

STEAM Reaction Time Project

Purpose: Students will design and perform an experiment testing their reaction times when exposed to various stimuli.

- Students may work in groups of 4 or 5 or their choosing
 - Ms. Gonzales may change groups if students show that it is not a good fit
- Students may use computers
- Materials for the experiment must be either to be able to be brought from home or found in the classroom
- Potential projects
 - Reactions involving your sight
 - Reactions involving hearing
 - Reactions involving your muscles
 - Reactions involving reflexes
 - How fast you move in a scenario
 - An experiment similar to that of our stoplight and circle websites from our previous classes

Experimental Design Write-up:

Students need to write a paper about their experiment. The paper must include

- A description of the experiment
- A list of the materials being used
- A description about the science behind it
- A handful of trials done by the members of your group (data must be recorded)
- A description of your results and discuss why you and your group members think those outcomes occurred

Schedule:

Week 1:

Students will choose groups and start brainstorming ideas for a team reaction time experiment. If and when the experiment is approved they may begin working on their experimental design

Week 2:

Students will have the entire period to work on and finalize their experimental design rough draft

Week 3:

Students will need to finish and turn in their final draft of experimental design

Week 4:

Students will (hopefully) get to conduct experiments with the class 😊