



Name: **KEY**.....

Separating Mixtures/ Lab report

Date:

Grade 6 A

Objective:

To identify the different methods of separating mixtures

*** Required Materials for different mixtures:**

- Flour and iron filings
- Sugar and water
- Sand and water
- Beans and lentil
- Rice and powdered sugar

*** Required tools/apparatus**

A magnet

A sieve

Beakers

Filter papers

Distillation apparatus

Procedure:

1. Prepare each of the above mixtures.
2. Select the appropriate method for separating each of the previous mixtures.
3. Separate the mixtures, and fill observations in the table.

Observation:

Mixture	Mixture Type	Method of separation
Mixture 1: flour+ iron filings	Solid + Solid (Non-magnetic material + Magnetic material)	By magnet
Mixture 2: Beans + lentil	Solid + Solid (Big grains + Big grains)	By sorting
Mixture 3: Rice + Powdered sugar	Solid + Solid (Big grains + powder)	By sieving
Mixture 4: Sand + water	Solid + liquid (Insoluble + water)	By filtration
Mixture 5: sugar + water	Solid + liquid (Soluble + water)	- By evaporation (To collect the soluble substance only). - Simple distillation (To collect both the soluble substance and the liquid).

Conclusion:

- There are three methods for separating **solid mixtures**:
1- By magnet 2- Hand sorting 3- By sieving.
- **Soluble** substances can be separated from **liquid**:
1- Evaporating 2- Simple distillation.
- **Insoluble** substances can be separated from **liquid**: By filtrating.