

GNSC 1110L LAB PRE-TEST

EXP#1 - MEASUREMENT OF HUMAN RESPONSE TIME

1. What is the objective of this experiment?

2. The time between the stimulus and the response of a system is called the response time. In this experiment, what is the stimulus? What is the response?

3. In this experiment, the meterstick will be a freely falling body once it is released. The time of its fall is related to the distance by which formula?

4. Solve the following equation of a freely falling object for time t .

$$d = (1/2)gt^2$$

5. True or False

In this experiment, a meterstick will be thrown straight down by one person and the other person will try to catch it as soon as possible.

6. True or False

In this experiment, the procedure involves having one person drop a meterstick, and then, as quickly as possible, says "ready", so the partner can catch it.

7. In this equation, $d = (1/2)gt^2$, what does d stand for? What does g stand for?

8. True or False

In this experiment, the person who catches the meterstick will have his/her fingers apart by about 10 cm to get ready.

9. You actually need only one piece of equipment for this experiment. What is it?

10 In your opinion, what would affect the human response time? Try to name at least three things.

11 There is no right or wrong answer for the result of this experiment. Some people might have a longer than average response time. So if you are one of those people, what should you do when you are out on the road driving? Think about these and question #10 above, so you can put them down in your conclusion.

ANSWERS:

4. $d = \frac{1}{2}gt^2 : 2d = gt^2 : 2d/g = t^2 : t = \ddot{O} (2d/g)$

5. False

6. False

8. False

9. Meterstick