

Name: _____ Date: _____ Period: _____

Separating Matter Challenge!

Due Date: _____

Questions

How do I classify matter?

How can I separate a mixtures based on the physical or chemical properties of its components?

Information

In chemistry, as in all the sciences, it is very important to be able to classify substances. One way substances are classified is as an element, a compound, or a mixture. Each substance will have both physical and chemical properties determined by its individual identity. Physical properties are properties that do not change the chemical nature of matter such as density, solubility, color, boiling point, freezing point, etc. Chemical properties are properties that do change the chemical nature of matter such as flammability and reactivity.

In this lab, you will use the properties of matter to determine how to separate a mixture.

	Magnetic	Soluble in Water	Density	Color
Sand				
Salt (NaCl)				
Iron Filings (Fe)				
Poppy Seeds				
Water				

Hypothesis

If I classify matter, then I can decide whether it can be separated by physical means. If it can be separated by physical means, then I can figure out how to separate the mixture.

Materials

Sample of mixture containing salt, sand, iron, and poppy seeds

Filter Paper

Goggles

Apron

Scoopula

Funnel

Beaker

Ring Stand with Ring clamp

Erlenmeyer flask

Magnet

Hot Plate

Safety

Let your instructor know immediately if anything is broken so that he/she can clean up the broken glass.

Goggles and aprons must be worn at all times.

Any procedure MUST BE APPROVED by the teacher before performing it to ensure the necessary safety measures are being followed.

[illegible]
