

## Laboratory Skills Checkup 4 \_\_\_\_\_

### Performing an Experiment

Read the following statements and then answer the questions.

1. A scientist wants to find out why a rattlesnake follows the trail of a bitten mouse rather than that of an unbitten mouse.
2. The scientist goes to the library and reads all about the senses of rattlesnakes. The scientist discovers that rattlesnakes have poor vision but a good sense of smell.
3. Based on this information, the scientist guesses that the rattlesnake uses its sense of smell to follow its prey. The scientist further guesses that the snake senses the smell of its venom in the bitten mouse and so follows the mouse.
4. To test these ideas, the scientist goes to the laboratory and does the following:
  - a. Allows a rattlesnake to bite a mouse.
  - b. Drags the mouse across a stretch of sand.
  - c. Releases the snake from its cage.
5. The scientist does the following with a mouse that has *not* been bitten by the snake:
  - a. Drags the mouse along a stretch of sand.
  - b. Releases the snake from its cage.
6. The scientist notes the rattlesnake's behavior in each case. The snake acts uninterested in the trail of the unbitten mouse. The snake follows the trail of the bitten mouse.
7. The scientist writes in a notebook: "It appears as if rattlesnakes follow the scent of their venom when tracking down an animal they have bitten."

#### Questions

- A. Which statement contains a **conclusion**? \_\_\_\_\_
- B. Which statement refers to **research**? \_\_\_\_\_
- C. Which statement contains a **hypothesis**? \_\_\_\_\_
- D. Which statement contains **observations**? \_\_\_\_\_
- E. Which statements describe an **experiment**? \_\_\_\_\_
- F. Which statement **supports** the **hypothesis**? \_\_\_\_\_
- G. In which statement is the **problem** defined? \_\_\_\_\_

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H. Which statement describes the experimental **control**? \_\_\_\_\_

I. Which statement describes the experimental **variable**? \_\_\_\_\_

J. Which statement contains a **generalization**? \_\_\_\_\_