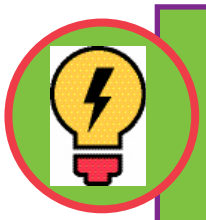
DO IT!

Color Code!

Explore what happens when you try to complete two simple tasks at the same time. The human brain is an amazing organ, constantly analyzing and interpreting the world around us. Often, when we are presented with two stimuli at the same time, interference occurs and our brains become confused. The "Stroop Effect" was named after psychologist J. Ridley Stroop, who discovered that when we experience multiple stimuli our reaction times can change.



You'll Need

1) Pencil and Paper
2) Markers of Different Colors
3) Stop Watch

1. **Introduction.** Our brain can get confused when it tries to process two different stimuli at the same time. Scientists study the brain to see what happens when it gets these "mixed messages." The Stroop Test is one way to do this.

2. **Research**. Start with the original Stroop Test to explore how it works. Find a copy of this test at cerebroedu.org/educator-resources.

3. **Try It.** There are two rounds to this activity. Have your youth work in pairs, with one person using the stopwatch to time the other while they complete both rounds. Then ask the youth to switch roles and repeat.

4. **Round 1.** Look at the list of words on Image 1 and identify the colors of the words out loud, one at a time.

5. **Round 2.** Repeat with Image 2.

6. **Compare times.** Which list was easier to read? Why?

7. **Brainstorm.** Explain that when you are looking at the list of words in Round 2, your brain is getting mixed messages. Deliver the challenge: Explore how reaction time differs when testing different types of "mixed messages." Ask each pair of girls to make a list of different stimuli to test (e.g., color and shape, color and words, color and animal, number and animal).

8. **Test**. Have each pair create new test sheets using the stimuli they chose. Remind them to time how long each task takes and record.

9. **Analyze and share findings.** As a group, discuss these questions: Did you get different reaction times when testing different stimuli? Which stimuli were more difficult than others? What implications do these findings have for everyday life?