Y12 A Level Chemistry Curriculum Plans 2021-2022

Please make sure you check the right plans for the class you are in. There are plans for different teachers. Any questions should be directed to the relevant members of staff or to Mrs Hale or Miss Kilcommons.

2 Lessons Per Week – Mrs Khan & Mrs Hale

w/b	Organic and Physical 2021-22	2 lessons per week (TK &SHA)	
1 1/9	No lessons	No lessons	
2 6/9	Recap rates and collision theory	3.1.5.2 Maxwell Boltzman Distribution	
3 13/9	3.1.5.3 Effect of temp	3.1.1.5.4 conc and pressure	
4 20/9	RP 3 Rates	RP 3 Rates	RP 3 Rates
5 27/9 NO FRI	3.1.5.5 Effects of a catalyst	Questions on kinetics	
6 4/10	3.1.6.1 Dynamic equilibrium	Activity 29 /30 (prac)	
7 11/10	3.1.6.2 Kc and calculations	3.1.6.2 Kc and calculations	
8 18/10	Exam question on equilibrium and Kc	Exam question on equilibrium and Kc	
OCT Half Term	OCT Half Term	OCT Half Term	OCT Half Term
9 1/11	3.3.1.1 Nomenclature	3.3.1.1 Nomenclature	
10 8/11	TEST ON Kinetics 3.1.5 & Equilibria 3.1.6	3.3.1.3 Isomerism	TEST ON Kinetics 3.1.5 & Equilibria 3.1.6
11 15/11	3.3.1.3 Isomerism	Exam question on nomenclature and isomerism	
12 22/11 NO FRI	3.3.2 Alkanes (P) ILPAC	3.3.2.1 Fractional distillation of oil	
13 29/11 NO MON	Cracking	3.3.2.2 Cracking practical	
14 6/12	3.3.2.3 Combustion of Alkanes	3.3.2.4 Chlorination of alkanes	
15 13/12		3.3.3.1 Halogenoalkanes	
CHRISTMAS	CHRISTMAS	CHRISTMAS	CHRISTMAS
16 3/1	3.3.3.1 Halogenoalkanes	Nucleophilic substitution	
17 10/1	TEST ON 3.3.2 Alkanes	elimination	TEST ON 3.3.2 Alkanes
18 17/1	EQ	3.3.3.3 Ozone depletion	
19 24/1			
20 31/1	EXAMS 1	EXAMS 1	EXAMS 1
21 7/2	3.3.4.1 Alkenes	3.3.4.2 addition reactions	

FEB Half Term	FEB Half Term	FEB Half Term	FEB Half Term
22 21/2 NO MON	Alkenes (cont)		
23 28/2	3.3.4.3 Polymers		
24 7/3	(Go through exam)	Test on Halogenoalkanes and alkenes 3.3.3 & 3.3.4	Test on Halogenoalkanes and alkenes 3.3.3 & 3.3.4
25 14/3	3.3.5.1 Alcohols production	3.3.5.2 oxidation	
26 21/3	3.3.5.3 elimination		
27 28/3			
EASTER	EASTER	EASTER	EASTER
28 18/4 NO MON	RP5 Distillation of a product	RP5 Distillation of a product	RP5 Distillation of a product
29 25/4	3.3.6.1 testing for functional groups		
30 2/5 NO MON	RP6 Functional Groups	RP6 Functional Groups	RP6 Functional Groups
31 9/5	3.3.6.2 Mass spec	3.3.6.3 Infra red	
32 16/5			
33 23/5	EXAMS 2	EXAMS 2	EXAMS 2
MAY Half Term	MAY Half Term	MAY Half Term	MAY Half Term
34 6/6			
35 13/6			
36 20/6 NO FRI			
37 27/6			
38 4/7			
39 11/7			
40 18/7			

