7E Mixtures & Separation- Revision Worksheet

Define the following key words:

Mixture	
Suspension	
Colloid	
Solution	

In a **mixture** of salt water, match up the following:

Solvent	Salt Water
Solute	Salt
Solution	Water

Describe what would happen if you kept adding salt to a **mixture** of salt water that was **saturated**.

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If you added 15g of salt to 100g of water, what would the **mass** of the salt water be.

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State the name of the principle used in the question above.

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State what the **solubility** of a **solute** means.

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Describe two different ways you could change the **solubility** of a **solute**.

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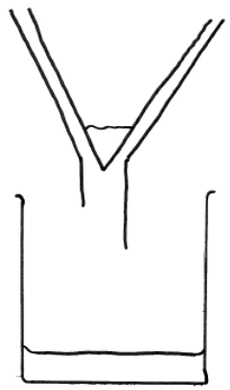
Label the diagram of a filtration practical below:



Draw and label a diagram to show how you would **heat** a **solution** safely.

Explain the process of producing **salt** that we use in food.

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Describe the difference between **evaporation** and **boiling**.

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State what you can tell about the brown sweet from the **chromatogram** here.

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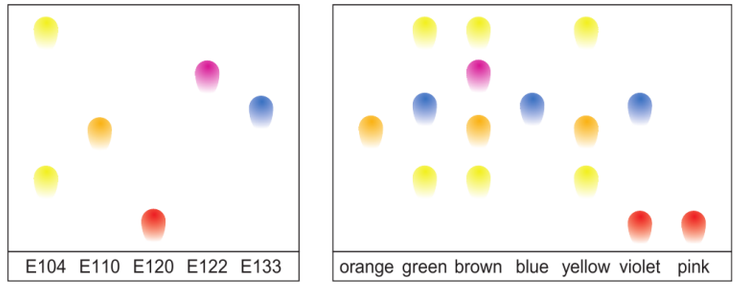

Describe how you would carry out a **chromatography** practical.

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State two uses of **chromatography** in industry.

1.

2.

You need to **separate** a **mixture** of copper sulfate, water and sand to collect copper sulfate crystals. Write out a method for how you would carry this out below.
(you will need to use filtration and evaporation)

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Match up the following **separation techniques** to what they **separate**.

Chromatography	Separates liquids with different boiling points
Distillation	Separates a liquid and solid by boiling off the liquid
Filtration	Separates liquids of different colours
Evaporation	Separates a solid that can dissolve from one that can't

Describe what **desalination** is and why it is important.

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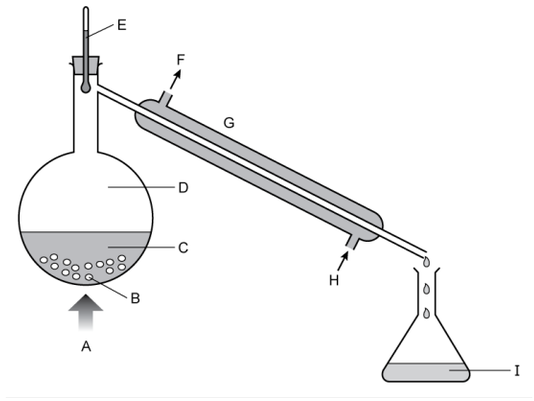
Draw a flowchart to outline the stages in **distillation**.

Label the equipment used to carry out a **distillation** practical.



Describe how we can **heat** to dryness safely.

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Describe the different ways in which we can make safe drinking water. Explain where each method might be useful.

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Rate the following on how well you think you can do them:

I can…

- ☐ Structure a method in a clear manner.
- ☐ Use diagrams to draw apparatus.
- ☐ Classify mixtures.
- ☐ Describe how insoluble solids can be separated from a liquid.
- ☐ Describe how soluble substances can form solutions.
- ☐ Identify the solute and solvent in a solution.
- ☐ Describe the effects of different variables on solubility.
- ☐ Describe how a Bunsen burner is used.
- ☐ Identify hazards and describe how to reduce risks.
- ☐ Describe how solutes can be separated from a solution by evaporation.
- ☐ Describe the differences between evaporation and boiling.
- ☐ Describe how chromatography can be used to identify substances in a mixture.
- ☐ Explain how chromatography works.
- ☐ Explain how distillation can be used to separate a solvent from a solution.
- ☐ Give examples of where distillation is used.