Encouraging Tomorrow’s Chemists

Characteristics of Matter

Supplies for one classroom for one session

A. Pressure and Density
Graduated cylinder, 50 mL
Containers containing corn syrup, coffee, vegetable oil, and ethanol
Vials containing bolts, NMR rubber stoppers, NMR plastic caps, cork

~30 1-mL plastic syringes without needles
Beaker

B. Boiling
Balloons
Liquid nitrogen dewar, 4 L
Small liquid nitrogen dewar
Tongs
Thick gloves
Racketball

C. Vacuum
Small vacuum pump
Desicato and rubber tubing to connect to vacuum
Beaker
Balloons
Marshmallows

D. Sublimation and Melting
Iodine vial
Cotton balls

Dry ice
Film canister
Tongs