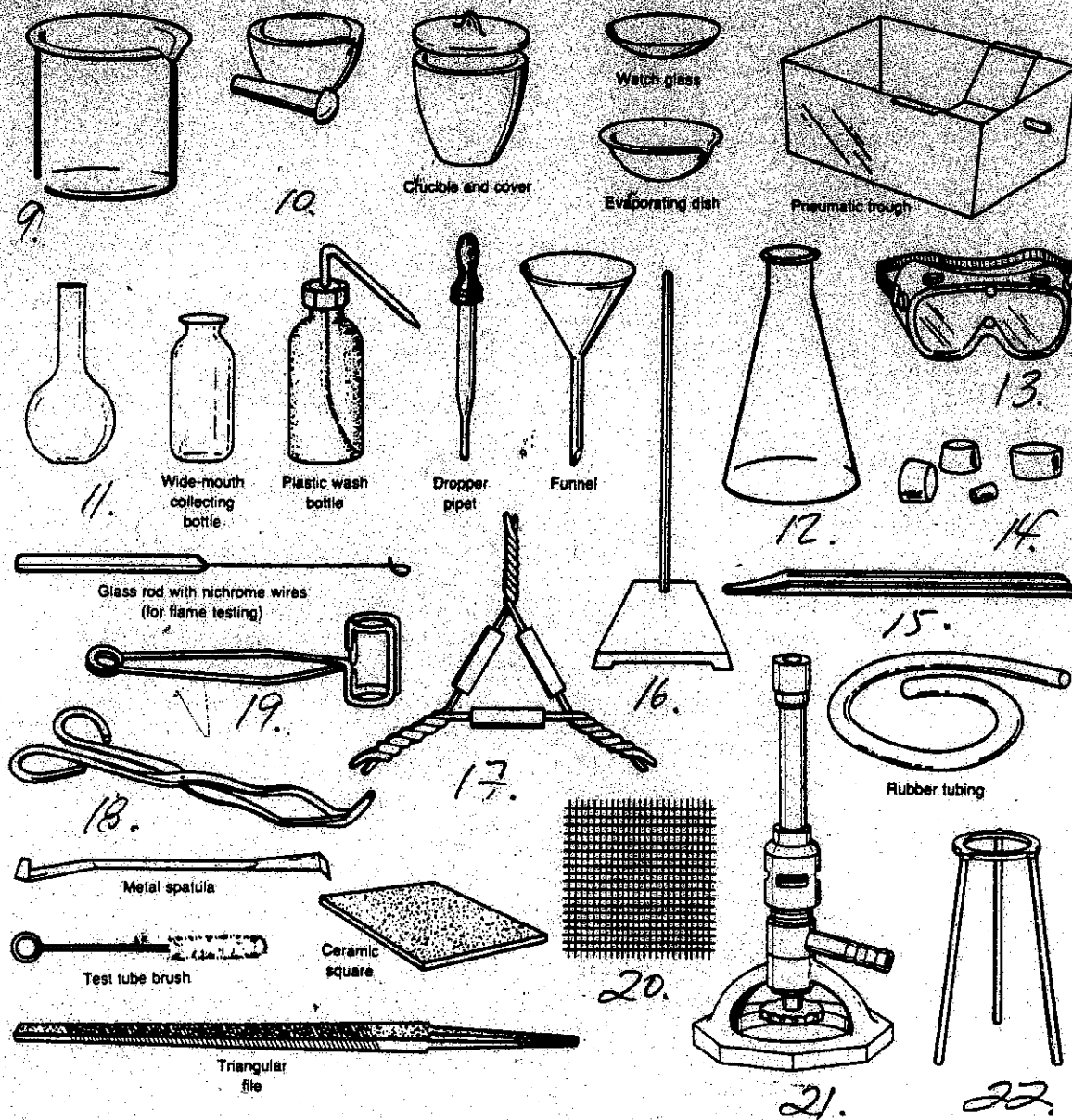


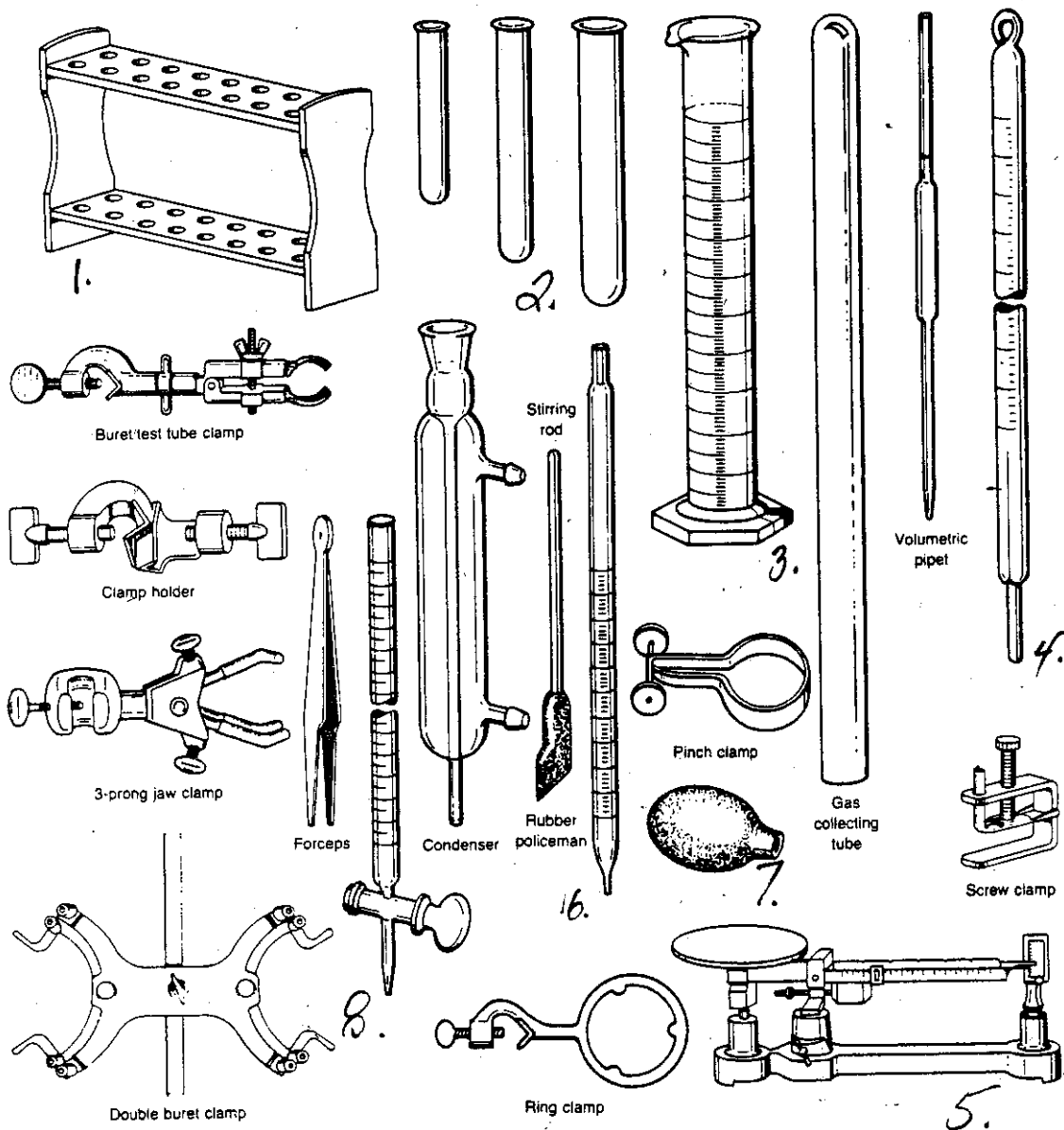
MATCHIN' CHEM EQUIPMENT

Laboratory Equipment



- A. Beaker:** glass or plastic; common sizes are 50 mL, 100 mL, 250 mL, 400 mL; glass beakers may be heated.
- B. Buret:** glass; common sizes are 25 mL and 50 mL; used to measure volumes of solutions in titrations.
- C. Ceramic square:** used under hot apparatus or glassware.
- D. 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.
- E. Clay triangle:** wire frame with porcelain supports; used to support a crucible.
- F. Condenser:** glass; used in distillation procedures.
- G. Crucible and cover:** porcelain; used to heat small amounts of solid substances at high temperatures.
- H. Crucible tongs:** iron or nickel; used to pick up and hold small items.
- I. Dropper pipet:** glass tip with rubber bulb; used to transfer small volumes of liquid.
- J. Erlenmeyer flask:** glass; common sizes are 100 mL, 250 mL; may be heated, used in titrations.
- K. Evaporating dish:** porcelain; used to contain small volumes of liquid being evaporated.

- L. Florence flask:** glass; common sizes are 125 mL, 250 mL, 500 mL; may be heated; used in making and for storing solutions.
- M. Forceps:** metal; used to hold or pick up small objects.
- N. Funnel:** glass or plastic; common size holds 12.5-cm diameter filter paper.
- O. 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.
- P. Gas collecting tube:** glass; marked in mL intervals; used to measure gas volumes.
- Q. Glass rod with nichrome wire:** used in flame tests.
- R. Graduated cylinder:** glass or plastic; common sizes are 10 mL, 50 mL, 100 mL; used to measure approximate volumes; must not be heated.
- S. Graduated pipet:** glass; common sizes are 10 mL, 25 mL; used to measure solution volumes; less accurate than a volumetric pipet.
