



## DIAGNOSTIC TEST, CONTINUED

- \_\_\_\_\_ 7. To test whether a plant grows better in acidic or basic soil, the amount of water and sunlight the plants receive must be controlled as factors called
- observations.
  - dependent variables.
  - independent variables.
  - constants.

- \_\_\_\_\_ 8. Which of the following statements is true of the substance produced in the simple chemical reaction depicted in Figure 2.2?

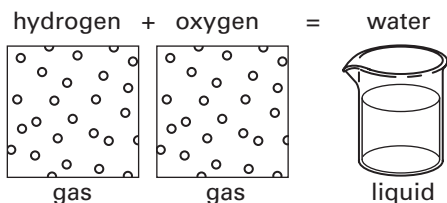


FIG. 2.2

- It is in a different physical state than the original substances.
  - It is identical to the original substances.
  - It is a compound, just like the original substances.
  - It contains more atoms than the original substances.
- \_\_\_\_\_ 9. Which of the following processes enables cells to stay within the limited range of conditions in which they function best?
- |                 |                |
|-----------------|----------------|
| a. biodiversity | c. homeostasis |
| b. adaptation   | d. metabolism  |
- \_\_\_\_\_ 10. Elements such as carbon can move through the environment and organisms in a cycle because living and nonliving things interact in
- |                |               |
|----------------|---------------|
| a. cells.      | c. organisms. |
| b. ecosystems. | d. species.   |