

Answer the following questions, as well as, include any other analysis of your data that you feel is important. When answering these questions, you should be using complete sentences and restating the question as part of your answer. For these questions, think about answering them based on information you learned from your dissection. In areas where you need more information than what you got from the dissection, use your book, or other resources.

1. How does this organism accomplish the following life functions:

- a. Feeding
- b. Respiration
- c. Movement
- d. Reproduction
- e. Internal Transport
- f. Excretion
- g. Response

2. Habitat / Ecology - Where does this organism live? How does it fit in the world? What impact does it have on the environment or other organisms?

3. Describe several key distinctive features of mammals

4. Explain how the three major types of mammals (placental, marsupial, and monotreme) differ in terms of reproduction and anatomy

5. How are mammals similar to other land vertebrates?

6. Describe how mammals have changed over time. The second link above will be especially helpful - click on "Oligocene" and "Miocene" when you get there.

The last link is also helpful - click on "vertebrate evolution"

6. Describe the mammalian vertebrate system. How does it differ from other vertebrates?

7. Rats are known to be notorious for spreading deadly diseases.

a) Name the common disease(s) associated with rats.

b) What role does the rat play in spreading/communicating these diseases?

8. Describe the rat's feet, snout, ears and eyes. How do they function according to where it lives and what it eats?

9. What kind of symmetry does it have?

10. What is meant by bilateral symmetry?

11. Explain why a starfish is not bilaterally symmetrical?

12. Are you bilaterally symmetrical?

13. Explain your answer and name two internal organs that are bilaterally symmetrical.

14. What is dissection?

15. Why would a scientist do a dissection?

16. What is the difference between surgery and dissection?

17. What are two problems that make a dissection more complicated than just cutting?

