

Skills Worksheet

Directed Reading B

Section: Asking About Life (pp. 8–11)

1. What is the first step in a scientific investigation?

observe or ask a question

2. The study of living things is called life science or biology.

STARTING WITH A QUESTION

3. The existence of single-celled algae, giant redwood trees, and 40-ton whales illustrates the amazing diversity of life.

4. What is one question you could ask about any living thing?

What does it eat?
How does it grow?
How does it reproduce?

INVESTIGATION: THE SEARCH FOR ANSWERS

5. After you ask a question, what is your next step?

form a hypothesis

6. What is the only kind of information scientists use?

reliable sources, like peer reviewed scientific journals
or they do it themselves with accurate measuring tools

Match the correct description with the correct term. Write the letter in the space provided.

observation

7. looking at the birds that visit your bird feeder

a. experimentation

research

8. searching for an answer on the World Wide Web

b. observation

c. research

experimentation

9. doing a test to find out the hardness of a mineral

Directed Reading B *continued*

WHY ASK QUESTIONS?

- c.** 10. Why do scientists conduct investigations?
- a. so scientists can argue
 - b. to give scientists something to do
 - c. because the answers to scientific investigations affect all living things
 - d. because the answers to scientific investigations are permanent

- a.** 11. Finding a cure for polio and learning more about AIDS are two ways in which scientists
- a. fight diseases.
 - b. preserve food so it lasts longer.
 - c. get rid of water pollution.
 - d. find new sources of food.

- c.** 12. Some **life** scientists do experiments to find out if they can
- a. build a faster airplane.
 - b. discover a new planet.
 - c. make **plants** grow faster or larger.
 - d. perfect a car fueled by hydrogen.

- environmental problems** 13. Besides diseases and food sources, what is another thing that life scientists investigate?
- a. rocks and minerals
 - b. the sun
 - c. computer science
 - d. environmental problems

14. What is a major cause of many environmental problems?

pollution

15. Why should we try to decrease pollution?

to preserve natural habitats so that ecosystems will function properly for our future generations of offspring to use and enjoy. Also to prevent the extinction of endangered species.

16. What are two examples of the way the actions of humans harm some living things?

- 1. Hunting the last Dodo bird and today's grey whales.
- 2. Polluting chemical waste runoff into lakes and streams making fish become poisonous to birds.

17. How do scientists hope to develop plans that will ensure the survival of endangered species?

by making laws and government restrictions against hunting and pollution. Also by tagging and counting how many individuals are left of the endangered species and protecting their habitat.