

TERRESTRIAL ARTHROPODS: THE CONQUERORS

QUESTIONS

1. What is special about arthropod appendages?

2. What are the advantages of this type of appendage?

3. List the different uses of arthropod appendages.

4. How did arthropods succeed in the arms race?

5. How is a Swiss Army knife a good metaphor for the arthropod?

6. Give two examples of different ways land arthropods breathe.

7. Why does the narrator use the word turbocharged to describe the tracheal system?

8. What habitat helped arthropods invade land?

9. Why does Bill Shear think that arthropods invaded the land more than once?

10. What features of the arthropod body plan allowed them to invade land?

11. What did the first land arthropods eat?

12. Name three types of land arthropods and what they eat.

13. What is metamorphosis?

14. What are the advantages and disadvantages of undergoing metamorphosis?

15. What animals, besides arthropods, undergo metamorphosis?

16. Where do dragonfly larvae live?

17. What changes do they go through during metamorphosis?

18. What are the advantages to having a freshwater larva?

19. Why do you think dragonflies haven't changed in millions of years?

20. Why was the evolution of wings so important for arthropods?

21. Why do you think the leading edge of a wing is thickened?

22. Why is the insect body plan so successful?

23. What innovation did spiders develop? What advantage does this give them?

24. Write a few sentences describing three roles that insects play in the natural world to help maintain ecosystem services.

Define in your own words these vocabulary words at the end of the video.

1. Book Lung

2. Trachea

3. Pollination

4. Detritivore

5. Metamorphosis

