

#### 1. glassware safety

- never use broken or chipped glassware
- dispose of broken or chipped glassware in sharps container
- never pick up any glassware unless you are sure it is not hot
- if glassware is hot use heat resistant gloves or tongs
- do not put hot glassware in cold water or any other cold surface

#### 2. sharp instrument safety

- always use single edged razors
- handle any sharp instrument with extreme care
- never cut any material toward you
- dispose of used or ruined sharp instruments in the sharp container

#### 3. fire and heat safety

- never use open flame without wearing safety goggles
- never heat anything unless instructed to do so
- never heat anything in a closed container
- when using bunsen burner, move test tube in and out of flame to heat
- always use clamp, tongs, or heat resistant gloves to handle hot objects
- fire extinguishers should be located in or near the lab

#### 4. animal safety

- do not cause pain, discomfort, or injury to a live animal
- follow your teacher's direction when handling animals
- wash your hands thoroughly after handling animals or cages

#### 5. electrical safety

- if an extension cord is needed to plug in an electrical devise, use the shortest one possible
- Do not use socket multipliers to overload an electrical outlet
- Never touch an electrical appliance or outlet with wet hands

#### 6. chemical safety

- always wear a safety apron and protective gloves when handling chemicals
- if chemical contacts your skin, rinse immediately and tell the teacher
- never smell a chemical directly, waft the smell toward you
- use proper ventilation in the lab through use of a chemical fume hood
- keep all lids closed when chemicals are not in use
- dispose of all chemicals as instructed by your teacher

7. eye and face safety

wear safety goggles when handling chemicals

when you are heating a test tube or bottle, always point it away from yourself and others

remember, chemicals can splash or boil out of a heated test tube

if chemical comes in contact with your eyes, use the eyewash fountain immediately and seek emergency care

8. mechanical pan balance

used to accurately determine mass to the nearest ten thousandth of a gram

9. graduated cylinder

graduated or marked with a scale for measurement

10. erlenmeyer flask

used to mix liquids; narrow mouth prevents splashing and lessens the dispersion of noxious fumes

11. eye dropper

used to dispense small measures of a liquid

12. watch glass

a holding container or covering device

13. test tube

used to mix, measure, or heat liquids

14. bunsen burner

source of gas heat

15. thermometer

measure temperature

16. caliper

used to accurately measure the thickness or diameter of an object

17. tongs

used to grasp heated materials

- 18. hot plate  
source of electrical heat
- 19. triple beam balance  
used to determine the mass of heavier materials to the nearest gram
- 20. spring scale  
used to determine force
- 21. beaker  
used to mix and heat liquids
- 22. telescope  
enables us to see objects too far away to be seen with the unaided eye
- 23. meter stick  
measures length or width
- 24. fume hood  
used to contain and safely remove hazardous gases from the laboratory
- 25. tripod  
holds glassware above a bunsen burner
- 26. microscope  
enables us to see very small objects or organisms too small to see with the unaided eye
- 27. U.S. Customary System
- 28. length
- 29. meter
- 30. mass
- 31. kilogram
- 32. volume
- 33. cubic centimeter
- 34. millimeter
- 35. graduated cylinder
- 36. meniscus
- 37. water displacement

- 38. density
- 39. temperature
- 40. celsius
- 41. kelvin
- 42. fahrenheit
- 43. accuracy
- 44. precision