

1.1 Activity: Safety in the Laboratory (p. 13)
Students' answers will vary.

1.1 Review Questions (p. 14)

- Where is the closest fire alarm to your chemistry laboratory? For example,
By 1st staircase to the right (8228)
- Outline the route you should follow in case of a fire alarm while you are in chemistry class.
For example: Right
Down stairs
Out to oval
- How many fire extinguishers are in your laboratory? What are their classifications? For example,
One
ABC
- Knowing you have lab on a particular school day, describe how you should dress.
Closed toe shoes, natural fibres, no dangling/loose clothes or jewelry
- Give the name and use of each of the following pieces of equipment:



erlenmeyer flask
(holds liquid)



graduated cylinder
(measure liquids)
volume



crucible
(heat)



buret clamp
(clamp buret)



test tube holder
(holds test tubes)

- List three things you should do before beginning any chemistry experiment.
Read lab/ know safety procedures/
Safety glasses
- Give three uses for the fume hood.
Vent toxic fumes, odours, smoke,
store organics, shield

- What is the most common injury in the chemistry lab? How might you avoid this injury? How would you treat this injury?

— burns

— bring hand near

— ice

- How would you assist your lab partner in each of the following cases?

(a) Partner has spilled a chemical into his or her eyes.

10-15 min in eye wash

(b) Partner's clothing has caught fire.

stop drop roll / fire blanket

(c) Partner has spilled concentrated acid onto the floor.

notify / neutralize with baking soda

(d) Partner took more chemical than required for the lab.

share / proper disposal

(e) Partner has broken a test tube on the floor.

notify / sweep up — place in glass disposal

- What is the meaning of each of the following labels?



Dangerously
Reactive



Poisonous
Product



compressed
gas



Corrosive
Product



corrosive

11. Outline a three-step procedure for cleaning glassware at the end of the period.

Wash with soap (+ scrubble/brush)

Rinse

Air Dry

12. Why should long hair always be secured back during lab?

Avoid contact with flame/chemicals

13. Why do you suppose food and drink are not allowed during lab?

contamination/ may drink wrong thing

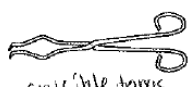
14. What do you think is safer: the laboratory or your kitchen? Explain why.

more safety equipment vs.

more hazards.

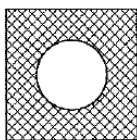
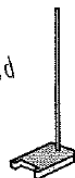
15. Give the name and use of each of the following pieces of equipment:

beaker tongs
(pick up beaker)



crucible tongs
(pick up crucible)

ring stand and ring
(holds ceramic pad or safety ring)



ceramic pad
(sits on ring for heating)

16. Where should binders, book bags, and backpacks be stored during the lab?

under bench - out of the way

17. What is an MSDS? Where might an MSDS be found in your school?

Material Safety Data Sheet

Binder in store room.

18. Where would you dispose of each of the following?

(a) a few milliliters of excess dilute acid

Sink (run water before + after)

(b) a sample of heavy metal precipitate

Disposal jar

(c) an excess piece of glass tubing

glass disposal

(d) used litmus paper

garbage can

(e) a few milliliters of excess acetone (nail polish remover)

organic disposal in fume hood

19. What is the meaning of each of the following labels?



explosive container



poison level II
biohazard



flammable contents (product)



poison division II



oxidizing material

20. Give four things to keep in mind while heating a test tube half-filled with liquid.

Clamp near top of test tube

45°

keep moving

point away