

Name _____ S.N. _____ Article Copy # _____ Date _____ Per _____

WHAT, IF ANYTHING, IS A ZEBRA?

An Essay by Stephen Jay Gould (Paleontologist) in *Hen's Teeth and Horses's Toes*, 1994.

Read the article, and answer the following questions (on this sheet, in ink), based on the article. Be sure to ask any questions which occur to you as you read (e.g. meanings of certain words, etc.) on back of this sheet.

- _____ 1. How are rabbits and rodents related? A) rabbits are rodents; B) rabbits are closely related to rodents; C) rabbits are not closely related to rodents; D) rabbits are not related to rodents at all

2. If animals were classified according to brain size, humans and dolphins would be classified as "_____".
Why?

Why aren't they?

3. Why aren't children with Down's Syndrome considered to be more closely related to each other (due to many striking similarities) than to their parents?

4. How many living species of zebras are there? _____ What are their common names?

5. The genus *Equus* includes zebras, _____, _____, and _____

6. What is "Cladistics"?

7. What is a clade?

8. What are "sister groups"?

9. What is OUR sister group?

10. What is a "cladogram"?

11. Why are orangutans, chimps, and gorillas (the "Great Apes") not a true geneological unit?

12. What are "shared derived characters"?

13. What are "primitive characters"?

14. What are the clearest shared derived characters which chimps and gorillas share?

15. What does Bennett base her cladistic analysis of *Equus* on?
16. According to Bennett, are zebras a geneological unit?_____Why?
17. According to chromosome analysis, are zebras a geneological group?_____Why?
18. Why is there "no such thing as a fish"?
19. What is "phenetics"?
20. Why do phenetics and cladistics sometimes fail to produce identical lineages? (answer on back).