## Non-specialist and a specialist laboratory essay sample



Non-Specialist Laboratory:

An example of a non-specialist laboratory would be a school science laboratory; the lab would have standard safety equipment such as safety goggles, protective clothing, aprons and gloves. The lab will only have equipment needed for a practical the students will be carrying out so the equipment they will use equipment such as Bunsen burner, test tubes, test tube racks, stands and clamps, thermometer and for a different experiment the students might use equipment such as power packs, batteries, cell holder and bulbs.

The science lab will have a first aid kit and eye wash stations. The lab will also have other safety equipment such as fire extinguisher, fire blanket and a sand bucket.

This kind of lab would be used by secondary school students to carry out general practicals such as animal dissections, titrations of a chemical and testing electric circuit for voltage and current change.

My non-specialist lab has the following equipment:

\* New fast and efficient computers to be able to do research and type up work

\* New student benches with integrated gas taps and plug sockets so that they are easily accessible during a practical.

\* New teachers' desk with draws and cupboard built in so storing documents and work is easy and also easily accessible as well as keeping it organised. \* New fume cupboard so that when testing substances that let off toxic fumes or a bad smell it doesn't spread in the whole lab and is just discarded of safely.

\* Storage cupboard at the back of the room for storing equipment, text book etc this will really help keep the lab organised, clean and tidy.

\* Also sinks to be built into each student bench so that if water is required during a practical it can easily accessed and also not cause a que around other sinks in the lab.

\* Eyes wash station so that if an accident occurs where chemical enters the eye it can quickly be washed out to prevent damage to the eye.

\* Fire safety equipment such as fire extinguishers, fire blanket and sand buck so that if something goes wrong during a practical and something sets fire there is safety equipment to deal with the fire.

Specialist Laboratory:

An example of a specialist laboratory would be a Blood test/ medical laboratory. This kind of lab will have equipment such as diagnostic equipment and medical lab equipment, this lab will have standard lab equipment such as microscope and Bunsen burner but it will also have specialist equipment such as hematology analyser, colorimeter, long extension kymograph and Tourniquet. This lab will have safety equipment such as safety goggles, aprons and disposable gloves. There will also be other safety equipment such as fire extinguisher, fire blanket, sand bucket and possibly water sprinklers.

This type of medical lab will mostly be used to test blood samples and tissue sample of humans to test for any kind of disease or infections.

My microbiology lab will have the following equipment:

- \* Lamina Flow Cabinet to avoid contamination of biological samples.
- \* A vortex mixer will be needed to mix liquids together.
- \* Incubator will be needed for tests that require a controlled environment
- \* A waring blender to mix together substances.

\* Balances will be needed throughout the lab to weigh substances and chemicals.

- \* Sterilising oven will be needed to sterilise equipment.
- \* A coliform water bath for food processing.
- \* Sinks will be needed in the lab for washing things.
- \* Fire extinguishers in case something sets fire
- \* Eye wash station and first aid kit in case chemicals get into the eye or if someone get injured