

Name _____

Period _____

AP Biology

Date _____

QUESTIONS: DIET AND PRIMATE EVOLUTION

Scientific American, August 1993

Dr. Milton argues that obtaining food is a major selective pressure in the evolution of primates. She compares the diet, behavior, and physical traits of spider and howler monkeys living in the same forest of Panama.

- 1. Describe the differences between the diet, behavior, and physical traits of spider and howler monkeys.

- 2. Which type of monkeys do humans resemble? Explain.

- 3. What selective pressures favored an increase in brain size in hominid primates?

- 4. Dr. Milton argues that despite adaptations favoring high quality (low fiber) food, human ancestors ate much more fiber than we do today. How did her studies on the digestion of fiber by chimpanzees support this idea?

- 5. Milton uses spider and howler monkeys as examples of two different strategies that monkeys use to cope with the nutritional challenges of life in the trees. Describe these two strategies and the adaptations involved. Give example of other non-primate animals that use similar strategies.