- T. Mortar and pestle:** porcelain; may be used to grind crystals and lumpy chemicals to a powder.
- U. 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.
- W Platform balance:** also known as a triple-beam balance.
- X Pneumatic trough:** galvanized container with shelf; used in experiments where a gas is collected.
- Y Ringstand:** metal rod fixed upright in a heavy metal base; has many uses as a support.
- Z Rubber stoppers:** several sizes.
- AA Rubber tubing:** used to connect apparatus so as to transfer liquids or gases.
- BB Safety goggles:** plastic; must be worn at all times while working in the laboratory.
- CC Screw clamp, pinch clamp:** metal; used to block off rubber tubing.
- DD Spatula, scoopula:** metal or porcelain; used to transfer solid chemicals; the scoopula has a larger capacity.
- EE Stirring rod and rubber policeman:** glass with rubber sleeve; used to stir, assist in pouring liquids, and for removing precipitates from a container.
- FF Test-tube brush:** bristles with wire handle; used to scrub small-diameter glassware.
- GG Test-tube holder:** spring metal; used to hold test tubes or glass tubing.
- HH Test-tube rack:** wood or plastic; holds test tubes in a vertical position.
- II Test tubes:** glass; common sizes small (13 mm × 100 mm), medium (20 mm × 150 mm), large (25 mm × 200 mm), may be heated.
- JJ Thermometer:** mercury in glass; common range -10°C to 110°C.
- KK Triangular file:** metal; used to scratch glass tubing prior to breaking to desired length.
- LL Tripod:** iron; used to support containers of chemicals above the flame of a burner.
- MM Volumetric pipet:** glass; common sizes are 10 mL, 25 mL; used to measure solution volumes accurately; must not be heated.
- NN Watch glass:** glass; used to cover an evaporating dish or beaker.
- OO Wide-mouth bottle:** glass; used with pneumatic trough.
- PP Wire gauze:** used to spread the heat of a burner flame.