

## 1.2A Sugar and Iron Filings

**Subject:** Introduction to Chemistry, definitions of matter

**Description:** The separation of iron filings from sugar will demonstrate a heterogeneous mixture.

**Materials:**

Sugar and iron filing mixture  
250 ml beaker  
Stir bar magnet

**Procedure:**

1. Hold the magnet up to the side of the beaker in order to separate the iron filings from the sugar. Or stir the mixture with the Teflon stir bar and pull the iron filings from the mixture.

**Discussion:**

A heterogeneous mixture is one for which the different materials in the mixture can be detected and separated easily. Iron and sugar is such a heterogeneous mixture. They can be easily separated using a magnet.

**Safety:** None

**Disposal:** None. The mixture can be reused indefinitely.

**References:**

1. Prof. Botch