

Writing About the Book

On a separate sheet of paper, write the answer for each of the following.

Extending the Story

1. In the epilogue, the authors state, “If all of humanity were to disappear, the remainder of life would spring back and flourish. . . . If all the ants somehow disappeared, the effect would be exactly the opposite, and catastrophic.” Assume that catastrophe has struck and that ants have disappeared from the Earth. Write a short narrative in which you describe the Earth’s ecosystem without ants. Include which insects or animals you think would take over for ants in the balance of nature.

Thinking About Assumptions

2. When discovered, the Ur-ant provided the missing link in the evolution of ants. Even with this information, the behavior of ancient ants is only an assumption. Describe what scientists think *Sphecomyrma freyi* ants were like. Include the basis for these assumptions.

Responding to a Review

3. One reviewer of *Journey to the Ants* in *Nature* stated, “Hölldobler and Wilson have done for ants what Levis did for denim.” Write an essay in which you react to this statement. Do you think ants are a popular topic? Does *Journey to the Ants* make ants an accessible topic? Do you think ants have universal appeal? Be sure to explain your opinions.

Evaluating Characters

4. Hölldobler and Wilson possessed interests and personality traits that led them to become myrmecologists. Compare and contrast their initial experiences with ants, which initiated their studies and research. Include how these experiences affected their interest in ants.

Writing a Journal Entry

5. Imagine that science has progressed to the point that you can shrink to the size of an ant. Then suppose that you are working as a miniaturized researcher in an ant colony. Write an entry that describes a day in the colony. Describe the process of preparation that allows you to go into the colony undetected, your activities, and what you observe while there.

Analyzing Scientific Methods

6. Much of Hölldobler and Wilson’s research is done in the field. However, they are also able to conduct laboratory research. Describe how the combination of these study methods contributed to their comprehensive books on ants. Cite specific references to explain your answer.

Testing on the Book

On a separate sheet of paper, write the answer for each of the following.

Critical Thinking and Writing

1. The queen is the focal point of an ant colony. Describe the role of the queen in relation to the other ants in the colony. Cite specific examples of the queen's importance.
2. The authors state, "Ants, like humans . . . succeed because they talk so well." Explain how ants create a social system based on communication. Compare and contrast their social system with that of humans.
3. Biologists have a basic understanding of how ant societies work. They also know that ants came into being 100 to 120 million years ago. What are the theories as to why ant societies came into being? Include specific examples of information on which the theories are based.
4. Symbiosis is the result of reciprocity among organisms. Describe how ants' adaptive participation in symbiosis has affected their evolution, as well as that of trophobionts.
5. Compare and contrast the evolution of ants with that of humans.

