In your textbook, read about observing and hypothesizing.

Answer the following questions.

1. What is meant by *scientific methods*? _____

_____

2. What is a hypothesis? _____

_____

3. How is a hypothesis tested? _____

In your textbook, read about experimenting.

For each item in Column A, write the letter of the matching item in Column B.

Column A		Column B
_____	**4.** A procedure that tests a hypothesis by collecting information under controlled conditions	**a.** dependent variable
_____	**5.** In an experiment, the group in which all conditions are kept the same	**b.** experimental group
_____	**6.** In an experiment, the group in which all conditions are kept the same except for the one being tested	**c.** independent variable
_____	**7.** The condition that is changed by the experimenter	**d.** experiment
_____	**8.** The condition being observed or measured in an experiment	**e.** control group

Use each of the terms below just once to complete the passage.

experimental results	**experiment(s)**	**hypothesis**	**laws**
scientific journals	**theory**	**valid**	**verify**

When **(9)** _____ are reported in **(10)** _____ , other scientists may try to **(11)** _____ the results by repeating the **(12)** _____ . Usually when a(n) **(13)** _____ is supported by data from several scientists, it is considered **(14)** _____ . Over time, a hypothesis that is supported by many observations and experiments becomes a **(15)** _____ . Some well-established facts of nature, such as gravity, are recognized as **(16)** _____ .