

OVERVIEW

Students continue to build on the knowledge and understanding gained from Year 7 and 8, studying topics that build in complexity. The concept of photosynthesis and our relationship with plants was taught in 8BE Ecology and this will be expanded on and put into a new concept in 9BP Plants and Photosynthesis, it will also draw on knowledge from 7BC Cells. 9PF Forces in Action will expand on prior learning from 7PF Forces and this topic will focus more on calculations, to deepen their understanding.

Aut

9PM Physics – Matter

Revisit particle theory, Density & volume calculations, Investigating Density of an irregular shaped object.

9PF Physics – Forces in action

Calculations, Moments, Pivots and levers, momentum.

9CR Chemistry – Reactivity

Atoms, Elements and Compounds, Ionic Bonding, Period Table, Metals & acids, metal oxides & acids, metal carbonates & acid, metal extraction, Fractional Distillation.

9CE Chemistry – Energetics and rates

Exothermic and Endothermic reactions, rates of reactions, effect of surface area, effect of temperature, effect of concentration on rates or reactions, catalysis.

Assessment:

End of topic tests for each unit

Spr

**9BB Biology
0Biological systems and processes**

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

9PS Physics – Sound waves

Waves, Wave function, the ear, how speakers work.

Revision for mid-year assessments

9BP Plants and photosynthesis
9CR Reactivity
9CE Energetics and rates
9PM Matter
9PF Forces in action

Assessment:

Mid-year assessments

End of topic tests for each unit.

Sum

Biology*B1 cells*

Transport in Cells, Osmosis Practical, Microbiology, Stem cells, Mitosis, Cancer.

Chemistry*C1 Atomic Structure*

Atomic Structure, development of atomic model, history of periodic table, group 1 elements, group 7 elements.

Revision for end of year assessment.

Assessment:

End of year assessments.

End of topic tests for each topic

Useful resources for supporting your child at home:

Oak National Academy
Cognito – YouTube lessons and quizzes
BBC Bitesize

Homework:

Weekly Educake homework and paper-based exam questions set by individual teachers.