



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.

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7BC Biology – Cells

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

7CP Chemistry – Particles

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

7PE Physics – Energy

Energy paths and transfers, calculations of gravitational potential energy, kinetic energy, elastic energy, energy sources, renewable and non-renewable energy resources, sustainability. Electricity – circuits, p.d and current.

Assessment:

End of topic test for each unit

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7BR Biology – Reproduction

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

7CC Chemistry – Chemical Reactions

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

Revision for mid-year

Time will be spent revising topics from the autumn term for the mid-year exam.

Assessment:

Mid-Year assessment – 7BC Cells, 7CP Particles and 7PE Energy

End of topic test for each unit.

Sum

7PF Physics – Forces

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

8BP Biological systems and processes

Skeleton, Muscles, Respiratory System, Circulatory System, Smoking, Alcohol, Drugs.

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

Assessment:

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

End of topic test for each unit.

Useful resources for supporting your child at home:

Oak national academy lessons
BBC bitesize

Homework:

Weekly Educake homework that will be set on Arbor