

2.3 – Mixtures of Matter



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Element Memorizing Project Kickoff!

<https://www.youtube.com/watch?v=zGM-wSKFBpo>

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Mixtures

Def: Combination of two or more pure substances.

Heterogeneous – Does not blend smoothly.
Ex: Iced Tea.

Homogeneous – Constant composition throughout.
Ex: Homogenized milk – what's in it?

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Solutions

Another term for homogeneous mixtures.
Can be solid, liquid, or gas.

Examples:

Gas/Gas solutions? Welding gases – CO_2 /Argon

Liquid/Liquid? Alcohol in water.

Solid/Solid? Brass – Zinc and copper metals.

Alloys are metal/metal solutions.

Gas/Liquid/Solid? CO_2 in sugary soda pop!



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Separation of Mixtures

Filtration – Porous barrier separates a solid from a liquid.



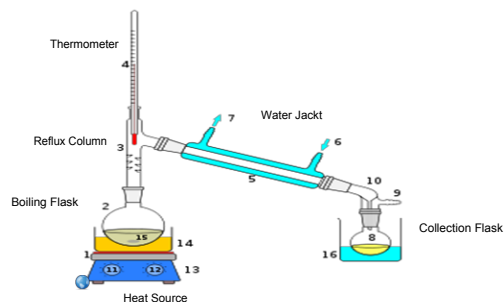
Yum? Coffee grounds anyone?



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Separation of Mixtures

Distillation – Separation based on different boiling points.



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Separation of Mixtures

Magnets – Iron can be separated from other metals or stuff.



Wow! Huge magnetic field here!

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Separation of Mixtures

Crystallization – Pure solid particles form from a saturated solution.



Sugar crystals in a jar.



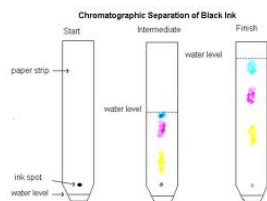
Frost on a branch.

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Separation of Mixtures

Sublimation – Change from solid to a gas.

Chromatography – Separation based on ability of substances to move. DEMO



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Homework

Read 3.4 of your book
2.3 Problems in your Booklet
Due: Next Class.

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