



SCIENCE Programme of Study (2024-25)

Northumberland's P.R.U.

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15
Autumn 1 – 'Equality & Diversity'							Autumn 2 – 'Living in the Wider World'							
Subject Area Topic							Subject Area Topic							
1. Lab skills + microscopes	2. Plant and animal cells + s	3. Specialised cells, multicellular and unicellular	4. Diffusion DNA Chromosomes	5. Inheritance Adaptation s	6. Solids, liquids gases + state changes	7. Compounds + mixtures.	8. Energy transfer	1. Plant nutrition+ seed production	2. Seed dispersal Plant reproduction Dependence on other organisms	3. Food chains food webs Extinction and preserving other species	4. -Space, sun and stars. -Gravity	5. Light waves, reflection, refraction, Colour	6. Sound waves and energy and speed of sound	7. Electrical circuits, circuit components, series and parallel.
Notes/Links/Interleaving			Additional Higher Content Chemical formula Genetic engineering				Notes/Links/Interleaving		Additional Higher Content Cross pollinating Electricity equations / calculations					
Spring 1 – 'The Circle of Life'							Spring 2 – 'Conflict'							
Subject Area Topic							Subject Area Topic							
1. Growth + skeleton Muscles	2. Human reproduction Menstrual cycle	3. Having a baby + pregnancy	4. Recycling, Atmosphere, and climate	5. Carbon cycle	6. Rock cycle + Earth structure	1. Acid and alkali reactions + products	2. Reactions of acids with metals	3. Reactions of oxides with acids	4. Displacement reactions and products	5. Forces, motion and friction.				
Notes/Links/Interleaving		Additional Higher Content Hormone additional info in menstrual cycle				Notes/Links/Interleaving		Additional Higher Content Balanced chemical equations Forces calculations using given equations (GCSE prep)						
Summer 1 – 'Health & Leisure'							Summer 2 – 'Crime & Punishment' (CSI THEME)							
Subject Area Topic							Subject Area Topic							
1. Nutrition, food groups vitamins and minerals	2. Consequences of unbalanced diet and health + related conditions + diseases	3. Digestion and healthy bacteria health	4. Smoking + related diseases / problems Asthma	5. drugs effects on health. Exercise	6. Gas exchange and Aerobic respiration	1. Blood tests mock up (CSI type theme) -Fingerprinting -Blood splatter + blood thickness	2. CSI Cont. -Fibres -Unknown powers -Ink chromatography	3. Separating mixtures Forces, elasticity and pressure	4. Separating mixtures Forces, elasticity and pressure	5. Properties of metals + non - metals Reactions of metal with air	6. 'Science of weapons' (acceleration, velocity, speed calculations)	7. Skeleton + muscles crime scene theme foot		

