

Investigation: Measuring and characterizing human reaction time
ECU Graduate TA Professional Development
August 5, 2020

Investigation Groups

Everyone has been assigned to an investigation group of four or five people. Each group will interact in a breakout session where they will collaborate on the investigation.

Breakout session instructions

1. Go to the Teams breakout channel with the same number as your group.
2. The group leader (first person listed in the group) should start the breakout session by pressing the **Meet** button on the upper right of the Teams window.
3. Everyone in the group should join the breakout meeting to collaborate on the investigation.
4. The session leader will make an announcement when it is time to return to the main session.

Guiding Question

Do two people have the same reaction time?

Experiment

Your task is to design and carry out a procedure to measure a person's reaction time using the online reaction timer at <https://nrich.maths.org/reactiontimer> and compare two measured values accounting for uncertainties in order to answer the guiding question.

Argumentation

Each group will prepare a three-slide PowerPoint (PPT) presentation with their argument.¹ The presentation slides should be:

1. Description of procedure. What did you measure, and how did you measure it?
2. Results. This can include a graph, a table, or a result from your measurements.
3. Argument. Answer the guiding question. Use your results to justify your argument.

Select a presenter from each group. The presenter will give the group's PowerPoint during the argumentation session. The other members of the group will be responsible for contributing to the discussion about the each groups' presentations.²

¹Note that face-to-face labs use a whiteboard for the argumentation session instead of a PPT. The three-slide PPT presentation is used in online labs.

²Face-to-face labs conduct the argumentation session by rotating non-presenters through the room to interact with presenters from other groups while online labs use a PPT presentation to multiple groups.