

Year 7: ASK Yourself!

Subject: Science

Unit 7.7: Elements, compounds and reactions

	Launching 1-2	Developing 3-4	Progressing 5-6	Mastering 7-9
 S skills				
	<p>I need to use particle diagrams to classify a substance as an element, mixture or compound and as molecules or atoms.</p> <p>I need to name compounds using their chemical formulae.</p>	<p>I can partially represent atoms, molecules and elements, mixtures and compounds using particle diagrams.</p> <p>I can partially identify an unknown element from its physical and chemical properties.</p>	<p>Given chemical formulae, I can confidently name the elements present and their relative proportions.</p> <p>I can confidently use observations of a pattern in chemical reactions to predict the behaviour of an element in a group.</p>	<p>I can expertly use observations from chemical reactions to decide if an unknown substance is an element or a compound.</p> <p>I can expertly use data about the properties of elements to find similarities, patterns and anomalies.</p> <p>I can expertly place an unfamiliar metal into the reactivity series based on information about its reactions.</p>
 K knowledge				
	<p>I need to know that metals are generally found on the left side of the table, non-metals on the right.</p> <p>I need to know that metals and non-metals react with oxygen to form oxides which are either bases or acids.</p>	<p>I partially know that the elements in a group all react in a similar way and sometimes show a pattern in reactivity.</p> <p>I partially know that as you go down a group and across a period the elements show patterns in physical properties.</p>	<p>I confidently know that most substances are not pure elements, but compounds or mixtures containing atoms of different elements.</p> <p>I confidently know that they have different properties to the elements they contain.</p>	<p>I understand that metals can be arranged as a reactivity series in order of how readily they react with other substances.</p>