Year 11 AP 1 – Triple Science

Ormiston Horizon Academy

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	**Biology higher**
Labelling and describing subcellular structures Knowledge of different specialised cells Knowledge of diffusion and osmosis Knowledge of oxygen, carbon dioxide and water movement inside the body **Photosynthesis required practical** Rate of photosynthesis Factors effecting photosynthesis White blood cells role in the body Converting millimetres to micrometres Comparing arteries, veins and capillaries Coronary arteries Coronary heart disease **Antibiotics on the growth of bacteria required practical method** Gas exchange process Calculating how many times greater Aerobic respiration Rate of respiration Anaerobic respiration Measles symptoms and transmission Aspirin, digitalis, penicillin origin and uses Vaccination description and explanation Plotting graphs and labelling axis with scale Risk factors for obesity Type of proportionality in graphs **Amylase enzyme required practical** **Osmosis required practical and method** Active transport vs osmosis	Measles symptoms and transmission Aspirin, digitalis, penicillin origin and uses Vaccination description and explanation Plotting graphs and labelling axis with scale Risk factors for obesity Type of proportionality in graphs **Amylase enzyme required practical** **Osmosis required practical and method** Active transport vs osmosis **Photosynthesis required practical** Calculating rate of photosynthesis Explaining differences in rate or photosynthesis Plant deficiencies and disease Roles of blood plasma Calculating the real size in micrometres given magnification and image size Labelling a heart diagram Describing structures of different blood vessels Aerobic vs anaerobic respiration Oxygen debt and lactic acid Diffusion, osmosis, and active transport Metabolic rate Stem cell uses and objections Monoclonal antibodies formation and use Bile use The liver and fat digestion Prokaryotic vs eukaryotic cells **Antibiotics on the growth of bacteria required practical method**

Year 11 AP 1 – Triple Science

Ormiston Horizon Academy

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

Chemistry foundation	**Chemistry higher**
Naming salts	The periodic table
Namine elements and number of atoms	Mendeleev's developments
Balancing equations	Group 0 properties and explanation
Gasses in metal acid reactions	Isotopes
Energy changes in reactions required practical	Percentage abundance
Energy reaction profile diagrams	Empirical formula
Electrolysis required practical	Describing how specific ionic bonds form in terms of electrons
Fuel cells and batteries	Properties of graphite
Rechargeable cells	Properties of polymers
Neutralisation experiment and titration	Carbon displacement as metal extraction
Calculating means	Atom economy calculation and advantages
Identifying common ions	Transition metals
Aluminium electrolysis process	Calculating relative masses in equations
Why hydrogen is produced in aqueous electrolysis	Identifying states given temperatures and melting and boiling points
Calculating a gradient given the change in Y and change in X axis	Identifying outer electrons
Nanoparticles examples and uses	Writing chemical formula for molecules
Calculating surface area to volume ratio for a cube	Explaining reactivity in group 7
Nano particle advantages and disadvantages	Writing balanced symbol equations for group 7 displacement reactions
Identifying mixtures, compounds and elements	Development of the model of the atom
Writing a method to separate substances	Alpha particle scattering experiment
Calculating percentage yield	Atom and nucleus size comparison
The periodic table	Calculating surface area to volume ratio
Mendeleev's developments	Comparing nanoparticles and fine particles
Group 0 properties and explanation	Ionic compound melting point explanation
Isotopes	**Electrolysis required practical**
Percentage abundance	Half equations in electrolysis
Empirical formula	Aluminium electrolysis
Describing how specific ionic bonds form in terms of electrons	Evaluating fuel cells
Properties of graphite	Drawing covalent bonds
Properties of polymers	Calculating bond energies
Carbon displacement as metal extraction explanation	**Titration required practical**
Atom economy calculation and advantages	Titration concentration calculation
Transition metals	Calculating percentage yield
Calculating relative masses in equations	**Writing a method for crystallisation**

Year 11 AP 1 – Triple Science

Ormiston Horizon Academy

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

Physics foundation	**Physics higher**
Reading data from a graph Power station disadvantages Plotting a graph Calculating specific heat capacity Calculating time using power and energy Nuclear decay equations and half life Identifying instability from graphs Mass number, atomic number and isotopes Models of the atom Gas pressure and temperature Identifying states of matter Kinetic energy and potential energy when melting Structure of a plug Circuit symbols Using given equations Calculating mass when given gravitational PE Energy types and transfers Calculating input energy when given efficiency Renewable and non-renewable Calculating volume when given density Writing conclusions from graphs Environmental impacts of different renewable sources **Specific heat capacity required practical** Calculating percentage difference Calculating resistance using a graph	Renewable and non-renewable Calculating volume when given density Writing conclusions from graphs Environmental impacts of different renewable sources **Specific heat capacity required practical** Calculating percentage difference Calculating resistance using a graph Carbon dioxide and combustion Pollution of different energy sources Isotopes Nuclear fusion and chain reactions Calculating temperature when given specific heat capacity Power difference in series and parallel circuits Contamination and irradiation Nuclear decay equations Calculating time taken when given half life Using half life to explain activity Calculating specific laten heat Explaining internal energy during changes of state Explaining pressure changes as temperature changes Calculating mass given the gravitational potential energy Calculating charge when given power, resistance and time Explaining efficiency Calculating velocity when given compression, spring constant and mass Energy changes in a loop the loop Measurements needed to calculate speed