

Curriculum Map

B is the topic number for biology C is the topic number for chemistry P is the topic number for physics L is the lesson number in this topic e.g. P1 L01 is the first lesson in the first physics topic.

Year 10 Combined Science

		Phys + Chem		Bio + Chem	
Date	Week	Lesson 1	Lesson 2	Lesson 1	Lesson 2
1-Sep	1	•	P1 Energy L01 Energy stores and transfers	· ·	B2 Organisation and the digestive system L01 Tissue, organs, and the digestive system
8-Sep		IWOLK GOLIE	LO3 GPE, KE and Elastic Potential Energy Equations	IPTOLEITS	L03 Required practical 3 food tests
15- Sep	3	LO4 Energy Calculation Practice	L05 Conservation of Energy with Equations	LO4 Enzymes and factors affecting enzymes	L05 Required practical 4 enzymes
22- Sep	4	L06 Dissipation and Efficiency	L07 Energy and Power	L06 Blood and Blood vessels	L07 The heart
29- Sep		L08 Energy and power	L09 Energy Application Questions		L09 Heart valve replacements and artificial pacemakers



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6-Oct		L10 Power Stations and Energy Demands	L11 Solar, Wind and Water Energy resources	L10 Tissues and organs in plants and transport systems	L11 Evaporation, transpiration and Factors affecting transpiration
13-	7	L12 Solar energy, wind, and wave		C1 and C8	
Oct		energy		L01 Pure Substances and	
			L13 Nuclear Energy	formulations	L02 Separation techniques
20-	8		L15 Specific Heat Capacity	L03 Required Practical -	
Oct		L14 Energy transfer by Conduction	Theory and Equation	Chromatography	LO4 Testing for gasses
HALF TERM					
3-	9	Assessment Autum Data Drop	L16 Specific Heat Capacity	Y10 Assessment Week	L05 Atomic Structure Recap and
Nov		•	Practical		Group 1
10-	10	L17 SHC Evaluation and Exam	L18 Heating and Insulating		
Nov		Practice	Buildings	L06 Group 1 Demo	L07 Group 7
17-	11	Review Assessment	P3 Particle Model of Matter	Review Assessment	B3 Infection and Response and B1
Nov			L01 Density theory and		Cell Division
			calculations		L01 Pathogens
24-	12	L02 Density Required Practical	LO3 Density extended writing	L02 Viral diseases	
Nov		, .	response (feedback task)		LO3 Bacterial Diseases
8-Dec		LO4 States of matter (+ Improve density feedback task)	L05 Changes of state	L04 Fungal and Protists diseases	L05 Human defences
15-	14	C2 Bonding L01 Ionic bonding - dot	Buffer Lesson	L06 Vaccinations	Buffer lesson
Dec		and cross			
22-	15				
Dec		End of term - may not have lessons		End of term - may not have lessons	
END OF TERM					
5-Jan	16	LO2 Ionic Bonding - describing ionic	L03 Atomic Size and reactivity	L07 Antibiotics and painkillers	LO8 Discovering drugs AND
		bonding			developing drugs
12-	17	L04 Ionic structures	L05 Covalent bonding - dot and	L09 non-communicable diseases	
Jan			cross		L10 Cell Division



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19- Jan	18	LO6 Simple covalent molecules	L07 Giant covalent molecules	L11 Stem cells and differentiation (with therapeutic cloning)	L12 Stem cell dilemmas
26- Jan		L08 Graphene, fullerenes, and nanotubes	L09 Polymers	L13 Cell division consolidation	L14 Cancer and smoking
2-Feb	20	L10 Metallic bonding and Alloys	L11 Identifying types of structures	L15 Alcohol, other carcinogens, diet, and exercise	B5 Homeostasis Part 1 L01 Principles of homeostasis
9-Feb		P6 L06 Internal Energy (Cooling of stearic acid)	L07 Specific Latent Heat Theory	LO2 Structure and function of nervous system	Buffer lesson
	HALF TERM				
23- Feb	22	Assessment week	L08 SLH and SHC Calculations	Assessment week	L03 Reflexes
2- Mar	23	L09 Gas pressure and temperature	L10 Molecules and Matter Revision	L04 Required practical 6 reaction time	B7 Ecology L01 Communities, Competition, abiotic and biotic factors
9- Mar	24	Assessment feedback	P4 Atomic Structure LO1 Atomic Structure recap	Assessment feedback	LO2 Adaptations in animals and plants
16- Mar		LO2 Alpha, beta, and gamma properties	LO3 Changes in the nucleus (demo of sources)	L03 Feeding relationships	LO4 Distribution and Abundance
23- Mar	26	LO4 Half-life definition and graphs	LO5 Half-life calculations	L05 Required practical 7 field investigations	LO6 Required practical 7 field investigations (feedback task)
		END OF TERM			
13- Apr	27	L06 Uses of radiation	C3 Quantitative Chemistry P1 L01 Conservation of mass	L07 Materials and cycling and the carbon cycle	L08 The human population growth
20- Apr	28	LO2 Balancing equations	LO3 Balancing equations	L09 Air pollution and Land and water pollution	L10 Deforestation and peat destruction
27- Apr	29	L03 Relative formula mass	LO4 Percentage by mass	L11 Global warming	L12 Maintaining biodiversity



4- May	30	L05 Concentration	L06 Concentration - changing the subject	C7 Crude oil L01 Alkanes	L02 Alkane properties
11- May		P2 Electricity L01 Circuit drawing and symbols	LO2 Current and Charge	LO3 Crude oil and fractional distillation	L04 Cracking and alkenes
18- May	32	L03 Potential difference	L04 Resistance	L05 Combustion	C9 Chemistry of the Atmosphere L01 History of the atmosphere
		HALF TERM			
1-Jun		LO5 Resistance of a wire required practical	L06 I-V characteristic graphs 1	L02 Greenhouse effect	L03 Global climate change and carbon footprint
8-Jun	34	LO7 I-V characteristic graphs 2	LO8 I-V characteristic graphs exam questions (EW question)	LO4 Atmospheric Pollutants	Using resources LO1 Water Treatment
15- Jun	35	L09 Series circuits rules	L10 Parallel circuit rules	L02 Wastewater treatment	L03 Potable water RP
22-	36	Y10 Assessment Week		Y10 Assessment Week	
Jun			Revision of Year 10 Content		Revision of Year 10 Content
29-	37		L01 Exothermic and		L04 Reduce, Reuse recycle
Jun			endothermic reactions and	L05 Finite Resources and Life-cycle	
		L11 Circuit Rules	reaction profile diagrams	assessment	
6-Jul		LO2 Energy changes required practical	Assessment feedback	Assessment feedback	Assessment feedback
13-Jul	39	Revision of Year 10 Content	Revision of Year 10 Content	Revision of Year 10 Content	Revision of Year 10 Content