

Name: _____ Date: _____ Hour: _____

Priority Standard 5.0b Study Guide

1. Below is information about a mother and baby. The mother wants to know who is the father. Using what you know about blood types, decide who may be the father. Note: Mother, Father 3, and Father 4 are heterozygous for their specific blood types. (5.2.1)

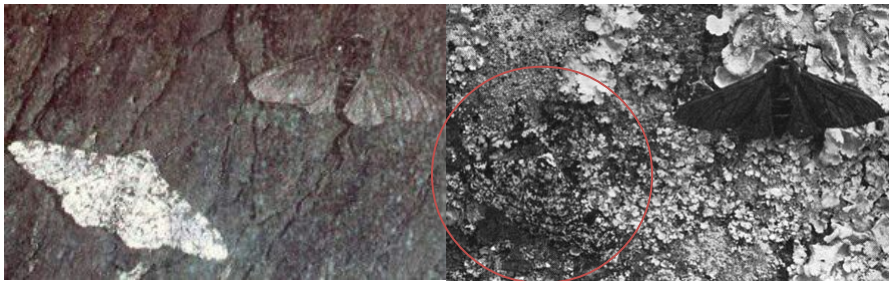
Name	Blood Type
Mother	A
Baby	AB
Father 1	AB
Father 2	O
Father 3	A
Father 4	B

2. Explain why you came up with your final answer as to who is the father. You may use a Punnett Square to answer. (5.2.1)
3. Using your Punnett square(s) from above, revise your model if it was determined that Father 4 was homozygous for blood type B. Does this change who the father may or may not be? Why or why not? (5.2.2)

4. The model below illustrates two species of peppered moths. Explain why the moths look different despite coming from a common ancestor. Give specific evidence from the model to support your answer. (5.3.2)



5. During the Industrial Revolution, London became black with soot. One of the moths tended to live longer and reproduce. Draw on the model below to reflect who is the most fit for the new environment. Next to the model, tell why (justify) these changes. (5.3.1)



6. Review Lamarck's and Darwin's theory of how change occurred over time. Be sure to explain a limitation to each theory. (5.3.3)