**Curriculum Overview for Science**

**Year 8**

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| **Half Term 5 : Future Olympian****Substantive Knowledge:**Identification of main food groupsHow to control body temperatureThe effects of energy drinksExplain heart rateDescribe how heart rate is affected by exerciseExplain breathing rate and how it changes during exerciseCompare anaerobic and aerobic respirationHow respiration is affected by altitude**Disciplinary Knowledge:**How to calculate speed | Books | Article homework – reading for meaning, Model reading and highlighting to pick out key details, reading of data, Skim reading |
| Speech | Healthy, Balanced, Ratios, Energy, Diet, Temperature, Homeostasis, Vasodilation, Vasoconstriction, Electrolytes, Adrenaline, Caffeine, Glucose, Lungs, Reactants, Products, Respiration, Haemoglobin, Saturation,  |
| Checklist RTL | Recall test x 2Written assessmentEnd of unit assessment |
| Home | Article Homework to promote reading like a scientistRevise for recall testOptional revision for written assessment and wish tasks when complete. |
| **Half Term 6: Investigations in a New Context**The effects of performance enhancing drugs in sportHow athletes alter their body to gain an advantageDescribe what makes the perfect athleteDescribe the 3 types of neuroneHow drugs affect the nervous systemExplain reaction timeHow MND and MS affect normal lifeHow we respond to sound and light**Disciplinary Knowledge:**How to calculate speedHow to interpret distance-time graphsHow to interpret velocity-time graphs | Books | Article homework – reading for meaning, Model reading and highlighting to pick out key details, reading of data, Skim reading |
| Speech | Drug testing, Athletes, Performance enhancement, Steroids, Marginal gains, Synapse, Neurone, Stimulant, Reaction time, Acceleration, Deceleration, Velocity, Antidoping |
| Checklist RTL | Recall testWritten Assessment |
| Home | Article Homework to promote reading like a scientistRevise for recall testOptional revision for written assessment and wish tasks when complete. |