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## Organic Lab, Pre-Lab

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### Organic Part 1 (Either Monday or Tuesday depending on your section)

- Title
- Purpose
- Procedure
  - You will be measuring the density of a pure, unknown liquid. Find in the online lab manual how you will measure density (particularly the amounts needed).
  - You will also be measuring the refractive index of your pure, unknown liquid. Write up a **brief** procedure on how to use the refractometer to get the refractive index.
  - You will be analyzing a 7-component mixture and a mixture unknown (containing anywhere from 1 to all 7 of those components) (qualitative analysis) using the gas chromatograph (GC). You should record the procedure for running a sample through the GC, NOT how the GC works. Look for where to inject the sample and how much sample to inject, etc.
- Data Tables
  - Need to have space for your unknown number for the pure, unknown liquid
  - Need to have spaces for what you need to record for the density
  - Space for the refractive index
  - Need to have space for your unknown number for your unknown mixture
  - Space for the retention times of the 7-component mixture (meaning where the peaks showed up, the x-values on the graph)
  - Space for the retention times for your unknown (anywhere from 1 to 7 components)

We will discuss how GC works before lab. You will be working INDIVIDUALLY on the first part of the organic lab. So, the more prepared you are, the faster the lab will go.

### Organic Part II (Either Wednesday or Thursday depending on your section)

- Title
- Purpose
- Procedure
  - You will be analyzing 5 standards of octane/isooctane mixtures and an unknown octane/isooctane mixture where the amount of those components changes. You should record the amount of sample to inject both for the standards and for your unknown.
- Data Tables
  - Need to have space for your unknown mixture
  - Need to have spaces for the area of each of the two peaks in each of the 5 standards.
  - Need to have spaces for the area of the two peaks in your unknown.