AP Chemistry Summer Preparation 2017

There is no formal summer assignment in AP chemistry (nothing graded).

That being said, it would help you out a lot next year if you learned your solubility rules and polyatomic ions over the summer.

For the polyatomic ions, you should know the name, charge, and formula.

If you would like to borrow an AP chemistry text for the summer, you may pick one up in C303. You might want to consider borrowing a book to brush up on basic chemistry skills (chapters 1-3).

I will gladly post solutions to problems from chapters 1-3, if anyone requests them.

I don't have a list of students taking AP chemistry next year . . . feel free to share this information with anyone you know who will be taking the course.

Have a great summer!

Mrs. Whitlock

Ion	Solubility	Exceptions
NO_3^-	soluble	none
ClO_4^-	soluble	none
Cl^-	soluble	except Ag^+, Hg_2^{2+}, *Pb^{2+}
I^-	soluble	except Ag^+, Hg_2^{2+}, *Pb^{2+}
SO_4^{2-}	soluble	except Ca^{2+}, Ba^{2+}, Sr^{2+}, Hg^{2+}, Pb^{2+}, Ag^+
CO_3^{2-}	insoluble	except Group IA and NH_4^+
PO_4^{3-}	insoluble	except Group IA and NH_4^+
OH^-	insoluble	except Group IA, *Ca^{2+}, Ba^{2+}, Sr^{2+}
S^{2-}	insoluble	except Group IA, IIA and NH_4^+
Na^+	soluble	none
K^+	soluble	none
NH_4^+	soluble	none

+1 IONS		**+2 IONS**		**+3 IONS**	
AMMONIUM	NH_4^{+1}	BARIUM	Ba^{+2}	ALUMINUM	Al^{+3}
CESIUM	Cs^{+1}	BERYLLIUM	Be^{+2}	CHROMIUM(III)	Cr^{+3}
COPPER (I)	Cu^{+1}	COBALT(II)	Co^{+2}	COBALT(III)	Co^{+3}
HYDROGEN	H^{+1}	CALCIUM	Ca^{+2}	GALLIUM	Ga^{+3}
LITHIUM	Li^{+1}	CHROMIUM(II)	Cr^{+2}	IRON(III)	Fe^{+3}
POTASSIUM	K^{+1}	COPPER(II)	Cu^{+2}	MANGANESE(III)	Mn^{+3}
RUBIDIUM	Rb^{+1}	IRON(II)	Fe^{+2}		
SILVER	Ag^{+1}	LEAD(II)	Pb^{+2}	**+4 IONS**	
SODIUM	Na^{+1}	MAGNESIUM	Mg^{+2}	TIN(IV)	Sn^{+4}
		MANGANESE(II)	Mn^{+2}	LEAD(IV)	Pb^{+4}
		MERCURY(I)	$(Hg_2)^{+2}$		
		MERCURY(II)	Hg^{+2}		
		NICKEL	Ni^{+2}		
		STRONTIUM	Sr^{+2}		
		TIN(II)	Sn^{+2}		
		ZINC	Zn^{+2}		

-1 IONS		**-2 IONS**		**-3 IONS**	
ACETATE	$C_2H_3O_2^{-1}$	CARBONATE	CO_3^{-2}	ARSENATE	AsO_4^{-3}
BROMATE	BrO_3^{-1}	CHROMATE	CrO_4^{-2}	NITRIDE	N^{-3}
BROMIDE	Br^{-1}	DICHROMATE	$Cr_2O_7^{-2}$	PHOSPHATE	PO_4^{-3}
CHLORATE	ClO_3^{-1}	MONOHYDROGEN PHOSPHATE	HPO_4^{-2}	PHOSPHIDE	P^{-3}
CHLORIDE	Cl^{-1}	OXALATE	$C_2O_4^{-2}$		
CHLORITE	ClO_2^{-1}	OXIDE	O^{-2}		
CYANIDE	CN^{-1}	PEROXIDE	O_2^{2-}		
DIHYDROGEN PHOSPHATE	$H_2PO_4^{-1}$	SULFATE	SO_4^{-2}		
FLUORIDE	F^{-1}	SULFIDE	S^{-2}		
HYDRIDE	H^{-1}	SULFITE	SO_3^{-2}		
HYDROGEN SULFATE	HSO_4^{-1}				
HYDROGEN CARBONATE	HCO_3^{-1}				
HYDROGEN SULFITE	HSO_3^{1-}				
HYDROXIDE	OH^{-1}				
HYPOCHLORITE	ClO^{-1}				
IODATE	IO_3^{-1}				
IODIDE	I^{-1}				
NITRATE	NO_3^{-1}				
NITRITE	NO_2^{-1}				
PERCHLORATE	ClO_4^{-1}				
PERMANGANATE	MnO_4^{-1}				