Mammalogy: Review Questions for Week 6 Archonta

1. For each of these taxa (orders, families, etc.) know the zoogeographic region(s), diagnostic characters (what distinguishes this taxon from its close relatives), adaptations, behaviors, life history, etc.
   a. Scandentia
   b. Tupaiidae (tree shrews)
   c. Dermoptera (colugo or flying lemurs)
   d. Primates
   e. Prosimians
   f. Lemuridae (lemurs)
   g. Daubentoniidae (aye-aye)
   h. Loridae (lorises)
   i. Galagidae (bushbabies & lesser bushbabies)
   j. Tarsiidae (tarsiers)
   k. Anthropoidea
   l. Ceboidea (New World monkeys including marmosets)
   m. Cebidae (some New World monkeys including marmosets)
   n. Cercopithecidae (Old World monkeys)
   o. Cercopithecinae (baboons, mandrills, macaques, mangabeys, guenons)
   p. Colobinae (colobines, proboscis monkey)
   q. Hylabatidae (gibbons & siamangs)
   r. Hominidae

2. Compare and contrast the Macroscelididae and Tupaiidae in terms of diagnostic characteristics, adaptations, diversity, distribution, diet, locomotion, etc.

3. What is unusual about parental care in one species of the Order Scandentia?

4. Why are pen-tailed tree shrews of biomedical interest?

5. Which trait is unique to primates? What other traits are used to characterize this order?

6. What is vertical clinging and leaping? Which primate families are characterized by it?

7. How does the morphology, diet, niche of aye-ayes differ from the other members of its order in the region where it is found?

8. Discuss the defense mechanisms of slender lorises.

9. For bush babies and tarsiers, list the most important ways in which they are similar, and list the most important ways in which they are different.

10. Why are lemuroids mostly diurnal and lorisoids nocturnal?

11. In what characteristics are Old World Monkeys similar to New World Monkeys? In what characteristics are they different?

12. What strategies have led to Golden lion tamarins being a conservation success? What new threat do they now face?

13. Which family of primates includes semi-brachiators? Brachiators? What is the difference between these two behaviors?

14. In what way are Howler monkeys similar in behavior (social and locomotor) to gibbons? Different?

15. What is the main diet of colobine monkeys? Where does most digestion of their food take place? Name two ecomorphs from orders other than primates.

16. How does neoteny explain the evolution of humans from chimp-like ancestors?
17. Neotony has been used to explain the difference between adult humans and adult chimps. Explain what this means.

18. What is the significance of *Ardipithecus* to human evolution?

19. Certain life history characteristics (characteristics of the species biology, not human caused) make most primate species more susceptible to extinction. What are the three most important features of their life history (hint - mainly characters that make species K-selected, but there are other behavioral features as well) that make them susceptible?

20. Why are non-human primates likely candidates for extinction? Discuss intrinsic and extrinsic factors involved. What strategies are being used to prevent this?

21. Why did golden lion tamarins become endangered? What strategies have led to this species being a conservation success? What new biological threat does it now face? What in particular new strategy needs to be done to maintain high effective population size?

22. For one species in the Order Primates that is NOT an ape or gibbon (i.e., not a hominoid)
   a. Name an endangered species and give its geographic distribution.
   b. Name the family to which it belongs
   c. For this species discuss a characteristic that is unique to this species (or not found in many others) that increases the likelihood it will go extinct.
   d. For this species discuss what has been done or needs to be done (something practical) to ensure the survival of this species.

23. For one species in the Order Primates that is an ape or gibbon (i.e., a hominoid)
   a. Name an endangered species and give its geographic distribution.
   b. What life history characteristics (characteristics of the species biology, not human caused) make species more susceptible to extinction?
   c. For this species discuss what has been done or needs to be done (something practical) to ensure the survival of this species.

24. What is the family of the species in the picture below? What are the most important characteristics of this family? If it is an ecomorph of another mammal, name the ectomorph and discuss the similarities. Name and describe the characteristic locomotion of this family.

25. Identify and discuss the why this species of mammal is interesting (using information from mammalogy lecture or the textbook). If it is an ecomorph of another mammal, name and discuss

26. For this species, give the common name and/or family, identify and discuss the why this species of mammal pictured below is interesting (using information from mammalogy lecture or the textbook). If it is an ecomorph of another mammal name and discuss

27. For each of these families, know the zoogeographic region(s), diagnostic characters (what distinguishes this family from its close relatives), adaptations, behaviors, life history, etc.

28. Identify the animals pictured below to order, family, what zoogeographic region(s) the family is found and write something about its natural history (behavior, ecology, diet, reproduction) that makes THE FAMILY of this animal interesting (to your professor, who will judge the quality of your answer) (4 pts)