

Year 7 – Overview

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Introduction, Matter & Earth Part 1	Organisation Part 1	Reactions and Genes Part 1	Energy Part 1	Forces and Ecosystems	Electromagnets
→ Baseline Test → Introduction to science → Variables and experiments → Bunsen Burners → The particle model and states of matter. → Melting and freezing → Identifying a pure substance and a mixture. → Solutions → Solubility → Separation techniques. → Predicting states → Explaining diffusion → Gas pressure and temperature. → Artificial and natural satellites → The Solar system. → The Earth and the seasons. → Phases of the Moon. → Models of the universe.	→ Levels of organisation. → Organ systems. → Function of the skeleton. → Naming parts of the skeleton. → Identify the four types of joints. → Role of the muscles. → Observe cells, both plant and animal cells. → The differences between plant and animal cells. → Specialised cells. → Movement of substances. → Unicellular organisms such as amoeba and euglena.	→ Chemical reactions → Safely working with acids and alkalis. → Indicators and pH. → Acid strength → Neutralisation → Making salts using acids and metals. → Chemical and physical properties of elements. → Reactions between metals and oxygen. → Reactions between metals and water. → Metal displacement reactions. → Variation. → Adaptations. → Reproduction in humans.	→ Stores of energy → Law of conservation. → Energy resources. → Renewable energy. → Calculating Power (Watts) → Dissipated energy.	→ Forces: Contact and non-contact. → Resultant forces → Balanced forces. → Calculating speed. → Relative motion. → Distance-time graphs. → Acceleration. → Pollination → Fertilisation → Parts of a flower. → Germination → Seed dispersal. → Animal dispersal. → Ecosystems → Food chains → Food webs → Competition → Interdependence	→ Potential difference. → Resistance. → Series and parallel circuits. → Conductors and insulators. → Energy transfers.