Organizing Experiments

PUBS

September 19, 2017
Tips for organization (in PUBS and beyond!):

1. Plan ahead
2. Develop a systematic way to implement experiments
3. Document thoroughly and regularly
Planning ahead

• Read all MSDS and be informed of dangers and best handling of materials
• Be aware of equipment dangers
• Perform calculations in advance (if possible)
• Thoroughly read protocols in advance and print out (if desired)
• Come to class with questions you can’t figure out beforehand!
Implementing experiments

• Label everything in a way that everyone can understand
  ➢ Label dangerous compounds as such
  ➢ If you develop a nomenclature system (ex: PUBS1, PUBS2, etc), make a spreadsheet that describes the sample associated with each name

• When possible, make a master mix to reduce pipetting error
• Keep time management in mind by making multiple small goals
• Develop a system for arranging samples in tube racks
Tube rack organization

Samples

Reagents
Tube rack organization

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Documentation

• Make a shared notebook that everyone in your group can access (google docs, drive, etc)
• Record calculations—important for troubleshooting!
• Note deviations to printed protocols
• Record observations
• Document/comment your code