3 Lessons Per Week – Mrs Bedford

w/b	Inorganic and physical 2019-20	3 lessons per week (KBE version)		
1 1/9	No lessons	No lessons	No lessons	
2 6/9	Introduction to course	3.1.1. Fundamental particles	3.1.1.2 Mass number and isotopes	
3 13/9	3.1.1.3 Electron configuration	.	.	
4 20/9	SUITABILITY CHECK	3.1.2.1 RAM RMM	3.1.2.2 Moles Avogadro (+maths)	SUITABILITY CHECK
5 27/9 NO FRI	Moles and concentration	Making a standard solution	RP 1a	
6 4/10	3.1.2.3 Ideal gas equation	.	3.1.2.4 Empirical and molecular formulae	
7 11/10	MgO prac	.	3.1.2.5 Balanced equations and calculations	
8 18/10	(P) % conversion of $CaCO_3$ to CaO by heat		(P) the Mr of a hydrated salt (eg magnesium sulfate) by heating to constant mass.	
OCT Half Term	OCT Half Term	OCT Half Term	OCT Half Term	OCT Half Term
9 1/11	volumes of gases calcs	percentage yields calcs	percentage atom economies	
10 8/11	Introduce Titrations	RP 1b	RP 1b	
11 15/11	C & EQ	C &EQ		
12 22/11 NO FRI	3.1.3.1 Recap of ionic bonding and formulae	3.1.3.2 Recap of covalent bonding introduce coordinate bonds	3.1.3.3 recap metallic bonding	
13 29/11 NO MON	3.1.3.4 link bonding structure and properties	Bonding and physical props	TEST on 3.1.1 & 3.1.2	TEST on 3.1.1 & 3.1.2
14 6/12	3.1.3.5 Shapes of molecules	.	3.1.3.6 Bond polarity	
15 13/12	3.1.3.7 Forces between molecules	.	.	
CHRISTMAS	CHRISTMAS	CHRISTMAS	CHRISTMAS	CHRISTMAS
16 3/1	C & EQ	C & EQ	C & EQ	

17 10/1	3.1.4.1 Exothermic and endothermic pracs	Enthalpy ΔH_f and ΔH_c	3.1.4.2 Calorimetry $Q=mC\Delta T$	
18 17/1	Test on 3.1.3 Bonding	(P)dissolution of sodium carbonate	(P)neutralising NaOH with HCl	Test on 3.1.3 Bonding
19 24/1	(P)combustion of alcohols.	.	3.1.4.3 Hess's law	
20 31/1	EXAMS 1	EXAMS 1	EXAMS 1	EXAMS 1
21 7/2	Hess's law + practicals	Hess's law + practicals	Hess's law + practicals	
FEB Half Term	FEB Half Term	FEB Half Term	FEB Half Term	FEB Half Term
22 21/2 NO MON	RP2	RP2	EQ	RP2
23 28/2	EQ	EQ	3.1.4.4 Bond enthalpy calculations	
24 7/3	3.1.7 Oxidation, reduction and redox	.	(P) observing redox reactions	
25 14/3	Test on 3.1.4	3.2.1.1 Classification spd	. 3.2.1.2 Physical props of period 3	Test on 3.1.4
26 21/3	3..2.2 Group2	(P)the solubility of Group 2 hydroxides	(P)test for sulfate ions &(P)solubility of Group 2 sulfates	
27 28/3	RP 4	RP 4	(D)Testing Solid halides with conc H_2SO_4	RP 4
EASTER	EASTER	EASTER	EASTER	EASTER
28 18/4 NO MON	Recap and EQ Group 2			
29 25/4	3.2.3 Halogens			
30 2/5 NO MON				
31 9/5			Test on 3.2. Inorganic Chemistry	Test on 3.2. Inorganic Chemistry
32 16/5	REVISION	REVISION	REVISION	
33 23/5	EXAMS 2	EXAMS 2	EXAMS 2	EXAMS 2
MAY Half Term	MAY Half Term	MAY Half Term	MAY Half Term	MAY Half Term
34 6/6	TBC			
35 13/6				
36 20/6 NO FRI				
37 27/6				
38 4/7				
39 11/7				
40 18/7				

