



**OVERVIEW**

Students will develop their knowledge and skills in biology, chemistry and physics. As well as consolidating the curriculum content students will be acquiring working scientifically skills throughout all topics, these will include completing practical activities and learning through discovery. There will be a focus on fluency and skills related to the topics, such as graph drawing and analysing, identifying variables and evaluating scientific conclusions.

**Autumn**

**7BC Cells**

Microscopes, Cell structure, bacteria and uses, yeast cells, Transport within cells.

**7CP Particles**

Particle Model of Matter, Diffusion, Solutions and pressure, Separating Mixtures

**7PE Energy**

Energy stores and transfers, efficiency, power, costs of energy, renewable and non-renewable energy resources, sustainability. Electricity – circuits, potential difference and current.

**Assessment**

End of topic test for each unit.

**Spring**

**7BR Reproduction and Variation**

Puberty, Fertilisation, Gestation and Birth, Menstrual cycle, Plant reproduction, germination, variation, evolution

**7CC Chemical Reactions**

Acids and Alkalis, Oxidation Reactions, Metals and Acids, Titration, Antacid Investigation

**Assessment**

End of topic test for each unit.

**Summer**

**7PF Forces**

Force Diagrams, Contact and Non-Contact forces, calculations, weight and mass, Investigation speed, Friction, Parachutes, Distance-time graphs, speed calculations

Time will be spent revising all topics for the end of year exam.

**8BP Photosynthesis**

Roots, Uses of Glucose, Rate of Photosynthesis, Leaf Adaptations, Transport in Plants, Plants and the Atmosphere, Plants as Food

**Assessment**

End of topic test for each unit.

End of Year exam will be based on all topics taught this year

**Resources for supporting your child at home**

Continuity Oak lessons  
BBC Bitesize  
Sparx Science independent learning

**Homework**

Weekly Sparx homework (set on Arbor).