



<p>This half term: Skills, Knowledge and Understanding to be developed:</p> <ul style="list-style-type: none">• Skills (students <u>WILL BE ABLE</u> to by the end of the Learning Programme: develop their experimental skills through carrying identification tests for carbonyl compounds, aldehydes, ketones and the presence of the CH_3CO structure in a molecule.• Knowledge (students <u>WILL KNOW</u> by the end of the Learning Programme): the reactions of carboxylic acids and their derivatives; identification tests for functional groups.• Understanding (students <u>WILL DEMONSTRATE</u> their understanding) through: writing equations for reactions; applying the knowledge learnt to similar reactions.			Key Terms / Words: condensation, reduction, addition-elimination, nucleophilic addition, iodoform, decarboxylation, bases, amines
<p>LP 3 – Weeks 1 & 2 Learning Outcomes:</p> <ul style="list-style-type: none">○ Students will be applying their knowledge sitting their mock exam.○ Students will know how to use high resolution ^1H NMR spectra (alongside the other spectral data specified in 2.8) in the elucidation of structure of organic molecules. <p>MOCK -Students will apply and demonstrate new knowledge and skills in an end of unit exam.</p>	<p>Assessment →</p> <p>MOCK EXAM</p> <p>MARK</p> <p>GRADE</p>	<p>Success criteria:</p> <ul style="list-style-type: none">• Students will be able to interpret different spectra during analysis questions.	<p>Homework LP 3 1/3</p> <ol style="list-style-type: none">1. Complete analysis examination questions.
<p>LP 3 – Weeks 3 & 4 Learning Outcomes:</p> <ul style="list-style-type: none">○ Students will know the order of relative acidity of carboxylic acids, phenols, alcohols and water and how these can be demonstrated.○ Students will know how carboxylic acids are formed by the oxidation of aldehydes.○ Students will know how carboxylic acids are reduced with LiAlH_4.○ Students will learn how aromatic carboxylic acids are formed by the oxidation of methyl side-chains.○ Students will understand how to decarboxylate carboxylic acids.		<p>Success criteria:</p> <ul style="list-style-type: none">• Students will be able to complete a flow chart to summarise the reactions of carboxylic acids.• Students will be able to answer end of unit questions on carboxylic acids and their derivatives.	<p>Homework LP 3 2/3</p> <ol style="list-style-type: none">1. Complete examination questions.
<p>LP 3 – Weeks 5 & 6 Learning Outcomes:</p> <p>APP -Students will apply and demonstrate new knowledge and skills in an assessment.</p> <ul style="list-style-type: none">○ Students will understand how to convert carboxylic acids to esters, acid chlorides, amides and nitriles.○ Students will know how these derivatives in are hydrolysed.○ Students will know how nitriles are produced from halogenoalkanes, and hydroxynitriles from carbonyl compounds.○ Students will know how to reduce nitriles.○ Students will be able to name amines, describe and explain their physical properties and compare basic strength.○ Students will know how primary aliphatic amines are produced from halogenoalkanes and nitriles.○ Students will know how aromatic amines are produced from nitrobenzene. <p>Students will know of ethanoylation of primary amines using ethanoyl chloride.</p>	<p>Assessment →</p> <p>APP1</p> <p>MARK</p>	<p>Success criteria:</p> <ul style="list-style-type: none">• Students will be able to compare the basic strength of different amines.• Students will be able to describe the processes involved in the preparation of phenylamine.	<p>Homework LP 3 3/3</p> <ol style="list-style-type: none">1. Complete examination questions.2. Revise for APP1.