

Combined Science - Chemistry - Key Stage 4

C8 Analytical Chemistry

Chromatography

Worksheet

Mr Robbins



Periodic Table of Elements

[illegible]

* The lanthanides (atomic numbers 58 – 71) and the Actinides (atomic numbers 90 – 103) have been omitted.

Relative atomic masses for **Cu** and **Cl** have not been rounded to the nearest whole number.



Recap questions:

1. What is a mixture?
2. What is a solution?
3. What is a solvent?
4. What is a solute?
5. What is solubility?

Chromatography questions

1. Why must the line be drawn in pencil?
2. Why must the pencil line be higher than top of the solvent?



Answers

Recap questions

1. Two or more substances that are not bonded
2. When a solute is mixed into a solvent
3. A liquid a solute dissolves in
4. A solid that dissolves into a solvent
5. How easily a substance dissolves

Chromatography questions

1. So the ink doesn't smudge and ruin the chromatogram
2. To ensure the solvent carries the inks up the stationary phase



Independent task

Chromatography is a technique used to separate a _____ of soluble chemicals. The mixture is placed on a _____ phase, which is often paper. The stationary phase is sat in the _____ phase, which is often water. As the mobile phase rises up the stationary phase the chemical mixture _____ and is carried up. The more _____ the chemical is the quicker it will travel up the stationary phase. This causes the chemicals to _____ out creating a chromatogram

Keywords: Separate Mobile Stationary Mixture Dissolves Soluble

