Name _____ Class _____ Date _____

SECTION 1-2 **The Scientific Method—A Way of Problem Solving** *(pages 18–29)*

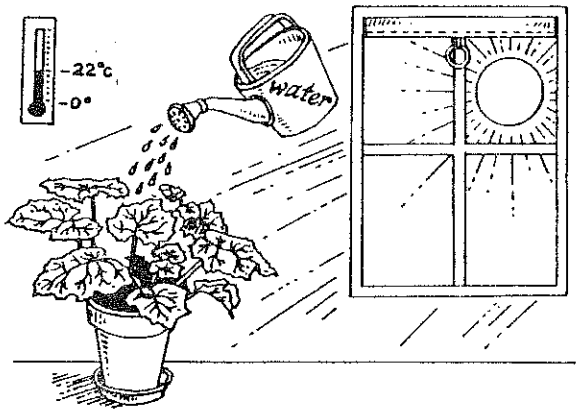
KEY CONCEPTS

- The basic steps of the scientific method are:
  - Stating the problem
  - Gathering information on the problem
  - Forming a hypothesis
  - Performing experiments to test the hypothesis
  - Recording and analyzing data
  - Stating a conclusion
  - Repeating the work

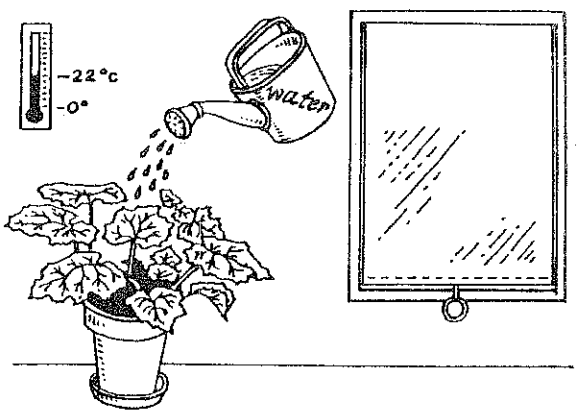
Vocabulary Skills: Understanding Terms

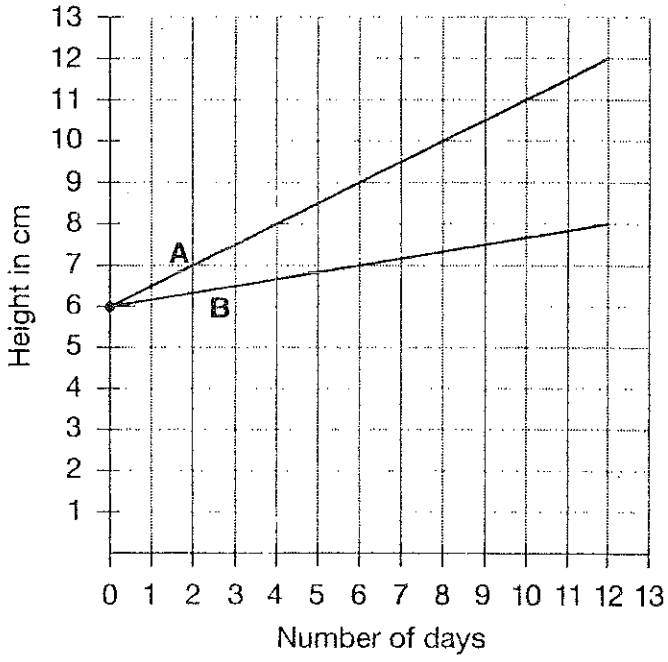
The pictures below show a typical scientific experiment. Look at the pictures carefully, then answer the questions on the following page.

A.



B.





1. What is the independent variable in this experiment? How can you tell?

2. Which experimental setup is the control? Why?

3. What is the dependent variable in this experiment?

4. Which axis on the graph is the independent variable on?

5. Which axis on the graph is the dependent variable on?

6. Identify the data collected for this experiment.

7. Write a possible hypothesis for this experiment.

8. Write a conclusion for this experiment.