Chapters 4&12: Atoms, Elements, Compounds, Molecules, & Periodic Table

Student Learning Targets

- * I will understand and be able to define each of the following terms: atom, element, compound, molecule, mixture, columns, rows
- * I will demonstrate the difference between an compound & molecule by giving real life examples
- * I will understand the process of how the periodic table was created
- * I will demonstrate how to use the periodic table

Part 1: What do you know?	AFTER BEGINNING
Please do the required activities FIRST. In addition, please complete 2 activities below	Continue updating IPOA tracker after each activity

X	Activity	Points	Complete?
REQ	Skim Ch. 4 in online textbook and answer the questions in the packet for Ch. 4. Be sure to focus on the key terms.	/10	
REQ	Please read Ch. 12, Sections 1-2 in online textbook and answer questions in the packet	/10	
	Design an infographic or make a web that demonstrates the connections among the terms: atom, element, compound, and molecule	/10	
	Find 4 non educational videos/movies that have examples of elements, compounds, molecules, and mixtures which are identified and used in movies. Be sure to identify what the element, compound, molecule, mixture is. Make a videocollage of the movies.	/10	
	Find 3 different interactive periodic tables. Identify 3 cool features that each has. Make a <u>video</u> or an <u>annotated snapshot/infographic</u> of the the three periodic tables and the features.	/10	
	Create a poem, song, or short story relating the following terms: atom, compound, molecule, mixture Can be fictional.	/10	
	Make Trading Cards of the key terms and 1 example of each term (e.g., an example of an element).	/10	
	Got another idea to demonstrate what you know about Introduction to the Elements, Compounds, Molecules & the Periodic Table? Come talk to me!		

Part 2: What have you learned?	AFTER BEGINNING
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Continue updating IPOA tracker after each activity

Х	Activity	Points	Complete?
REQ	Lab: "Flame Test"	/25	
	Lab: "Making Butter"	/25	
	Lab: "Separating Elements"	/25	
	Lab: "Create a Periodic Table"	/25	
	Lab: "Chemical Side of Light"	/25	
	ScilLinks Activity: Mixtures	/25	
	Webquest - Create a storybook of the elements	/25	
	SciLinks Activity: The Periodic Table	/25	
	Webquest - You are a Science Teacher!	/25	
	Webquest - Eureka! You discovered a new element!	/25	
	Got another idea to demonstrate what you will learn about Elements, Compounds, Molecules and the Periodic Table? Come talk to me!		

Part 3: Now, what will you find out?	BEFORE BEGINNING
Choose one of the following questions to answer. Take your own assignments from Part 1 and your results/data or final project from Part 2. Answers can be in any format (written, recording, video, drawing).	Keep a list of all resources you use

X	Activity	Points	Complete?
	What would be a reason for the "average person" to know about chemical reactions?	/10	
	Is Chemistry a language or is it more comparable to something else and if so what it and why?	/10	

Adapted from D. Moran, The Academy at Eleventh Street