

Lab Safety Web Quest

1. Use the internet to figure out how to protect the following during an experiment.

a. Eyes:

→ Safety goggles worn → Keep face away from chemicals → no contacts

b. Nose:

Smell by fanning chemicals towards nose → do not put nose into vessel

c. Mouth:

— No tasting or eating "anything" in a lab situation

c. Hands:

wear gloves — dissection gloves
— acid safe gloves

d. Feet:

Wear closed toed shoes — flat shoes

e. Body:

Wear clothing reduce exposed skin
→ lab coat

2. Explain what to do if your get a chemical substance in your eyes:

Tell someone → especially teacher

→ go to eye wash station — 10-15 minutes warmish water

3. Complete the activity found on the website linked:

<https://www.ncbionetwork.org/iet/zombie-college/index.html>

What are the 5 rules of lab safety according to the activity?

1. Dress appropriately for labs
2. Use personal protective equipment when required.
3. Always add acid to the base
4. No location of safety equipment
5. Proper safe lab conduct NO horseplay

4. Fill in the blanks below with the following list.

accident alone before chemicals chipped clean
glass glassware goggles gum hands heat
horseplay instructor location minor safety shoes
taste touch

Report any accidents or injury to your instructor immediately, no matter how minor it may appear.

Never work alone. No student may work in the lab without an instructor present.

Do not touch any equipment, chemicals or other materials in the laboratory until you are instructed to do so.

No food, drink or gum is allowed in the laboratory. Keep hands away from your face. Do not touch, taste, or smell any chemicals unless specifically instructed to do so.

Never fool around in the laboratory. Horseplay safety, jokes and pranks are dangerous and not allowed.

Know the location and correct use of all lab equipment.

Work areas should be kept clean and tidy at all times. Clean all work surfaces and equipment before leaving the lab.

Return all equipment clean and in working order to the proper storage area. Dispose of chemicals as instructed.

Long hair must be tied back. Dangling jewelry and loose or baggy clothing must be secured. Shoes must completely cover your feet.

Never handle broken glassware with your bare hands. Use a brush and dustpan to clean up broken glass. Place broken or waste glassware in the designated glass disposal container.

Examine glassware before each use. Never use chipped or cracked glassware. Never use dirty glassware.

goggles must be worn when working with chemicals,
heat or glassware.

5. Answer the following questions using the picture below.

a. List 3 unsafe activities shown in the picture and explain why each is unsafe.

1. Face immersed into chemicals
2. Don't ~~smell~~ ^{take to clean} chemical directly
3. No safety equipment when hammering.
4. No licking or tasting

b. List 3 correct lab procedures shown in the picture.

1. Fan chemicals to smell
2. Carefully carry equipment!
3. Wear safety goggles

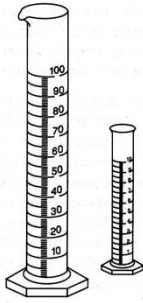


6. Label the laboratory equipment below From the following list:

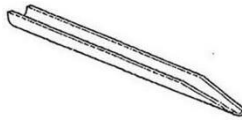
Test tube tongs/holder
Beaker
Scoopula
Graduated cylinder
Beaker tongs

Heating Plate
Centigram Balance
Test tube
Thermometer
Erlenmeyer flask
Forceps

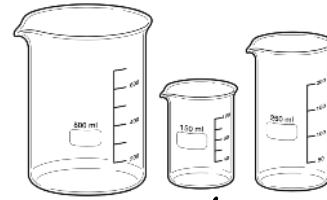
Safety goggles
Test tube rack
Bunsen Burner
Striker
Dropper
Burette and Stand



1. graduated cylinder



2. Scoopula



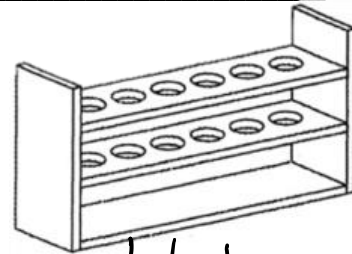
3. beakers



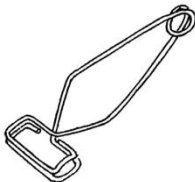
4. beaker tongs



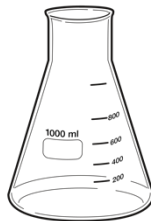
5. test tube



6. test tube holders



7. test tube tongs



8. Erlenmeyer Flask



9. voltmeter



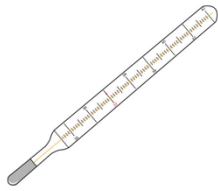
10. dropper



11. electronic balance



12. alligator clips



13. thermometer



14. Centigram balance



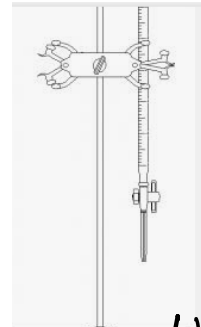
15. safety goggles



16. Bunsen burner



17. Striker



18. burette & stand

7. Find the equipment and information card around the room and then describe the purpose/use of the equipment listed below.

| | |
|---|---|
| Erlenmeyer flask to mix, stove, heat liquids | Striker creates a spark to light gas |
| Beaker used to hold stuff | Test tube - holds chemicals |
| Centigram Balance measures mass (grams) | Dropper alligator clips used to connect electrical components in a circuit |
| Graduated cylinder - glassware used to accurately measure volume | Forceps Voltmeter → measure voltage in volts. |
| Test Tube Holders → hold test tubes | goggles - protect eyes from chemicals |
| Scoopula picks up dry chemicals i.e. solids. | Bunsen Burner → heat chemicals etc. |

