Week / Date	Key Topics	Learning Objectives	Tasks / homework
	Ionic Compounds and Equations	☐ I can name common ions (word/formula)	
		☐ I can name ionic compounds (word/formula) (A)	
		☐ I can use supplied ions to write the formula of ionic compounds (A)	
		☐ I can write ionic equations for compounds formed	
	Using Flow Charts to identify ions	☐ I can Identify a precipitation reaction	
	Precipitation reactions	☐ I can Use the solubility rules to predict a precipitate	
		☐ I can Write balanced precipitation equations (M)	
		☐ I can Use the flow chart to identify the following cations NH_4^+, Na^+, Mg^{2+}, Ag^+, Fe^{2+}, Fe^{3+}, Cu^{2+}, Al^{3+}, Pb^{2+}, Zn^{2+}, Ba^{2+} (A)	
		☐ I can Use a flow chart to identify the following anions CO_3^{2-}, Cl^-, I^-, SO_4^{2-}, NO_3^-, OH^- (A)	
		☐ I can describe the steps I have used to identify each ion (A)	
		☐ I can describe the observations I have made during each step of the procedure for each ion identified (A)	
	Impact of Ions on People and Environment	☐ I can state 2 ways that one of the ions from the list above impact humans and/or the environment. (A)	
		☐ I can explain 2 ways that one of the ions from the list above impact humans and/or the environment. (M)	
		☐ I can discuss the positive and negative impacts one of the ions have on humans or the environment (E)	
		☐ I can Research to build a list of your information sources (E)	
		☐ I am Continuing with practical work to identify unknown ions	
	Practice assessments	☐ I can write balanced equations for all the reactions where precipitates are formed (M)	

		☐ I can write balanced equations for all the reactions where complex ions are formed (E)	
		☐ I can link my observations to any equations I write for the formation of precipitates and/or complex ions (M/E)	
		☐ I can link the procedure, observations and the secondary data to justify the identification (E)	
		☐ I can link the ion identified in the solutions to the purpose of the investigation *(Your task is to carry out an analysis of the water to determine any ions that are in it and report on their impact on people and the environment.) (E)*	
		☐ I am Continuing with practical work to identify unknown ions	
	Assessment Grade ☐	You will be assessed on how well you collect primary data using an identification procedure. Use this to identify the chemical species and link this to the purpose of the investigation. The report will include a justification of the identification process of the ions identified in the solutions. Discuss the significance of the identified chemical species for people and the environment, linked to the purpose of the investigation. This is an <u>individual</u> practical and written activity done over 3 periods in class. You may use your devices in class to carry out research or you may bring printed web pages to class as resources to complete your report. The report will be written in class under assessment conditions in 3 periods. Reports along with additional printed material brought to class will stored in class. Purpose Your task is to carry out an analysis of the water to determine any ions that are in it and report on their impact on people and the environment.	*Last minute reminders for assessment* Bring any printed resources to first hour Bring device (charged) _____ _____ _____