

## Stroop Test

### INSTRUCTIONS

1. Work in groups of 3. Decide who will take on each role and write down their names on the data table (page 2):

1. Reader — reads the test set according to the task instructions
2. Timer — times how long it takes for the reader to complete the task
3. Checker — keeps track of how many errors the reader makes

**Group members should keep the same roles for all of the tasks. If you want to change roles, use a different data table to record the results.**

*Note: You can also work in pairs. One person will be the reader, and the other will be both the timer and the checker.*

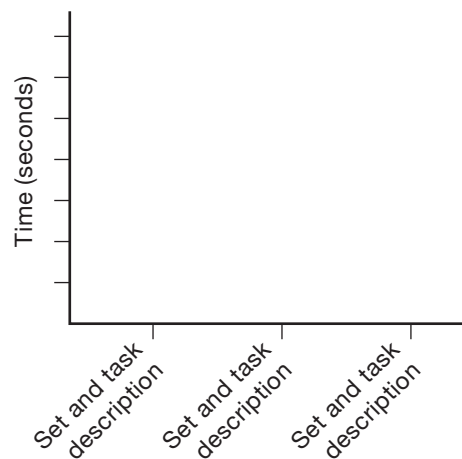
2. Determine what your tasks will be and write them down on the data table. You should plan at least one non-conflicting and the starred conflicting task. Examples of tasks include:

- Set A — Read the words (non-conflicting)
- Set B — Say the colors of the letters (non-conflicting)
- Set C — Say the colors of the letters (non-conflicting)
- Set D — Read the words (conflicting)
- \* Set D — Say the color of the letters (conflicting)
- Set D — Hold chart upside-down and say the color of the letters

3. Begin. Give the answer key for sets C and D (page 5) to the checker. As the reader completes the task, the checker makes tally marks for each error. If the reader makes more than 3 errors, stop and have them begin again. Record notes and observations below the data table.

4. (Optional) Repeat conflicting trials to see if time and errors improve.

5. (Optional) On a separate page, make a bar graph that compares the time it takes to complete each task. Be sure to use data only from error-free trials. See the example on the right.



### WHAT IS GOING ON?

The Stroop Test is a measure of working memory and attention. When the colors and words are conflicting, the brain must work hard to filter out competing signals. Reading is such an automatic task that the brain needs to actively inhibit it and direct its attention instead to saying the color of the letters. The resulting delay is called the Stroop Effect.

When the colors and words match, or when the words are neutral, there is no conflicting information for the brain to have to filter out.

**TEACHERS** — For more extension ideas and to find even more classroom activities, visit <http://teach.genetics.utah.edu/content/memory/>

NAME \_\_\_\_\_

DATE \_\_\_\_\_

**STROOP TEST DATA TABLE**

**Reader** \_\_\_\_\_

**Timer** \_\_\_\_\_

**Checker** \_\_\_\_\_

<b>Test Set</b> (A, B, C...)	<b>Task</b> (E.g., "read words" or "say color of letters")	<b>Conflicting?</b> (Yes or no)	<b>Errors</b>	<b>Time</b>

**Notes**

**Observations**

SET A

red	green	red	yellow	green
red	blue	red	yellow	red
blue	yellow	yellow	green	red
blue	yellow	green	blue	yellow
green	green	red	blue	green
blue	red	yellow	blue	red

SET B

blue	green	red	yellow	green
red	blue	green	blue	red
yellow	red	yellow	green	red
blue	yellow	green	blue	yellow
green	green	red	yellow	green
blue	red	yellow	blue	red

SET C

xbrq	lbihg	ozt	xbrz	mppaa
lbihg	ozt	lbihg	lbihg	xbrq
ozt	xbrq	mppaa	xbrq	mppaa
mppaa	lbihg	ozt	mppaa	xbrq
lbihg	mppaa	lbihg	mppaa	ozt
xbrq	ozt	mppaa	xbrq	lbihg

SET D

red	green	blue	yellow	blue
red	blue	red	yellow	red
green	yellow	yellow	green	red
blue	yellow	green	blue	yellow
green	green	red	blue	green
blue	blue	yellow	blue	red

SET C – ANSWER KEY

blue	green	red	yellow	green
red	blue	green	blue	red
yellow	red	yellow	green	red
blue	yellow	green	blue	yellow
green	green	red	yellow	green
blue	red	yellow	blue	red

SET D – ANSWER KEY

blue	green	red	blue	green
green	blue	yellow	red	green
red	yellow	green	blue	blue
yellow	blue	green	red	yellow
yellow	red	red	yellow	blue
blue	green	blue	red	yellow