

LAB SAFETY, PROCEDURES & TECHNIQUES - STUFF TO KNOW

There's a ton of information in this unit and it could become very overwhelming as you study for test. To help you get organized, here is an overview of the information included on the test. The hints included are **STRONGLY ENCOURAGED**.

Give yourself plenty of time to study. Do not try to complete all of this in one night. It's too much to keep straight. I would suggest a **minimum** of 3 hours of study time (not all at once).

- **Lab safety video** - all the information in the video. There's a copy of the video in a post on the class website. Check old syllabuses for the date of the post. *(Hint: re-watch the video and double check that the information is in your notes.)*
- **Lab apparatus and lab equipment** – *(There's a copy of the lab apparatus slideshow in a post on the class website. Check old syllabuses for the date of the post. Hint: practice the Lab Apparatus Review on PSL)*
 1. know the correct name (and spelling)
 2. know where the items are located in the lab
 3. know the use of each of the items
- **The "Safety in the Chemistry Lab" packet** – know the information and be able to apply it
 1. Know lab safety rules – these will be in the multiple choice and you will have to apply them in different situations, but you will not have to list them
 2. Lab safety symbols and precautions – know the precautions for each symbol. If given the symbol, be able to list precautions you should take *(Hint: put these on flash cards, or write them out)*
 3. Lab Safety equipment – know where each item is located in the lab and the use of each *(Hint: Practice drawing a diagram of the room and labelling the different piece of safety control equipment)*
 4. Labelling – know the information that should be on a chemical reagent bottle label
 5. Know the proper technique for decanting and transferring liquids
 6. Know the proper techniques for heating substances and evaporating solutions
 7. Be able to draw and label diagrams of the set-up for: *(Hint: practice drawing & labelling before the test!)*
 - a. Evaporation *(evaporating dish)*
 - b. Boiling *(beaker)*
 - c. Filtering
 - d. Heating intensely *(crucible and cover)* – this one will be in the multiple choice
 8. Know the proper technique for pouring liquid from a chemical reagent bottle
 9. Know the proper technique for heating materials in a test tube
 10. Know the proper technique for using a mortar and pestle *(know which one is the mortar and which one is the pestle)*
 11. Know the proper technique for testing an odor safely
- **Lab Procedures and Techniques Experiment** – know the information from the experiment and be able to apply it
 1. **The Bunsen burner**
 - know the parts and their use,
 - know how to light a Bunsen burner
 - know the observations from the experiment on the Bunsen burner
 - Know the information in the "Lighting a Bunsen Burner" post on the class website
 2. Know the proper technique for handling solids *(the information is also in the lab safety video)*
 3. **The Balance** – know the parts of a balance, know how to read a balance to determine mass
 4. Know proper techniques for measuring volume– know how to read volume on a graduated cylinder *(much of this information is also in the lab safety video)*
 5. **Filtering** - Know the techniques and observations from the experiment on filtering
 6. **Evaporation** - Know the techniques and observations from the experiment on evaporation