

Science Curriculum Map (Year 9)

[2022 – 2023]



Keeping healthy

Describe non communicable diseases, coronary heart disease and risk factors

June

End of year exam

Assessment of all learning since September

Reactivity series and reacting acids

Describe how to make a neutral salt and **write word** and **symbol** equations.

Transport in plants

Explain how the structure of root hair cells, xylem cells and phloem cells are adapted to function.

States of matter: changes of state

Describe internal energy of the 3 states of matter. Use the particle model to link energy to changes of state

April

Progress test 2

Assessment of all learning since September

Investigating photosynthesis

Investigate different factors that can affect rate of photosynthesis



States of matter: Density

Use the particle model to **investigate** and **calculate** density

April

Progress test 2

Assessment of all learning since September

What happens in a reaction and reactions involving atoms

Describe and **draw** the formation of **ionic** and **covalent** bonds. Calculate Mr

The circulatory system and food for energy

Describe the blood and its pathway around the Body. The digestive system



Monitoring reactions

Identify endothermic and exothermic reactions from data and display these using reaction profiles

Electricity

Investigate circuits, Calculate resistance and describe IV characteristics for different components

Microbes

Describe how different microbes can cause different diseases.

The role of white blood cells,

Vaccines and **immunisation**.

January

Progress test 1

Assessment of all learning since September

Energy calculations
Calculate changes in stores of Potential energy, kinetic, work done and power



The atom and periodic table

The development the atomic model and periodic table. Describe and explain trends in groups

Cells, microscopes and respiration

Explain how cell structures link to function. **Mitosis**, Calculate magnification.



Electrical circuits and Magnetism

Draw series and parallel circuits

Describe how current and potential difference behave

Describe how magnets behave