

## Year 9 revision list

\*Please note there are 3 separate lists in this document\*

### **Biology**

#### **Cells**

- Animal cells
- Plant cells
- Specialised cells
- Eukaryotes, Prokaryotes & Fungi
- Microscopes (including practical)
- Calculating magnification
- Levels of organisation
- Organ systems

#### **Organs**

- Blood
- Blood vessels
- The Heart
- Heart disease - Stents
- Pacemakers
- The Lungs
- Effects of exercise on breathing

#### **Bioenergetics**

- Photosynthesis
- Adaptation of leaves and stomata
- Reproduction in Plants
- Aerobic Respiration (including practical)
- Anaerobic respiration
- Metabolism
- Food groups
- Food tests

## Chemistry

### Intro to chemistry

- Atoms
- Atoms, elements and compounds
- Basic word equations
- Acids and alkalis
- Neutralisation and pH scale
- Salts (word equations only)
- Metal + non-metal oxides (acidity)

### The Earth

- Earth's structure /composition
- Igneous rock
- Sedimentary rock & metamorphic
- Weathering/ erosion
- Rock cycle

### Atomic structure

- Writing word equations
- Crystallisation and filtration
- Distillation
- Chromatography
- Atoms and their history
- Subatomic particles
- Relative atomic mass / isotopes
- Electronic structure

## Physics

### Particle model

- Change of State + Properties
- Gas Particle Model and Brownian
- Pressure
- Density
- Specific Heat Capacity
- Latent Heat + Graph
- Cooling Curves

### Energy types and systems

- Energy types and systems
- Kinetic Energy
- Gravitational Potential Energy (GPE)
- GPE to Kinetic Energy + practical
- Hooke's Law
- Elastic Potential Energy

### Energy

- Specific Heat Capacity
- Work done
- Power
- Energy Transfers, Sankey diagrams, Efficiency
- Conduction, Convection and Radiation
- Thermal Conductivity