

Great Park Academy Science Curriculum Overview: Year 7

Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
7	1. Working scientifically investigation (a) Safety in science (b) Planning experiments (c) Collecting data (d) Handling data (e) Conclusions (f) Evaluating data 2. Forces (Physics) (a) Introduction to forces (b) Squashing and stretching (c) Drag forces and friction (d) Forces at a distance (e) Balanced and unbalanced 3. Energy 1 (Physics) (a) Introduction to energy (b) Conservation of energy (c) Food and fuels	4. Particles (Chemistry & Physics) (a) The particle model (b) States of matter (c) Density (d) Melting and freezing (e) Boiling (f) More changes of state (g) Diffusion 5. Elements, atoms and compounds (Chemistry) (a) Elements (b) Atoms (c) Compounds (d) Chemical formulae	6. Chemical reactions (Chemistry) (a) Chemical reactions (b) Word equations (c) Oxidation reactions (d) Decomposition reactions (e) Using ratios (f) Conservation of mass (g) Exothermic and endothermic reactions 7. Cells (Biology) (a) Observing cells (b) Plant and animal cells (c) Specialised cells (d) Movement of substances into and out of cells (e) Unicellular organisms	8. Structure & function of body systems (Biology) (a) Levels of organisation (b) Gas exchange (c) Breathing (d) Skeleton (e) Movement: joints (f) Movement: muscles 9. Sound (Physics) (a) Waves (b) Sound (c) Loudness and pitch (d) Detecting sound (e) Echoes and ultrasound	10. Light (Physics) (a) Light (b) Reflection (c) Refraction (d) The eye and the camera (e) Colour 11. Acids and alkalis (Chemistry) (a) Acids and alkalis (b) Indicators and pH (c) Neutralisation (d) Making salts	12. Reproduction (Biology) (a) Adolescence (b) Reproductive systems (c) Fertilisation and implantation (d) Development of a foetus (e) The menstrual cycle (f) Flowers and pollination (g) Fertilisation and germination (h) Seed dispersal 13. Space (Physics) (a) The night sky (b) The Solar System (c) The Earth (d) The Moon



(d) Energy resources			