

Teacher Notes for Material Separation Lab

Objectives of the Material Separation Lab

- Mixtures (separated physically)
- Compounds (separated chemically)
- Pure Substances (elements)
- Homogeneous Mixtures
- Heterogeneous Mixtures
- Experimental Design and Setup
- Procedures
- Materials
- Matter
- Separating Mixtures (Physical and Chemical Methods)
- Classification of matter

Materials:

- Sand
- Gravel
- Water
- Salt
- Iron filings
- Alcohol
- Beakers (5 small)
- Funnels
- Filter paper
- Tweezers
- Strainers
- Hot plates
- Magnets
- Distillation apparatus
- Ice

Procedures will vary based on each group. Ideally mixture will be separated with the solids first (gravel, then iron filings, then sand) leaving the alcohol, salt, and water mixture. Alcohol is distilled off next and finally salt is boiled off, leaving residue on a beaker. No water left!