

Enrichment Activity

Exploring the Nervous System

Directions: Every day your central nervous system processes thousands of signals and prepares a proper response. To help you understand better how the central nervous system works, try the three experiments below with a partner. Then analyze what happened by answering the questions.

Experiment A. Have your partner hold your arms down against your sides. For about 30 seconds, press your arms upward as hard as you can. Then have your partner let go.

1. What happened? _____

2. Why do you think this happened?

3. What part of the brain was involved?

Experiment B. Stand on one leg and balance yourself for one minute. Now try balancing on one leg for one minute with your eyes closed. Have your partner do the same.

4. Which balance attempt was harder (eyes open/closed)? _____

5. Why do you think this attempt was harder?

6. Which part of the brain was involved?

Experiment C. Cut a piece of paper into the shape of a dollar bill. Have your partner hold the paper on its side, high over your head, and then let it fall. See if you can catch it with one hand as it flutters to the floor. Try this five times.

7. Was the paper easier or harder to catch with successive tries? _____

8. What part of the brain was working? _____

9. What do you think was the flow of messages to and from the brain?
