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## INTRODUCTION TO CHEMISTRY

## Chapter Quiz

Classify each of these statements as true (T) or false (F). Write the letter on the line.

- \_\_\_\_\_ 1. Chemistry is the study of matter and the changes that matter undergoes. 1.1
- \_\_\_\_\_ 2. Pure chemistry is the use of scientific knowledge to attain a specific goal. 1.1
- \_\_\_\_\_ 3. Inorganic chemistry is the study of substances that contain oxygen. 1.1
- \_\_\_\_\_ 4. Agriculture is one area where chemistry has played an important role. 1.2
- \_\_\_\_\_ 5. In chemistry, as in all sciences, patterns can be discovered by making observations and doing experiments. 1.3

Fill in the word(s) that will make each statement true.

6. The \_\_\_\_\_ is a logical approach to the solution of scientific problems. 1.3
7. An experiment is a means for testing of a(n) \_\_\_\_\_. 1.3
8. A candle gives off light and heat. These are examples of \_\_\_\_\_. 1.3
9. A proposed explanation for observations is a(n) \_\_\_\_\_. 1.3
10. Successful scientific outcomes are more likely when scientists collaborate and \_\_\_\_\_. 1.3

Write your answer in the space provided.

11. For the following word problems, state whether there is enough information to solve the problem. If not, tell what is needed.
- a. A chemist must fill 10 test tubes with sulfuric acid. What volume of sulfuric acid does she need? 1.4
- b. Earth is  $9.3 \times 10^7$  miles from the sun. If light travels at  $1.86 \times 10^5$  miles per second, how many minutes does it take light to reach Earth from the sun? 1.4