

name: _____
lab partner: _____



Separating Mixtures Assessment (or the Un-making of a Pizza)

Your Challenge:

Separate the (heterogeneous) mixture of 4 substances based on what you know about different substances and differences in solubility, density, and other physical properties.

Techniques of Separation:

Density: Recall the behavior of substances with a higher or lower density than that of water.

Filtration: Make a cone of filter paper and pour mixture through to separate liquids and solids.

Solubility: Substances that are water soluble will dissolve in water, those that are insoluble will not.

Chromatography: Separate multiple solutes from a solvent by paper chromatography.

Evaporation: Remove a solute from a solvent by letting the solvent evaporate (or boil off).

Magnetism: Pass a magnet through a mixture (like in lab 11) to separate out any magnetic particles.

Your Conclusions:

For all substances:

- Describe the physical appearance and other physical properties for each of the substances in the mixture.
(Think: color, soluble, insoluble, crystals, magnetism, density)
- Tell how you were able to separate them from the original mixture.
- Guess as to what you think this substance is (we have seen all of these in one form or another before...)

Substance 1:

Substance 2:

Substance 3:

Substance 4: