

**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.

**Autumn****9CR Reactivity**

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

**9PF Forces in Action**

Calculations, Moments, Pivots and levers, momentum

**9CE 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 test for each unit.

**Spring****9BB Biological Systems and Processes**

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

**9PS 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**

End of topic test for each unit.

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

**Summer****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.

**Assessment**

End of topic test for each unit.

**Resources for supporting your child at home**

Continuity Oak lessons

BBC Bitesize

Sparx Science independent learning

**Homework**

Weekly Sparx homework (set on Arbor).