



**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 - Biological 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.