



**Overview**

Students continue to build on the knowledge gained from Year 7 and 8, studying topics that build in complexity. 9CR and 9CE deepen their understanding of chemical reactions, linking them to the concept of energy from physics and linking them to real-world contexts. 9PE revisits the concept of electricity in much more detail than Y7, studying circuits and their behaviour. 9BB introduces more detail on the various organ systems of the human body and introduces interpreting data to inform a healthy lifestyle.

**Autumn**

**9CR Reactivity**

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

**9PE Electricity and Magnetism**

Series and parallel circuits, current, potential difference (voltage), resistance, Ohm's Law and resistance of a wire, insulators and static electricity, magnetic fields, electromagnetism

**Assessment**

End of topic test for each unit.

**Spring**

**9BB Biological Systems and Processes**

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

**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

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 9 exams 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