wikipedia.org/wiki/St._Bernard_(dog) and http://en.wikipedia.org/wiki/Molosser
- Packet 2D: http://en.wikipedia.org/wiki/German_shepard

Data Set 3: Most Ancient Breeds

- Packet 3E: http://en.wikipedia.org/wiki/Afghan_hound
- Packet 3F: http://en.wikipedia.org/wiki/Basenji

Procedure

1. Fill out the table to record who will read, highlight, and sumarize which data packet.

Member 1	Member 2	Member 3	Member 4	Member 5
Dog Breed & Data Packet #	Dog Breed & Data Packet #	Dog Breed & Data Packet #	Dog Breed & Data Packet #	Dog Breed & Data Packet #

2. Pick up a data packet for your dog breed from your teacher and review the rows of the table before on the next page starting your reading, so that you know what the essential ideas are you are trying to summarize from the reading.

3. After reading and highlighting your packet, record your discoveries in the table on the next page. You can record brief bulleted notes, rather than full sentences.

4. Your teacher will tell you when to meet with all your group members and share out the main discoveries you each made. You will use each other's discoveries and ideas to write some hypothesis about the domestication of dogs from wild wolves in ancient times on the last 3 pages of this activity packet.

My Dog Breed: _____

Physical traits common to this breed.	
Behavioral traits common to this breed.	
Genetic diseases common to this breed.	
Where in the world was it first selectively bred?	
When does it appear selective breeding may have first begun for this breed?	

Name: _____ Explanation – Ancient Dog Domestication

Hypothesis #1 With your group, brainstorm types of trait variations people would have found most useful in wild wolves when they first started to hang around early human camps and settlements.

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Save this space for any notes you want to take or questions you want to record during group presentations for the first hypothesis.

Breeders select the most desirable individuals from a litter of offspring to keep, feed, shelter, raise, and eventually breed together with other individuals in future generations.

Hypothesis #2 What type of trait variations in offspring might have appeared in wolf cub litters that ancient humans would have found more desirable than other trait variations as they first began to breed wolves to become dogs?

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Save this space for any notes you want to take or questions you want to record during group presentations for the second hypothesis.

Selective breeding of dogs may have intentionally (or accidentally) removed some trait variations from dogs that would help them survive in the wild better without humans.

Hypothesis #3 What are some of the trait variations that might have been lost/removed through the selective breeding process that would put them at a competitive disadvantage for survival if they had to compete against wild wolves in an ecosystem?

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Save this space for any notes you want to take or questions you want to record during group presentations for the third hypothesis.