

# Review 3

## Worksheet

Separate Science - Chemistry - Key Stage 4

C8 Chemical Analysis

Mr Robbins



1. A student carried out a series of tests on a group of unknown compounds. The results are summarised in the table below. Identify each compound from the test results and write the balanced chemical formula.

Compound	Flame test	Addition of sodium hydroxide	Addition of silver nitrate	Addition of acid	Addition of barium chloride
A	Green	No visible change	Yellow precipitate	No visible change	No visible change
B	Orange-red	White precipitate	Cream precipitate	No visible change	No visible change
C	Lilac	No visible change	No visible change	No visible change	White precipitate
D	No visible change	White precipitate that dissolves in excess	No visible change	Gas produced. Turned limewater cloudy	No visible change



# Answers

1.
  - A. Copper Iodide.  $\text{CuI}_2$
  - B. Calcium bromide.  $\text{CaBr}_2$
  - C. Lithium sulfate.  $\text{Li}_2\text{SO}_4$
  - D. Aluminium carbonate.  $\text{Al}_2(\text{CO}_3)_3$



Incorrect statement	Correct/better statement
<p>We use a pencil to draw the line in chromatography so that you can rub it out if you made a mistake</p>	
<p>The test for hydrogen is the squeaky pop test.</p>	
<p>The test for oxygen is to use a blown out splint and it will relight</p>	



A compound is when two or more substances are mixed together	
You put a lid on chromatography experiments so that nothing can get in and mess up the experiment	
If a dot does not move off the start line in chromatography, it means there is only one colour in it.	
A pure substance means only one element is present	
You can't use a flame test for a mixture because the most reactive element will make the other colours	

