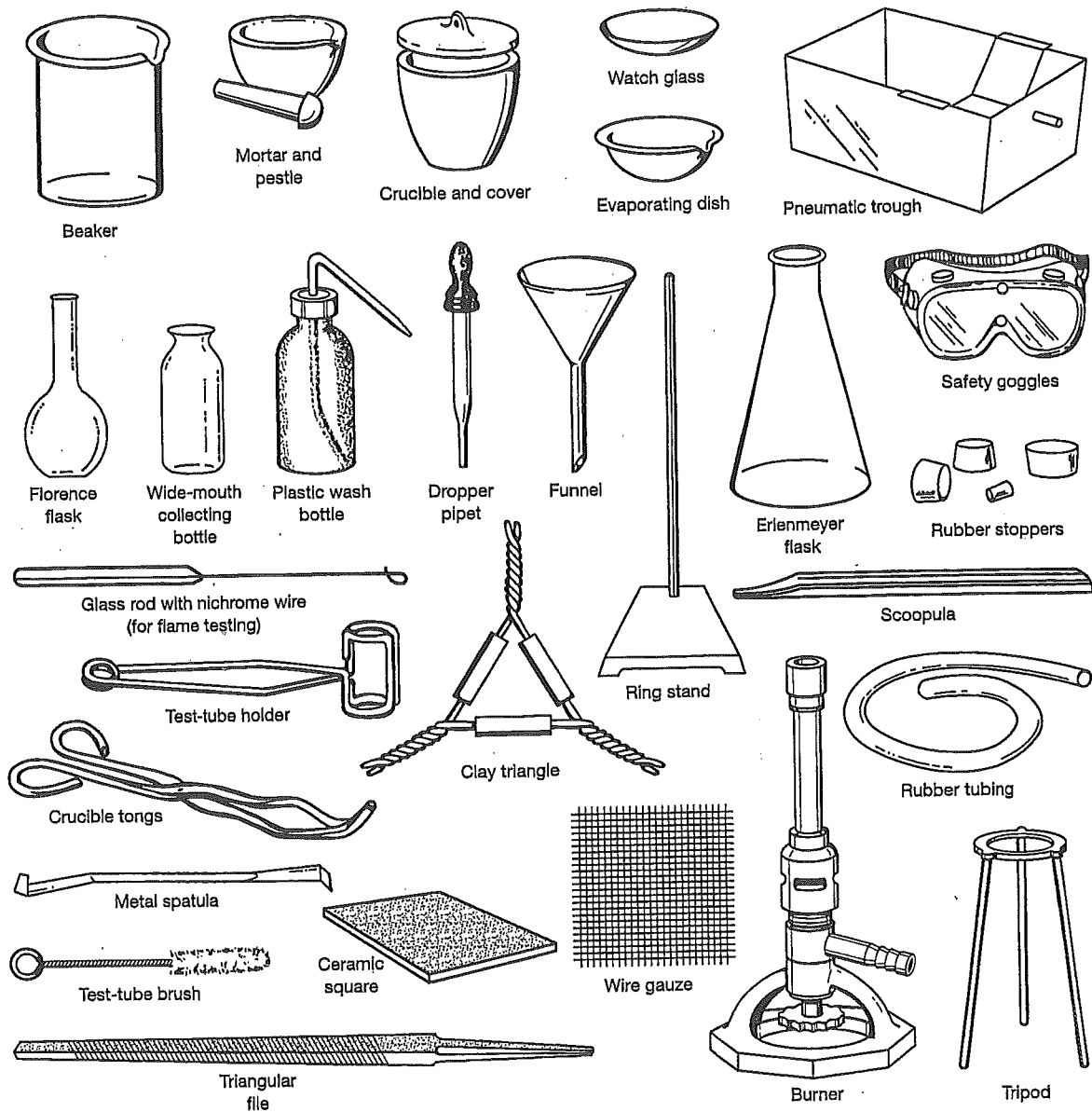


Laboratory Equipment



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Beaker: glass or plastic; common sizes are 50 mL, 100 mL, 250 mL, 400 mL; glass beakers may be heated.

Buret: glass; common sizes are 25 mL and 50 mL; used to measure volumes of solutions in titrations.

Ceramic square: used under hot apparatus or glassware.

