

1. Reactions of aqueous ions in solution

Physical

3.2.6 Aqueous Ions

A-Level Exams

Organic

6. Catalysts

3.3.15 Nuclear magnetic resonance

Inorganic

5. Variable oxidation states

1. NMR Spectroscopy

4. Formation of coloured ions

1. Organic synthesis

3. Shapes of complex ions

3.1.14 Organic synthesis

3.3.13 Amino acids, proteins and DNA

5. Action of anticancer drugs

2. Substitution reactions

3.2.5 Transition Metals

4. DNA

1. Properties of transition metals

3. Enzymes

1. Properties of period 3 elements and oxides

6. Buffer solutions

3.2.4 Period 3 Elements and Oxides

2. Proteins

5. pH Curves

3.1.12 Acids and Bases

3.3.12 Polymers

1. Amino Acids

4 Weak acids and  $K_a$

2. Biodegradability and disposal

3. Ionic product of water,  $K_w$

1. Addition Polymers

3. Nucleophilic properties

2. Determination of pH

3.3.11 Amines

2. Base properties

1. Bronsted-Lowry acid-base model

3.1.11 Electrode potentials and electrochemical cells

1. Preparation

2. Gibbs free-energy change

2. Electrochemical Cells

1. Electrode Potentials

2. Electrophilic substitution

3.3.10 Aromatic chemistry

1. Bonding

3.1.8 Thermodynamics

1. Born-Haber cycles

3.3.9 Carboxylic acids and derivatives

1. Carboxylic acids and esters

2. Acylation

3.1.10 Equilibrium constant  $K_p$

1. Aldehydes and ketones

1. Optical isomerism

1.  $K_p$  Calculations

3.3.8 Aldehydes and Ketones

3.3.7 Optical isomerism

Year 12

3.1.9 Rate equations

2. Determination of rate equation

1. Rate Equations