

Recording Format for Qualitative Analysis Observations

1. Colour Changes

Task	Requirements: Describes initial and final colour of reagent
Adding 1 solution to another	Example: Purple solution turns colourless.
Heating solids	Example: White solid turned yellow.

2. State Changes

Task	Requirements: Describes initial and final state of reagent
Adding a liquid to a solid or vice versa / heating suspensions	Example: White solid dissolved to form a colourless solution.
Heating solids	Example: White solid melted to form a colourless liquid.
Heating solids that sublime	Example: White solid vapourised to produce a white fumes (which condensed on the cooler part of the test tube).

3. Separations

Task	Requirements: Describes colour and state of substances for all components.
Filtration	Example: A colourless solution was obtained as the filtrate. A white solid was obtained as the residue.

4. Precipitate formation

Task	Requirements: Describes formation of precipitate, stating its colour. In addition, describes solubility of precipitate with excess reagent.
Adding 1 solution to another	Example: Formation of a white precipitate , soluble in excess NaOH(aq), forming a colourless solution . Or Formation of a white precipitate , insoluble in excess dilute HNO ₃ (aq)
Negative observation for standard reagents	Example: No precipitate formed. Not accepted: No observable change / No reaction / Nothing happened...

5. Production of gases

Task	
Adding 1 solution to another solution / solid or vice versa	Requirements: Describes formation of gas, stating both the colour and smell of gas and describe rate of production of gas. In addition, describes solubility of precipitate with excess reagent. Example: Brisk effervescence of a colourless and odourless gas.
Heating of solids	Requirements: Describes formation of gas, stating both the colour and smell of gas. Example: Colourless, pungent gas evolved.

<p>Testing for the gas</p>	<p>Requirements:</p> <p>Describes the correct reagent and complete observation.</p> <p>Examples:</p> <ul style="list-style-type: none"> • Moist blue <u>litmus paper</u> turned pink and bleached it. (for SO₂, Cl₂ only) • Does not have any effect on moist litmus paper (H₂ and O₂) • Bubbled into limewater forming a white precipitate. • ... extinguished a <u>burning splint</u>.
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