Lesson	Know		Apply		Extend	
5.3.1 Elements	I can state what an element is.	☐	I can correctly write down the chemical symbols of 16 elements and, given chemical symbols, write down their names.	☐	I can suggest the advantages of using the same chemical symbols in all languages.	☐
	I can state the chemical symbols of 16 elements.	☐				
5.3.2 Atoms	I can state what an atom is.	☐	I can represent atoms and elements using particle diagrams.	☐	I can estimate the number of atoms in a sample.	☐
	I can state that every element has its own type of atom.	☐	I can compare the properties of an atom of an element to the properties of many atoms.	☐	I can use a model to draw conclusions about how the properties of atoms together contribute to the properties of an element.	☐
5.3.3 Compounds	I can state what a compound is.	☐	I can represent elements, mixtures, and compounds using particle diagrams.	☐	I can use particle diagrams to help to explain why a compound has different properties to the elements whose atoms it contains.	☐
	I can use particle diagrams to classify a substance as an element, mixture, or compound.	☐	I can compare the properties of a compound to the properties of the element whose atoms it contains.	☐	I can compare and contrast the properties of elements and compounds and give a reason for their differences.	☐
5.3.4 Chemical formulae	I can name simple compounds.	☐	I can name compounds using their chemical formulae.	☐	I can deduce a pattern in the formula of similar compounds and use it to suggest formulae for unfamiliar ones.	☐

Lesson	Know		Apply		Extend	
	I can use particle diagrams to classify a substance as an element or compound.	☐	I can name the elements present and their relative proportions, given chemical formulae.	☐	I can find the element whose atoms contribute the greatest mass to the compound, given relative masses of atoms.	☐
	I can represent simple compounds using models.	☐	I can represent elements, compounds, and mixtures using particle diagrams.	☐		
5.3.5 Polymers	I can state what a polymer is.	☐	I can represent elements, mixtures, and compounds using particle diagrams and physical models.	☐	I can use particle diagrams to predict physical properties of compounds.	☐
	I can state some uses of polymers.	☐	I can explain how polymer properties make them suitable for their uses.	☐	I can compare properties of different polymers.	☐
	I can describe the structure of a polymer.		I can explain how polymer properties depend on their molecules.			