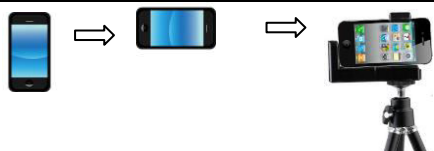


Script to prepare video clip(s)

Manuscript Title:	Setting of Gas chromatography		
ID: 32065			
Material:	Time:	Date:	Location: Your Lab

Position of your smart phone



Take the video using your smart phone in horizontal position instead of vertical

Smart phone on the tripod reduces the shaking of picture

Set-up

Materials and Reagents

[Gas chromatography](#)

Action		Subtitle
1	Open the valve for the gasses (helium, air, and nitrogen) that are connected to the gas chromatograph (GC).	Wide shot
2	Turn on the GC and then the computer.	
3	Clicking the icon of the GC software Chemstations or other software	
4	Once the software has opened, parameters can be set by going to the Instrument drop down menu and then selecting Quick Setup.	
5	Set the split ratio of a 30:1.	Close view <In computer: Use the cursor to change the ratio>
6	Set the injection port temperature to 300°C.	
7	Set the temperature of the oven and any ramp times.	
8	Set the temperature of the flame ionization detector to 250°C.	

Making an Injection

Materials and Reagents

[Syringe, sample, internal standard](#)

Action		Subtitle
1	Wait until the Green Ready signal appears in the upper left corner of the screen.	
2	To prepare the sample for injection, first rinse the syringe with three small portions of your sample.	
3	Then, load 0.5 – 1 micro liters of sample into the syringe.	
4	Then pull the syringe plunger back to add a 1 micro	

	liter plug of air.
5	You use the internal standard method for calibration as small injection errors can greatly influence results.
6	Guide the fragile syringe into the (hot) injection port. The syringe needle should be at least 2/3 down into the injection port.
7	Gently but firmly, tap the plunger and then touch the Start button of the GC.
8	This action will begin data collection.
9	Remove the syringe from the GC.

Data Collection

Materials
and
Reagents

[Gas chromatography, printer](#)

Action	Subtitle
1	The run time can be viewed on the computer.
2	Data collection can be stopped at any time by either clicking on the Stop tab or by going to the Run Control drop down menu and selecting Stop Run.
3	When data collection is complete, either through a manual stop run or when the preset run time is complete, a report will be generated.
4	Inspect the report and if it is satisfactory, click on the Print tab on the report.
5	The most common problem with GC data is split peaks; this problem is due to hesitation while making an injection.
6	To fix this problem, the sample analysis must be repeated with better injection technique.
7	The next injection can be made when the Ready is again green.