

Make Your Own Qualitative Constant Velocity Graph

Group Members _____ , _____

Period _____

Name of Group (letter or number) _____

Purpose: To help you review for the constant velocity exam, you will create your own video using a smart phone, upload it to YouTube, and create a position vs. time and velocity vs. time graph of the motion.

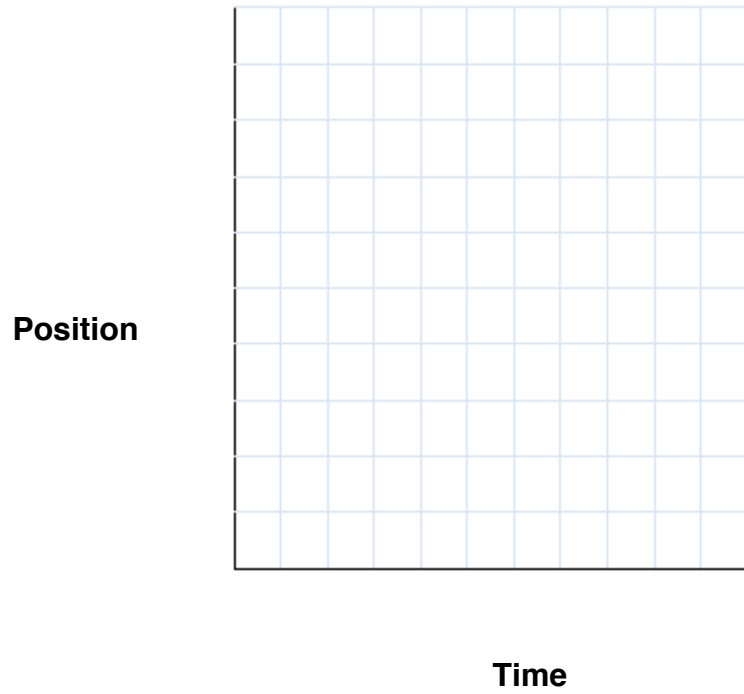
Requirements:

1. You need to have at least two people moving in your motion graph. You can have three if you'd like to make it more complicated.
2. Find a location where you will want to film. You can go outside to find a location.
3. Basic Motion Requirements:
 - Someone moving in a positive direction for part of the time
 - Someone moving in a negative direction for part of the time
 - Someone stopped for part of the time.

Instructions:

1. Get a group: You can use either three or four members in your group for this project. Make sure at least one of your group members has a smart phone that takes video.
2. Plan:
 - Decide what kind of motion graph you would like to make (number of people moving- 2 or 3)
 - Decide what kind of motion each person will make
3. Video: Use your smart phone and video the motion. Make sure that the people who are moving move perpendicular to the direction the smart phone is filming. The far left of video will be considered to be position 0 unless otherwise indicated in all videos. Your teacher will demonstrate how they want you to do the videotaping.
4. Upload the video to YouTube, title the video the letter or number of your group, and select "unlisted." DO NOT make your video public.
5. Email the link to your physics teacher.
6. Create a position vs. time graph and a velocity vs. time graph below. This will be the "key" for your graph. The graphs are qualitative, not quantitative except for time. Please make sure the time is accurate on your graph. We will assume for all videos that the f

Position vs. Time Graph



Velocity vs. Time Graph

