**Mental Rotation Experiment -- Report Worksheet**

***Student \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Section \_\_\_\_\_\_\_\_\_\_\_\_***

1. **Introduction: Hypothesis.** Briefly introduce the topic of mental rotation and describe the purpose of this experiment. Based on the background readings, state the main hypothesis of this experiment as a testable prediction.

2a. **Method: Participants.** Briefly describe the participants in this survey project, including number of participants, gender ratio, and a rough age range.

2b. **Method: Variables.** Every experiment involves at least one independent variable (a variable that gets manipulated) and at least one dependent variable (a variable that gets measured). Name and describe the two independent variables and the two dependent variables in this experiment and explain why each of them is an independent or dependent variable. *Hint: Look at your data sheet.*

2c. **Method: Procedure.** Briefly explain what a “mental rotation” task is. Then describe the procedures this experiment used to present the stimuli and collect the behavioral responses from the participants. *Hint: if necessary, go back through the experiment again to help you remember the procedure.*

3a. **Results: Angular Rotation.** Using the statistical analysis from the pooled data, describe the angular rotation results for the individuals who participated in this experiment (including the mean RT and PC values, as well as the t-value and p-value from each of the t-tests for angular rotation).

3b. **Results: Gender.** Using the statistical analysis from the pooled data, describe the difference between females and males in performance on the mental rotation task (including the mean RT and PC values, as well as the t-value and p-value from the t-test for gender).

4a. **Discussion: Comparison with Previous Research.** Briefly restate the main findings from this experiment. Did the pooled results support the main hypothesis you stated above? In what ways did the procedures used in our experiment differ from those used by Shepard and Metzler (1971)? Compare our pooled results to the Shepard and Metzler results. Do both studies show the same basic pattern of results? Why were the RT values lower in our experiment than in Shepard and Metzler’s experiment?

4b. **Discussion: Comparison with Individual Results.** Overall, how similar were your own individual results to the pooled results? Describe how your results are similar or different from the pooled results.