INTRODUCTION

Learning is a complex process in all organisms. We can begin to understand the process of learning by identifying some of the methods by which humans learn.

- repetition—observing and copying the actions of others
- trial and error—repeating the efforts until a solution is found
- memorization—a way to increase our body of knowledge
- reasoning—drawing conclusions based on past experiences

In this investigation, you will complete various tasks in order to study these methods of learning.

MATERIALS

Letter "L" puzzle pieces in an envelope; word lists A, B, and C on separate pieces of paper

PROCEDURE

Part A: The Letter L Puzzle

1. Work in pairs. Take an envelope that contains the pieces of the letter L puzzle.

2. One member of the pair acts as a timekeeper. That person times how long it takes for the other person to solve the puzzle. The solver begins to arrange the puzzle pieces into the letter L when the timer says "go." The timer looks away from the person solving the puzzle.


4. Repeat this process until each person has solved the puzzle three times.

5. Prepare a bar graph that shows the elapsed time of each trial on the vertical axis and the trial number on the horizontal axis.
Part B: Word Lists

1. Work by yourself. Carefully read through list A three times. Put this list away. On a blank piece of paper, write down all the items on the list that you can remember. Try to write the words in the same order as they appeared on the list.

2. Repeat step 1 with list B.

3. Repeat step 1 with list C.

4. Determine your score for each list. Count one point for each item in the list you remembered. For the purposes of calculating your score, the order of the items recalled does not count.

INTERPRETIVE QUESTIONS

1. What evidence was there that learning occurred in the activities in Parts A and B? What were the primary methods by which learning occurred in each of these activities?

2. Discuss how the learning activities in this investigation are related to the skills and habits needed to become a successful learner.