Measuring reaction time of a human reflex action

The purpose of this activity is:

* to find out about the variation in speed of human reflexes within a group of students
* to develop a plan for a practical investigation
* to learn when a ‘double-blind’ test is used and why
* to find out about the effect of caffeine on human nervous reaction times

### Procedure

SAFETY:

* Take care moving around the room with metre rulers – to avoid hitting one another with them, carry them vertically and close to you at all times.
* If using hot coffee as your source of caffeine, take reasonable care as with any hot liquid.
* Carry out the part of the experiment involving consumption of drinks in a classroom or dining room rather than a laboratory where chemicals or biomaterials have been used.

### Investigation

1. Watch your teacher’s demonstration of the basic practical method. Devise a detailed set of instructions for someone carrying out this investigation to control as many variables as possible.

**QUESTIONS**

1. Describe your practical method here. What variables are you controlling?
2. How many times will you repeat the test with each subject? Why have you chosen this number?
3. Make notes here about the ‘double-blind’ test for the effect of caffeine on our reactions. What are the important features of this test?