Great Park Academy Science Curriculum Overview: Year 6

At GPA, year 6 science begins with a fruit battery-themed investigation, where pupils will revisit and enhance some fundamental scientific skills. These scientific skills are then revisited at appropriate times across the year, within other topics. Year 6 science follows the details and topics outlined by the national curriculum for this year group. The biology and physics topics have been carefully sequenced across the academic year to support pupil understanding and their long-term memory; learning is a change to long-term memory, so this is a crucial consideration. The topics are also sequenced to work synergistically with other curriculum subjects. For example, in year 6 we teach the circulatory system just before/at a similar time to when pupils study "Pig Heart Boy" in English. This drives engagement, understanding and memory, across the curriculum. Year 6 topics carefully and thoughtfully build upon the foundations laid earlier in KS2 and at KS1.

Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
6	1. Working scientifically investigation – Fruit batteries  (a) Safety in science (b) Planning experiments (c) Collecting data (d) Handling data (e) Conclusions (f) Evaluating data	2. Electricity (Physics)  Key question of physics - How can energy be used to explain what things can do?  Key question of physics - How do forces impact objects? (a) Introduction to electricity and history of electricity	3. Human body systems & health (Biology)  Key questions of biology - What are living things made of?  Key questions of biology - How does life survive and thrive? (a) The circulatory system	4. Classification (Biology)  Key questions of biology - What are living things made of?  Key questions of biology - How does life survive and thrive? (a) Introduction to classification (b) Classifying	5. Evolution and inheritance (Biology)  Key questions of biology - What are living things made of?  Key questions of biology - How does life survive and thrive? (a) Fossils	6. Light (Physics)  Key question of physics - How can energy be used to explain what things can do? (a) Light & sight (b) Shadows (c) Reflection (d) Refraction (e) Colour

		(b) Generating electricity (c) Conductors & insulators (d) Changes of state (e) Circuits and circuit symbols	(b) The heart (c) Blood (d) Blood vessels (e) Exercise (f) Drugs	vertebrates (c) Classifying invertebrates (d) Classifying plants (e) Microorganisms	(b) Variation & inheritance (c) Adaptations (d) Evolution (e) Extinction	