Clamps: the following types of clamps may be fastened to support apparatus: buret/test-tube clamp, clamp holder, double buret clamp, ring clamp, 3-pronged jaw clamp.

Clay triangle: wire frame with porcelain supports; used to support a crucible.

Condenser: glass; used in distillation procedures.

Crucible and cover: porcelain; used to heat small amounts of solid substances at high temperatures.

Crucible tongs: iron or nickel; used to pick up and hold small items.

Dropper pipet: glass tip with rubber bulb; used to transfer small volumes of liquid.

Erlenmeyer flask: glass; common sizes are 100 mL, 250 mL; may be heated; used in titrations.

Evaporating dish: porcelain; used to contain small volumes of liquid being evaporated.

Florence flask: glass; common sizes are 125 mL, 250 mL, 500 mL; may be heated; used in making and for storing solutions.

Forceps: metal; used to hold or pick up small objects.

Funnel: glass or plastic; common size holds 12.5-cm diameter filter paper.

Gas burner: constructed of metal; connected to a gas supply with rubber tubing; used to heat chemicals (dry or in solution) in beakers, test tubes, and crucibles.

Gas collecting tube: glass; marked in mL intervals; used to measure gas volumes.

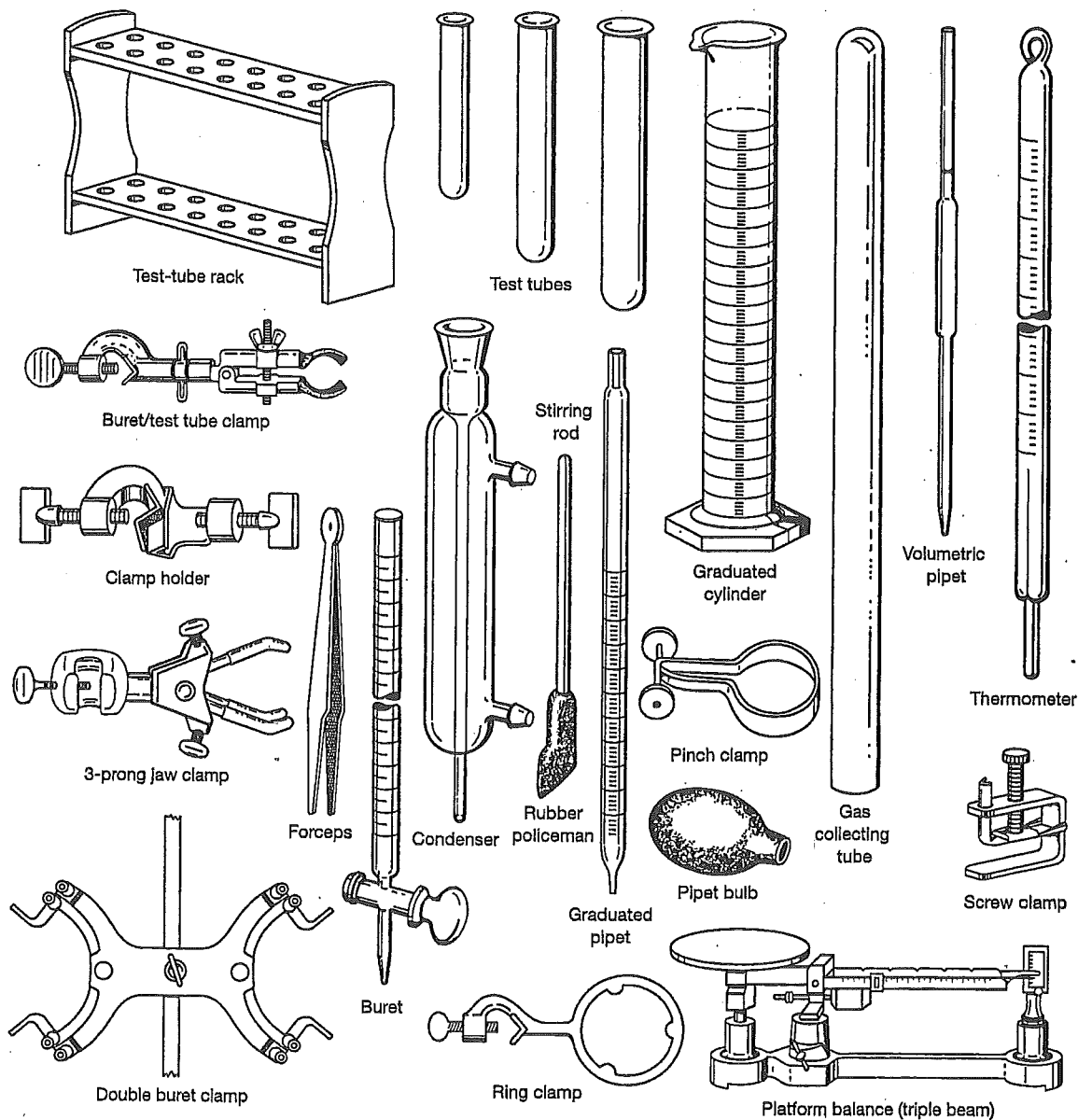
Glass rod with nichrome wire: used in flame tests.

