



<p>by now8</p>	<p>and Compounds is taught at this point as pupils now understand that all substances are made from particles, this will now be developed further to relate to the atom as well as making prior links with concepts from Metals and Non-metals and the basic structure of the periodic table, further links are made back to the Earths structure module where pupils were introduced to the notion of properties of compounds, &amp; pupils have previously studied word equations in the topic Acids and Alkalis# Metals and Non-metals# which will now</p>	<p>several concepts underpinning the big picture of this &amp; periodic table topic of learning, ; or example# atoms and elements from the previous module# pure and impure substances at the beginning of year 10 and Metals and Non-metals from later in year 10, Conclusions can be drawn# while opening new areas of learning in year 10# where pupils will investigate how the periodic table was developed,</p>	<p>on knowledge from the year 9 &amp; 10 covering modules from Chemical Reactions in terms of Acids and Alkalis, 10 further practices chemical equations and from Metals and Non-metals where the reactions of metals with acids was studied, this will now be developed</p>			
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	<p>increase in complexity as they are introduced to chemical formulae to represent elements, compounds and molecules, this will be carried across to the biology topic Cellular Respiration which is taught later in year 7 so pupils can build on the word equation and can subsequently challenge their knowledge to use chemical formulae to show the relevant equations rather than just using word equations,</p>			<p>reduce the impact humans have on the environment,</p>	<p>this module will draw on these cross curricular key themes so that the processes behind the recycling of cars can be studied, It also incorporates knowledge of radiation from the earlier topic in Year 7 + eating and Cooling in Physics,</p>	<p>metals is more advantageous to the environment in terms of reducing carbon footprint,</p>
<p>Skills &amp; Characteristics</p>	<p>Listening          Pupils will have opportunities to develop their listening skills throughout the academic year specifically when being given instructions for investigations or e.g, displacement reactions, they will also listen to each other throughout group work and opportunities for presenting their work.          Problem Solving          Pupils will use problem solving skills when evaluating the results from investigations processes, they will work collaboratively to explain the results of their practical experiments using scientific reasoning,</p>					

	<p>Aiming ) igh  All pupils will set clear# tangi" le goals and which can especially " e met during in(estigati(e wor2 when \$ollowing methods and use o\$ le(el ladders in tas2s,  Team * or+, &amp;upils will " e re%uired to wor2 in a group whilst carrying out practical wor2 or pro" lem*sol(ing acti(ities showing that these s2ills are necessary in the world o\$ wor2 irrespecti(e o\$ career choice,</p>					
Aspirations & Careers	<p>' he science in(ol(ed in this area correlates withA*  * Chemical engineer  * Energy manager  * &amp;roduction manager</p>	<p>' he science in(ol(ed in this area correlates withA*  * ; urniture designer  * Chemical metallurgist  * Chemist</p>	<p>' he science in(ol(ed in this area correlates withA*  * Chemical technician  * ' eacher o\$ chemistry  * ; orensic scientist</p>	<p>' he science in(ol(ed in this area correlates withA*  * &amp;roduct design  * Chemical engineer  * Research scientist</p>	<p>' he science in(ol(ed in this area correlates withA*  * Bardener  * ; armer  * En(ironmental scientist</p>	<p>' he science in(ol(ed in this area correlates withA*  * Recycling operati(e  * Chartered engineer  * Mining</p>
<p>CE-A.  Medical E-perience days  Careers ; airs  . or2 E-perience  Cultural Capital  &amp;upils are encouraged to ma2e lin2s " etween current e(ents# such as using hy" rid (ehicles and climate change and our Chemistry learning in the classroom,  All pupils ta2e ad(antage o\$ our e-cellent lin2s with the ROC and Newcastle Uni(ersity \$or o! site (isits and in school acti(ities,  E/tracurricular  Otem Clu"  Durham Uni(ersity  Chemistry Cecture series</p>						

Year Group	Basic (Lower Ability End Points)	Clear (Middle Ability End Points)	Detailed (Hig er Ability End Points)
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