

Revision Framework for Combined Science Paper 1 - Use along side your revision checklists

Date	Unit	Section for revision	Revision book pages <i>CGP</i> <small>Pearson H Pearson F</small>	Time spent revising	Evidence in File	Issues identified	Action taken
24 th October	P4	Describing Waves, Manipulation of the wave speed calculation, describe how to complete a practical to measure velocity of waves (water and air)	164-165 188-193 175-180				
	B1	<i>Microscopes, Magnification calculation, SI prefixes - milli, micro, nano and pico. Plant and animal cells</i>	11-14 1-6 1-6				
	C1	<i>States of matter, changes of states, particle diagrams,</i>	97-98 112-113 105-106				
	P4	Describe refraction, Explain the effects of the refraction of light, Explain how the change in wave speed can cause a change in direction. Investigation refraction	166-167 191, 194-195 178-180				
	B1	<i>Enzymes, Investigation into the effect of pH on enzyme activity. Different types of enzymes</i>	15-17 7-9, 12 7-9, 12				
	C2a, b	<i>Mixtures, Pure substances, Heating Curves, Filtration, Crystallisation,</i>	99, 101 113-115 106-108				
	P5	EM spectrum, Long and short waves, describe uses of EM waves,	168-169 194, 196-197 181-183				

	B1	Transporting substances: diffusion, osmosis and active transport. Investigating osmosis and interpreting results	18-19 10-12 10-12				
	C2 c, d, e	Chromatography, Calculate Rf values, Distillation, fractional distillation, drinking water, chemical analysis, purification of water, hazards and risks when purifying water.	100, 102-104 116-119 107-112				
	P5	Describe how radio waves are produced and detected by electrical circuits, Dangers of EM waves, Radiation and temperature	170-171 197-199 183-185				
27 th October	B2a,b,c	Mitosis, cell division and growth in animals and plants	20-21 13-15 13-15				
	C3a, b, c	Atomic structure, atomic mass, atomic number, Isotope, (H) Calculate the Ar of an element from the relative masses and abundances of its isotopes.	78-80 91-92 86-87				
31 st October	P6	Describe the structure of an atom, describe how and why the model of the atom has changed overtime, Rutherford alpha particle scattering, Isotopes, Ionisation, Electrons changing orbits, Background radiation and measuring background radiation.	172-173 200- 202 186-192				
	B2d	Stem Cells. Compare stem cells in plants and animals. Compare embryonic and adult stem cells in animals.	22 16 16				
	C4 a,b,c	Mendeleev's periodic table, Atomic number, Mendeleev's problems when ordering the periodic table, periodic table arrangement, electronic configuration.	81-82 93-95 88-90				

	P6	Types of radiation (the 5 types), penetrating abilities and ionising abilities. Describe the process of Radioactive decay B+ and B- Balance nuclear equations	174-175 204-208 193-198				
	B2e,f	The nervous system, synapses and reflexes	23-24 17-19 17-19				
	C5 a,b,c	Ions, Ionic Bonding, Ionic lattices, Properties of Ionic compounds.	83-85 96-98 90-93				
29 th October	P6	Half Life - calculations Dangers of radioactivity	176-177 209-212 196-198				
	B3a,b	Sexual reproduction, Meiosis, DNA	26-27 20-21 20-21				
	C6/C7a, b	Covalent compounds, dot cross diagrams, Properties of simple molecular compounds, allotropes of carbon	86-88 99-102 94-97				
	P1	Weight, mass, scalar, vector, definitions of momentum, acceleration, force and energy. Describe a distance/time graph and determine speed. Acceleration	145-147 166-169 156-158				
	B3 c,d,e	Alleles, Genetic diagrams, phenotype, genotype, gene mutations, human genome project	28-31 22-28 22-28				
	B3f	Variation	30 26 26				
2 nd Nov	P1	Velocity/time graphs. Determine the distance from a velocity time graph.	146-148 170-171, 181 159-161				

	B4a,b	Evidence for human evolution - bacteria and fossils 'Ardi' 'Lucy' AND Richard Leakey. Darwins Theory	32-34 29-30 29-30				
	C7cd	Properties of metals, metal structure, Explain why models are used to represent structure and bonding.	88 103- 104,111 98-99				
5 th November	P2	Resultant forces, Newton's First Law, Mass and Weight, Newton's second law	149-151 172-176 161-164				
	B4c	Classification, genetic analysis	35 31 31				
	C8a,b	Acids, neutralisation, pH scale, relationship between hydrogen ion and concentration, strong and weak acids	105-107 120-121 113-115				
8 th November	P2	Newton's 3 rd Law, Momentum,	152- 153 177-178 164-165				
	B4d,e	Selective Breeding and Genetic Engineering. THEY ARE DIFFERENT.	36-37 32-35 32-34				
	C8c,d,e, f,g	Making salts, balancing equations, solubility, preparing a soluble salt, preparing an insoluble salt.	108-109 122-127 115-119				
11 th November	P2	Stopping distances, crash hazards	154-155 179-180 166-168				
	B5a,f	Health and disease, differences between communicable and non-communicable disease. STI's	39-40 36-37, 39,45 35-38				
	C9a	Calculations involving masses, EMPIRICAL FORMULA, relative formula mass	90, 93 105- 106, 108 100-101				

15 th November	P3	Energy stores and transfers, energy efficiency, supplying electricity	156-159 182, 186-187 169-172			
	B5	Immune system- Physical and chemical barriers and how the immune system attacks pathogens. Memory lymphocytes, Immunisation, Antibiotics	41-43 38, 40-44 39-43			
	C9b,c	conservation of mass, concentration calculate reactant /product, (H)MOLES Limiting reactant, balancing equations	89, 91,92, 94,95 107,109 -110 102-104			
18 th November	P3	Keeping warm, Heat transfers, Home insulation, Non - renewable and renewable resources.	160-162 183-185 171-174			
	B5b, c	Non communicable diseases, malnutrition, lifestyle factors, Measuring obesity, cardiovascular disease	44-46 45-49 44-48			
	C10	Electrolysis, electrolysis of copper sulphate core practical,	110-112 128-131 120-123			
25 th November	B5d,e	Examples of communicable diseases,	39 37 36-38			
	C11/	Reactivity series, extraction of metals, Oxidation/Reduction, Recycling	114-120 134-140 124-131			
	C12	EQUILIBRIUM	121-122 141-142 132			

This list is NOT EVERYTHING you need to know but it's a good start. Don't just use your revision guide; use your class notes also. The revision guide does not give enough information for grade 9!

Suggested activities:

1. Produce mind maps for each section, highlighting key words and their meanings.
2. Construct flow charts for processes; potential 6 mark questions.

3. Re draw diagrams and see if you can label them correctly. Do you know what each part does and how it helps?
4. Complete worksheets in the revision books & assess progress.
5. Draw out genetic crosses to calculate the 'chance' of inheriting a disease.
6. Key word definition check lists
7. Make flash card notes from your class notes.
8. Write any questions/ queries on a post it note and stick it on the relevant revision book pages. Then take it to your revision class and ask the teacher!
9. Work through sections on GCSE bitesize: You are following the EDEXCEL combined science course.
10. Practice 6 mark questions; don't forget SPG!
11. Complete practice calculations including your working out; if you check the answer and it is wrong discuss with a friend/ teacher by showing them your working.
12. Evaluate treatments/ processes; What are the advantages/ disadvantages? Can you give reasons for/ against the use of some treatments?
13. READ questions carefully and make sure you know what the instruction means; the mark scheme indicates if you have understood the question being asked.