

Year 11 AP 1 – Science

How to revise Science:

Memorise the facts

- Make flash cards
- Produce mind maps
- Write the information in a book

Practice answering questions

- Use online tests
- Use Sparxscience
- Use BBC bitesize multichoice tests at the end of units

Biology Foundation

- Cell structure and subcellular organelle's function – nucleus, cytoplasm, cell membrane, mitochondria
- Features and types of bacterial cell
- Stem cells and where they are found. Use of stems cells
- Required practical on photosynthesis and effect of light on the rate of photosynthesis
- Interpreting data from a table of light intensity on the rate of photosynthesis
- Science skills – measuring volume
- Defining repeatability, accuracy
- Understanding how temperature affects the rate of photosynthesis and the volumes of oxygen produced
- Labelling a section through a leaf
- Plant diseases and how to effectively remove infected leaves
- Osmosis in potatoes investigation
- Calculating surface area of a cube and how surface area can affect the rate of osmosis
- Naming the reagents used to test for protein, glucose and starch
- Aerobic respiration
- Significant figures and using data to draw a bar chart
- Structure and function of the heart
- Function of the mitochondria and why muscle cells need a lot of them
- Heart problems and possible treatments
- Pathogens and how they spread
- How does vaccination give immunity
- Medical requirements for testing drugs

Biology Higher

- Structure and function of the heart
- Function of the mitochondria and why muscle cells need a lot of them
- Heart problems and possible treatments

- Pathogens and how they spread
- How does vaccination give immunity
- Medical requirements for testing drugs

- Required practical on photosynthesis and effect of light on the rate of photosynthesis
- Interpretation of graphical data
- Accuracy
- Understanding how light intensity affects the rate of photosynthesis and the volumes of oxygen produced
- Understanding how temperature affects the rate of photosynthesis and the volumes of oxygen produced
- Enzymes and optimal conditions

- Investigation on how surface area affects the rate of osmosis
- Interpretation of osmosis data
- Planning osmosis investigations

- Anaerobic respiration reactants and products
- Labelling a section through a leaf
- Describing and explaining the process of transpiration

- Electron microscopy
- Specialised cells – ciliated cells, red blood cells
- Magnification calculations
- Using standard form
- Stem cell use