Separating mixtures

Answers

KS3 science quick questions

This topic online

Activate 2: Separation techniques | Exploring Science 7E

Q	Answer	Remember
1	solute	The solute is the thing that dissolves.
2	solvent	Solvent = the liquid that does the dissolving. Water is the most common one.
3	solution	Solute + solvent = solution. You cannot see the solute, but it is still there.
4	soluble	Soluble = can dissolve. Add "in-" for the opposite.
5	insoluble	Insoluble substances stay as bits you can see, so they can be filtered out.
6	filtration	Water particles fit through the tiny holes in filter paper; sand grains do not.
7	filtrate	Filtrate = what gets through. It starts the same way as "filter".
8	residue	Residue is whatever is left over - it stays behind in the paper.
9	evaporation	Heat drives off the water as vapour and the salt is left behind in the dish.
10	distillation	Distillation keeps the liquid, unlike evaporation which keeps the solid.
11	chromatography	Different dyes travel different distances up the paper, so they separate out.
12	saturated	Saturated = full up. Extra sugar just sits at the bottom.
13	pure	In science, pure means one substance only - not just "clean".
14	1	More than one spot means the ink was a mixture of dyes.
15	205 g	Dissolved particles are still there, so their mass still counts.
16	condenser	Cold water flows around the outside of the condenser to cool the vapour inside.
17	0.5	R_f values are always between 0 and 1 because the dye never overtakes the solvent.
18	Pencil does not dissolve in the solvent, so it will not run up the paper and mix with the dyes being tested.	Pen ink is itself a mixture of dyes, so it would spoil the results.
19	18 g	Half the water dissolves half the salt: 36 / 2 = 18.
20	lower	The liquid with the lower boiling point reaches it first and boils off first.

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