

Year 10 Combined Science Teaching Plan (Sept 2024-July 2025)

Week Beginning	Topic Covered	Spec. Points	Revision guide (H)	Revision guide (F)
2/9 Week 1	P3: particle model and motion in gases	6.3.1.1	191	193
9/9 Week 2	P3: density inc. RP, internal energy	6.3.1.1, 6.3.3.1	192-193	194-195
16/9 Week 3	P3: changes of state, recap specific heat capacity, specific latent heat	6.3.1.2, 6.3.2	193-194	195-196
23/9 Week 4	B4: photosynthesis, rate of photosynthesis, limiting factors inc. RP, uses of glucose	4.4.4.1-4.4.4.3	50-53	50-52
30/9 Week 5	B4: aerobic and anaerobic respiration, metabolism and exercise	4.4.2.1-4.4.2.3	54-56	53-55
7/10 Week 6	C3: conservation of mass, balancing equations, relative formula mass, percentage by mass calculations	5.3.1	123, 125	123-125
14/10 Week 7	C3: concentration of solutions C3 H: moles, calculating masses, balancing equations using moles, limiting reactants	5.3.2.5 H: 5.3.2.1-5.3.2.4	124-128	126
21/10 Week 8	C3: consolidation	5.3.1-5.3.2	123-128	123-126
October Half Term				
4/11 Week 9	T1 Assessment			
11/11 Week 10	P2: circuit symbols, charge, current, potential difference and resistance ($V=IR$)	6.2.1.1-6.2.1.3	179-181	180-182
18/11 Week 11	P2: length of a wire RP, series / parallel inc. RP	6.2.1.3, 6.2.2	183-185	185-187
	T1 Reteach			
25/11 Week 12	C4: reactions of metals (O_2 , acid, H_2O), reactivity series, displacement, oxidation, reduction H: REDOX in terms of electrons	5.4.1.1-5.4.1.3 H: 5.4.1.4	132-134	130-131
2/12 Week 13	C4: reactions of acids and metals, neutralisation	5.4.2.1 H: 5.4.2.3	129-131	128-129
9/12 Week 14	C4: pH scale and making salts, neutralisation H: strong and weak acids	F: 5.4.2.3-5.4.2.4 H: 5.4.2.2-5.4.2.5	129-131	128-129
16/12 Week 15	C4: electrolysis of molten ionic compounds, extracting metals using electrolysis, electrolysis of aqueous solutions RP, H: half equations	5.4.3.1-5.4.3.3 H: 5.4.3.5	134-136	132-133
Christmas Holiday				
6/1 Week 16	P2: I-V Characteristics RP (ohmic conductor, filament lamp, diode)	6.2.1.4	181	183
13/1 Week 17	P2: circuit devices (thermistors, LDR)	6.2.1.4	182	184
20/1 Week 18	B3: communicable diseases (bacteria, virus, fungi, protist) and human defence systems	4.3.3.1-4.3.1.6	43-46	42-46
27/1 Week 19	B3: vaccination, antibiotics, painkillers, discovering and developing drugs	4.3.1.7-4.3.1.9	47-49	47-49
3/2 Week 20	P2: electricity in the home, power and the National Grid	6.2.3-6.2.4	186-189	188-191
10/2 Week 21	B1: cells, microscopes, transporting substances B2: organ systems, enzymes, food tests, non-communicable diseases and plant systems	4.1.1-4.1.3 4.2.1-4.2.3	11-22 24-41	11-22 24-40
February Half Term				

24/2 Week 22	C1: atoms, elements, compounds, mixtures, periodic table C2: ionic compounds, simple and covalent molecules, metallic bonding, states of matter	5.1.1-5.1.2 5.2.1-5.2.3	96-110 112-121	96-111 113-122
3/3 Week 23	T2 Assessment - Biology Paper 1			
10/3 Week 24	C5: endothermic and exothermic reactions, measuring energy changes (RP), reaction profiles	5.5.1.1-5.5.1.2	138-139	134-136
17/3 Week 25	C5 H: bond energies, F: consolidation	F: 5.5.1 H: 5.5.1.3	140	134-136
	T2 Reteach			
24/3 Week 26	P4: atomic structure, isotopes, developing atomic model, radioactive decay, types of nuclear radiation	6.4.1.1-6.4.1.3 6.4.2.1	195-196 103	197-198 104
31/3 Week 27	P4: nuclear equations, half-life, irradiation and radioactive contamination	6.4.2.2-6.4.2.4	197-199	199-201
Easter Holiday				
21/4 Week 28	B5: homeostasis, the nervous system, synapses and reflexes, investigating reaction time RP	4.5.1 - 4.5.2	58-61	57-60
28/4 Week 29	B5: endocrine system, controlling blood glucose, diabetes, hormones in reproduction	4.5.3.1-4.5.3.3	62-64	61-63
5/5 Week 30	B5 F: contraception B5 H: treating infertility, negative feedback	F: 4.5.3.4 H: 4.5.3.4-4.5.3.6	65-67	64-65
12/5 Week 31	C6: collision theory, factors affecting rates of reaction, RP: the gas syringe, RP: the black cross	5.6.1.2 5.6.1.3	142-145	138-141
19/5 Week 32	C6: catalysts, calculating rate using graphs, reversible reactions and equilibrium	5.6.1.1, 5.6.1.4 5.6.2.1-5.6.2.3	143 146-147	139 142-144
May Half Term				
2/6 Week 33	C6 F: consolidation C6 H: the effect of conditions on equilibrium	F: 5.6.1-5.6.2.3 H: 5.6.2.4-5.6.2.7	148	138-144
9/6 Week 34	P1: energy stores and systems, energy transfers, energy resources	6.1.1-6.1.3	167-177	167-179
16/6 Week 35	E1 Assessment - Chemistry Paper 1 and Physics Paper 1			
23/6 Week 36	E1 Assessment - Chemistry Paper 1 and Physics Paper 1			
30/6 Week 37	C7: crude oil, structure and properties of hydrocarbons, alkanes	5.7.1.1-5.7.1.4	150-152	146-149
7/7 Week 38	C7: fractional distillation, cracking and alkenes	5.7.1.1-5.7.1.4	150-152	146-149
	E1 Reteach			
14/7 Week 39	Review			