Sports Science Curriculum Overview:

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|  | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
| Year 5 | **Introduction to Sports Science**  Introduction to science skills such as use of equipment, measuring and recording results, lab safety, key terminology.  **Health and Fitness**  Basic understanding of the systems of the body, including:   * Cardiovascular * Respiratory * Skeletal * Muscular. | **Health and Fitness**  Pupils will understand the impact of exercise, diet, drugs and lifestyle and how it can affect sport performance. | **Forces**  Investigating and explaining the science behind why things fall, air resistance, water resistance, and friction.  The effect and use of simple mechanisms including leavers, pulleys and gears. | **Forces**  Applying knowledge of forces into project based for:   * Gravity * Air resistance * Water resistance * Friction * Levers, pulleys and gears. | **Earth and space**  NASA Mission X: Train Like an astronaut.  Pupils will understand the planets, orbits and day/night and why astronauts need to know this. | **Earth and space**  NASA Mission X: Train Like an astronaut.  Pupils will understand why astronauts must be physically and mentally fit as well as having a balanced diet to prepare them for life in space. |
| Year 6 | **Introduction to Sports Science**  What is sports science and the various jobs associated within the sector.  **Health and fitness**  Pupils will build upon their knowledge of the systems of the body learnt in year 5. They will then apply their theory into testing components of fitness.  Cardiovascular and respiratory system will be investigated. | **Health and Fitness continued**  Pupils will build upon their knowledge of the systems of the body learnt in year 5. They will then apply their theory into testing components of fitness.  Muscular system and skeletal s will be investigated.  Exploring biomechanics of the skeleton and muscles.  The structure of the human skeleton and functions of the muscles. | **Health and Fitness continued**  Pupils will build upon their knowledge of the systems of the body learnt in year 5. They will then apply their theory into testing components of fitness.  The digestive system will be investigated, exploring The impact of diet, exercise, drugs and lifestyle on the way the body functions. Body composition will also be explored. | **Health and Fitness continued**  Pupils will build upon their knowledge of the systems of the body learnt in year 5. They will then apply their theory into testing components of fitness.  Additional functions of the body will be investigated including:   * Flexibility * Power * Agility * Coordination * Balance * Speed * Reaction time | **Functionality of an athlete**  Combine learning from throughout the year and investigate additional requirements for an athlete including psychology, sociology and sports injury.  Links to BTEC/GCSE PE and careers. | **Functionality of an athlete**  Pupils will be given a brief and apply their knowledge and understanding along with cross curricular links to design and build/adapt a sporting object suitable for use within a sporting situation.  Application of forces knowledge will be acquired.  Links to BTEC/GCSE PE and careers. |