1. Why is Amphioxus described as a simple organism?

2. What does Amphioxus have in common with us?

3. Name one positive benefit of having vertebrae for Chordates.

4. When Chordates quadrupled the number of Amphioxus genes what innovations took hold?

5. What advantages do animals with jaws have?

6. What were the first animals with bony jaws?

7. What protects the brains of fish?

8. Why does the narrator say, “Evolution is not a straight march forward”?

9. Name one very different looking Chordate.

10. Describe possibly the first limbed vertebrate to exit the ocean and succeed on land?

11. Why could the monitor lizard be successful on land?

12. What kind of reptile abandoned the ability to walk?

13. What do snakes accomplish with their mouths that other vertebrates do with their limbs?

14. Name three consequences of the asteroid that hit the Earth 65 million years ago.

15. Name three similarities between humans and great apes.
16. Name three ways in which humans and great apes are dissimilar.

17. Define these vocabulary terms in your own words:

   Nerve Cord:

   Gill Slit:

   Segmented Muscle:

   Notochord:

   Vertebrate:

   Scaffolding:

   Asteroid:

   Metabolism:

   Primate:

Supplemental Questions

1. What are the five major groups of vertebrate animals?

2. Name two ways the animals in the above group are alike? Two ways they are different?

3. Why can’t an ant get as big as an elephant?

4. Describe in detail one animal behavior you observed in the episode?