3 Lessons Per Week – Miss Minshull

w/b	Inorganic and physical 2019-20	3 lessons per week (RMI)		
1 1/9	No lessons	No lessons	No lessons	
2 6/9	3.1.1. Fundamental particles	3.1.1.2 Mass number and isotopes	3.1.1.3 Electron configuration	SHA to do Introduction to course
3 13/9		.	3.1.2.1 RAM RMM	
4 20/9	SUITABILITY CHECK	3.1.2.2 Moles Avogadro (+maths)	Moles and concentration	SUITABILITY CHECK
5 27/9 NO FRI	NO FRI	NO FRI	NO FRI	
6 4/10	3.1.2.3 Ideal gas equation		3.1.2.4 Empirical and molecular formulae	
7 11/10	MgO prac		3.1.2.5 Balanced equations and calculations	
8 18/10	(P) % conversion of $CaCO_3$ to CaO by heat		(P) the Mr of a hydrated salt (eg magnesium sulfate) by heating to constant mass.	
OCT Half Term	OCT Half Term	OCT Half Term	OCT Half Term	OCT Half Term
9 1/11	volumes of gases calcs	percentage yields calcs	percentage atom economies	
10 8/11	Introduce Titrations	RP 1a	RP 1b	RP1
11 15/11	3.1.3.1 Recap of ionic bonding and formulae	3.1.3.2 Recap of covalent bonding introduce coordinate bonds	3.1.3.3 recap metallic bonding	
12 22/11 NO FRI	NO FRI	NO FRI	NO FRI	
13 29/11 NO MON	3.1.3.4 link bonding structure and properties	Bonding and physical props	TEST on 3.1.1 & 3.1.2	TEST on 3.1.1 & 3.1.2
14 6/12	3.1.3.5 Shapes of molecules		3.1.3.6 Bond polarity	
15 13/12	3.1.3.7 Forces between molecules			
CHRISTMAS	CHRISTMAS	CHRISTMAS	CHRISTMAS	CHRISTMAS
16 3/1	C&EQ	C & EQ	C & EQ	

17 10/1	3.1.4.1 Exothermic and endothermic pracs	Enthalpy ΔH_f and ΔH_c	3.1.4.2 Calorimetry $Q=mC\Delta T$	
18 17/1	Test on 3.1.3 Bonding	(P)dissolution of sodium carbonate	(P)neutralising NaOH with HCl	Test on 3.1.3 Bonding
19 24/1	(P)combustion of alcohols.	.	3.1.4.3 Hess's law	
20 31/1	EXAMS 1	EXAMS 1	EXAMS 1	EXAMS 1
21 7/2	Hess's law + practicals	Hess's law + practicals	Hess's law + practicals	
FEB Half Term	FEB Half Term	FEB Half Term	FEB Half Term	FEB Half Term
22 21/2 NO MON	RP2	RP2	EQ	RP2
23 28/2	EQ	EQ	3.1.4.4 Bond enthalpy calculations	
24 7/3	3.1.7 Oxidation, reduction and redox	.	(P) observing redox reactions	
25 14/3	Test on 3.1.4	3.2.1.1 Classification spd	. 3.2.1.2 Physical props of period 3	Test on 3.1.4
26 21/3	3..2.2 Group2	(P)the solubility of Group 2 hydroxides	(P)test for sulfate ions &(P)solubility of Group 2 sulfates	
27 28/3	RP 4	RP 4	(D)Testing Solid halides with conc H_2SO_4	RP 4
EASTER	EASTER	EASTER	EASTER	EASTER
28 18/4 NO MON	Recap and EQ Group 2			
29 25/4	3.2.3 Halogens			
30 2/5 NO MON				
31 9/5			Test on 3.2. Inorganic Chemistry	Test on 3.2. Inorganic Chemistry
32 16/5	REVISION	REVISION	REVISION	
33 23/5	EXAMS 2	EXAMS 2	EXAMS 2	EXAMS 2
MAY Half Term	MAY Half Term	MAY Half Term	MAY Half Term	MAY Half Term
34 6/6	TBC			
35 13/6				
36 20/6 NO FRI				
37 27/6				
38 4/7				
39 11/7				
40 18/7				