KEVICC KS3 Curriculum:	Subject: Science	Key terms and vocabulary.
Year: 8 Term: Across the year	Topic: Chemistry	***Which words will be explicitly taught & how frequently will understanding be checked? How will assimilation of new vocab be checked?*** alkali, brittle, conductor, chemical, property, dense, displacement, reaction, element, group, halogen, malleable, metal, noble gas, non-metal, period, Periodic Table, physical property, sonorous, reactive, chromatography, chromatogram, compound, condenser, dissolve, distillation, evaporation, filtrate, filtration, filter paper, impure, substance, insoluble, mixture, pure, substance, residue, saturated, separate, solvent, solute, soluble, solubility, solution, acid, displacement reaction, metal, reaction, reactivity, reactivity series, salt, state symbol, atmosphere, crust, cementation, compaction, igneous, rock, inner, core, lava, magma, mantle, metamorphic, rock, outer core, porous, rock cycle, sedimentary rock Vocabulary will be modelled by teachers and tested in periodic short tests and scientific literacy is marked during feedback. Scientific communication is directly reported to parents as part of the college report.

What is the essential knowledge from this unit? ***What do students need to remember and understand?***

<u>Autumn term – Periodic table</u>

For 150 years chemists have used the Periodic Table to understand why elements have the properties that they do and to make predictions. Students will learn about some of those properties and patterns

Key Practicals – reactions of group 1 and group 7 elements.

<u>Separation techniques</u>

In this unit students will learn how to separate solids and liquids from each other in a number of practicals as well as understanding why somethings dissolve well.

Key practicals – separation techniques.

<u>Spring Term – Metals and Acids</u>

Students can investigate the properties and reactions of a number of materials that are all around us including metals, ceramics, composites and polymers. Students also learn about how metals are extracted from the Earth

Key practical – reactions of metals with water, oxygen and acids.

<u>Summer term – The Earth</u>

In this unit students study the structure of the Earth and the different types of rock and how they are recycled. The composition of the atmosphere and the causes and effects of Climate Change are introduced.

Key practical: making sedimentary rock.

What prior learning supports understanding of this content?	How does this content link to future learning?
Students have already covered in KS2 and Y7 the ideas around particles in solids, liquids and gases and how particles can be combined and reacted to make new materials.	All parts of this topic are revisited in GCSE science and the Periodic table is key scientific principle in all further study in Chemistry.

Reading: *Where in the unit are students supported to read complex academic text?*	**Writing:** *Independent writing tasks and how they are structured*
Reading activities from textbook and comprehension activities in the integrated Skills Tests that run throughout the year. Scientific literacy also includes reading graphs and tables in order to extract meaning from data.	Writing skills include concise and accurate communication that includes appropriate keywords. Scientific literacy includes the ability to draw graphs and tables to effectively communicate data. Conclusions to practical work is the most important form of scientific communication.

Key assessments:

Chemistry questions in Autumn , Spring 1, Spring 2 and Summer assessments

Skills tests 1 to 13 which are set as independent learning tasks.

How will feedback be received? Students will be given feedback via DIRT sheets after each topic, regular feedback on skills tasks 12 times a year and tests 4 times a year. The students will be actively involved in all of these processes via 'purple pen'.

What will be seen in books? Books will include notes on the content and practical/skills along with feedback via DIRT sheets (see above), skills sheets and tests will be found with purple pen relating to them all.