Subject: **KS4 Separate Chemistry**		Year Group: **11**
Term 1 Key Focus/Topic(s) **Quantitative analysis (Topic 5)** ● Concentrations and titrations ● Titration core practical ● Volume of gases	Term 2 Key Focus/Topic(s) **Organic chemistry (Topic 9)** ● Hydrocarbons and their reactions ● Alcohols ● Alcohol core practical ● Carboxylic acids ● Polymerisation	Term 3 Key Focus/Topic(s) **Qualitative analysis & nanoparticles (Topic 9)** ● Flame tests ● Tests for positive and negative ions ● Core practical ● Nanoparticles
Term 1 Assessment Opportunities: ● Classwork with a particular focus on these calculations and how they link to industry. ● Core practical: Acid-alkali titration. ● End of topic test on quantitative analysis	Term 2 Assessment Opportunities: ● Classwork with a particular focus on organic compounds and their reactions. ● Core practical: The combustion of alcohols ● End of topic test for organic chemistry ● Mock Exams	Term 3 Assessment Opportunities: ● Classwork with a particular focus on selecting an appropriate test, and knowing the expected observations for a number of positive and negative ions. ● Core practical: identifying ions. ● End of topic test for qualitative analysis
Term 4 Key Focus/Topic(s) **Revision, second mocks, reviewing areas of weakness.** ● Practising revision techniques ● creating revision checklists ● retrieval practise ● mock exams	Term 5 Key Focus/Topic(s) **Revision** ● Knowledge – recap of key content ● Numeracy skills - calculations ● Literacy Skills – 6 mark questions ● Practical skills – recap core practicals	

Term 4 Assessment Opportunities: ● In class retrieval quizzes ● Second set of mocks, will full paper 1 and 2.	Term 5 Assessment Opportunities: ● Past paper practice for revision. ● Revisit end of topic tests for topics that students need extra help with.	

Rationale:
The topics studied in the final year of the course step up again in difficulty. For example, following on from 'calculations from masses' topic in Year 10, students now revisit this, and apply the knowledge to more complex calculations, such as calculating concentration from titration data. The topic separate chemistry is finalised in Term 1, and then these ideas are built on in Term 3 with the introduction of organic chemistry. These topics help to consolidate previous knowledge, and in Year 11, students are encouraged to draw links between different topics. Focus also shifts to higher level skills, such as planning the core practicals, analysing and evaluating data to draw valid conclusions.

In Year 11 Chemistry we place a particular focus on:

- Literacy skills in Chemistry – Focus on the answering of 6 mark exam questions. This will include key scientific literacy skill of explaining, comparing, justifying and evaluating as part of a written response.
- Continue to build on the mathematical skills developed in Year 9 and Year 10 – Ensuring that students can go through multiple calculation steps to arrive at an answer.
- Practical Skills – Being able to safely and effectively use practical work to accompany their classwork to further their understanding of the content. Students are to start planning their own investigations, and writing risk assessments.

Evaluation:

- Assessment opportunities will involve teacher, self and peer assessment. The assessment will focus around work produced in lessons where the students are required to demonstrate their fundamental scientific knowledge and understanding as well as their mathematical skills within Chemistry.
- Practical work will be assessed through the core practical investigations linked to titration, organic chemistry and identifying ions, and other experiments carried out in class.

- Book scrutiny, lesson observations and collegial discussions will be used to quality assure teaching and learning. Gap analysis on end of topic tests and mock papers.