

# Chapter 1.1 - Scientific Method

## SCIENCE 9 ACTIVITY

### *Which hand is quicker?*

**OBJECTIVE:** use a step by step process to answer a question

**MATERIALS:** notebook, reaction card

**BACKGROUND:** Most people are either left or right-handed, that is, one hand dominates over the other in terms of dexterity and coordination. Some people are ambidextrous, doing things equally well with both hands. Now consider reaction speed. Is one hand quicker than the other? Use the procedure below to find out.

#### **PROCEDURE:**

- A. Write the title of this activity in your notebook and date it.
- B. Next in your notebook, list two things you did where you had to react quickly with your left and two things with your right hand.
- C. Which seems most likely to you; that your left hand is quicker, that your right hand is quicker or that both hands react at the same speed? Write your guess in your notebook.
- D. Put your guess to the test. Have your partner hold the reaction card for you in a vertical position. You place the thumb and forefinger of one hand on opposite sides of the zero line about 5 cm (one inch) apart. Without telling you, your partner will let go of the reaction card. Catch the card between your thumb and forefinger. Read the number off of the card that is closest to your thumb and record the data in your notebook. Repeat this two more times. Then, repeat the whole thing over using your other hand. Then switch roles.
- E. Calculate the average of the 3 catches for each hand and record it in your notebook. Compare the averages. Was your guess right? Answer this question in your notebook.
- F. In your notebook, write a short letter (two or three sentences) explaining this activity to a friend or relative.