Graduated cylinder: glass or plastic; common sizes are 10 mL, 50 mL, 100 mL; used to measure approximate volumes; must not be heated.

Graduated pipet: glass; common sizes are 10 mL, 25 mL; used to measure solution volumes; less accurate than a volumetric pipet.

Mortar and pestle: porcelain; may be used to grind crystals and lumpy chemicals to a powder.

Pipet bulb: rubber; used in filling a pipet with a solution; a pipet must never be filled by mouth.



Plastic wash bottle: flexible plastic; squeeze sides to dispense water.

Platform balance: also known as a triple-beam balance.

Pneumatic trough: galvanized container with shelf; used in experiments where a gas is collected.

Ring stand: metal rod fixed upright in a heavy metal base; has many uses as a support.

Rubber stoppers: several sizes.

Rubber tubing: used to connect apparatus to transfer liquids or gases.

Safety goggles: plastic; must be worn at all times while working in the laboratory.

Screw clamp, pinch clamp: metal; used to block off rubber tubing.

Spatula, scoopula: metal or porcelain; used to transfer solid chemicals; the scoopula has a larger capacity.

Stirring rod and rubber policeman: glass with rubber sleeve; used to stir, assist in pouring liquids, and for removing precipitates from a container.

Test-tube brush: bristles with wire handle; used to scrub small-diameter glassware.

Test-tube holder: spring metal; used to hold test tubes or glass tubing.

Test-tube rack: wood or plastic; holds test tubes in a vertical position.

Test tubes: glass; common sizes small (13 mm × 100 mm), medium (20 mm × 150 mm), large (25 × 200 mm); may be heated.

Thermometer: mercury in glass; common range -10°C to 110°C .

Triangular file: metal; used to scratch glass tubing prior to breaking to desired length.

Tripod: iron; used to support containers of chemicals above the flame of a burner.

Volumetric pipet: glass; common sizes are 10 mL, 25 mL; used to measure solution volumes accurately; must not be heated.

Watch glass: glass; used to cover an evaporating dish or beaker.

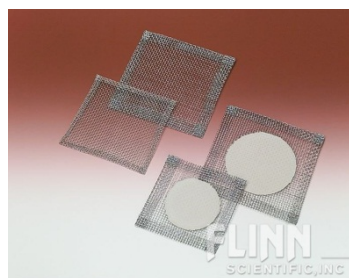
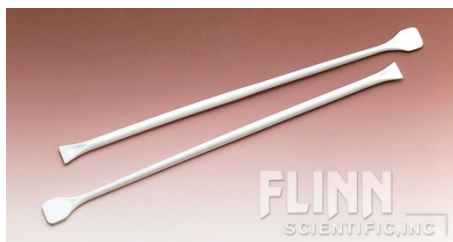
Wide-mouth bottle: glass; used with pneumatic trough.

Wire gauze: used to spread the heat of a burner flame.

Additional Laboratory Equipment



Hot plate/magnetic stirrer Hot vessel gripper Pipet filler (green 10 mL, red 25 mL) Buchner funnel*



Stirring rod, plastic

pH paper

Wire gauze w/ ceramic center



Bunsen burner



Tirrill burner**



Flint lighter (striker)



Beaker tongs

*Buchner funnels are used for vacuum filtration

**Tirrill burners allow for regulation of gas supply and air flow (Bunsen only allows regulation of air flow)