## Map of the unit: From Minerals to Elements

This shows the relationship between the Storyline, the Activities and the Chemical Ideas.

To aid planning, laboratory-based practical work is indicated by (P), activities involving IT skills are indicated by (IT) and those developing study skills by (S).

	ACTIVITIES		CHEMICAL STORYLINE		CHEMICAL IDEAS
M1.1	Solutions of ions (P)	M1	CHEMICALS FROM THE SEA	5.1	lons in solids and solutions
M1.2	Bromine production			9.1	Oxidation and reduction
M1.3	Halogens and their compounds (P)			2.4	Electronic structure: sub-shells and
M1.4	This liquid is dangerous				orbitals
M1.5	Manufacturing chlorine			11.4	The p-block: Group 7
M2.1	Mineral spotting (P)	M2	M2 COPPER FROM DEEP IN THE GROUND	1.5	Concentrations of solutions
M2.2	Getting at the minerals (P)			8.1	Acid-base reactions
M2.3	Extracting copper (P)			5.2	Molecules and networks
M2.4	Finding out how much acid there is in a solution (P)				
M2.5	The philosopher's microbe?				
M2.6	Molecules and networks				
М3	Check your notes on <b>From Minerals to Elements</b> (S)	М3	SUMMARY		