Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_ Score \_\_\_\_\_\_\_\_\_\_\_\_\_

Please visit <http://evolution.berkeley.edu/evolibrary/article/arthropodstory> then answer the following questions. See the Weebly for additional ‘cool’ videos.

1) More than \_\_\_\_\_\_\_\_ % of all described animal species are arthropods.

2) What are the most abundant animals in the ocean?

3) Give an example of arthropods in the following areas:

-Antarctica: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

-Arctic Ice Pack: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

-South America: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

-Hydrothermal Vents: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

-Everest: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

-Australian Desert: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4) Why are arthropods so successful?

5) What are the five branches of the arthropod tree?

6) What are the 4 inherited characteristics of arthropods?

7) Give an animal example of the 3 types of body symmetry:

8) Explain body segmentation in an arthropod.

9) What is the hard exoskeleton made of?

10) Paired limbs can have many functions, what are the 5 outlined in the Web Quest?

11) Which of the animals from the checklist are actually arthropods (submit your answer on the page too)?

12) What are the main characteristics of these 3 classes?

-Insects:

-Chelicerates:

-Crustaceans:

13) The first arthropod fossils were found during the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ period.

14) Based on the available evidence, are the following organisms arthropods? Explain why or why not. What group would it belong to?

*-Sanctacaris:*

*-Opabinia:*

*-Pikaia:*

*-Hallucigenia:*

*-Onychophoran:*

*-Naraoia:*

16) Why are arthropods so small?

17) Describe the molting process and why arthropods are so susceptible at those times.

18) Compare and contrast the respiration of crustaceans/spiders and insects.

19) Using your own words, summarize the evolution of arthropods.

20) Choose your favorite arthropod you have learned about throughout this Web Quest. Create a short paragraph on why this is your favorite.