

EDEXCEL

Biology GCSE (9-1) Specification

Specification Summary

Section 1: Key Concepts in Biology

1.1 Cell Biology

1.2 Enzymes

Section 2: Cells & Control

2.1 Cell Division

2.2 Specialised Cells

2.3 The Central Nervous System (CNS)

2.4 The Brain

2.5 The Eye

Section 3: Genetics

3.1 Sexual & Asexual Reproduction

3.2 Inheritance

3.3 DNA & protein synthesis

Section 4: Natural Selections & Genetic Modification

4.1 Natural Selection & Evolution

4.2 Genetic Engineering

4.3 Selective Breeding

Section 5: Health

5.1 Human diseases

5.2 The Development of Medicine

5.3 The Immune System

Section 6: Plant Structures & their Functions

6.1 Photosynthesis & plant growth

6.2 Transport in Plants

6.3 Leaf Structure & Function

6.4 Plant Hormones

Section 7: Animal Coordination, Control & Homeostasis

7.1 Menstrual Cycle & pregnancy

7.2 Homeostasis

7.3 Urinary System

Section 8: Exchange & Transport in Animals

8.1 Transport in Animals

8.2 Circulatory system

8.3 Respiration

Section 9: Ecosystems & Materials

9.1 Feeding Relationships

9.2 Organisms in the Environment

9.3 Cycles within Ecosystems

9.4 Humans & the Environment

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Chemistry GCSE (9-1) Specification

Specification Summary

Section 1: Key Concepts in Chemistry

- 1.1 Atomic Structure**
- 1.2 The Periodic Table**
- 1.3 Ionic Bonding**
- 1.4 Covalent Bonding**
- 1.5 Types of Substances**
- 1.5 Calculations involving Masses**

Section 2: States of Matter & Mixtures

- 2.1 States of Matter**
- 2.2 Methods of Separating & Purifying Substances**

Section 3: Chemical Changes

- 3.1 Acids**
- 3.2 Electrolytic Processes**

Section 4: Extracting Metals & Equilibria

- 4.1 Obtaining and Using Metals**
- 4.2 Reversible Reactions & Equilibria**

Section 5: Separate Chemistry 1

- 5.1 Transition Metals, Alloys & Corrosion**
- 5.2 Quantitative Analysis**
- 5.3 Dynamic Equilibria**

5.4 Chemical Cells & Fuel Cells

Section 6: Groups in the Periodic Table

6.1 Group 1

6.2 Group 7

Section 7: Rates of Reaction & Energy Changes

7.1 Rates of Reaction

7.2 Heat Energy Changes in Chemical Reactions

Section 8: Fuels & Earth Science

8.1 Fuels

8.2 Earth & Atmospheric Science

Section 9: Separate Chemistry 2

9.1 Qualitative Analysis - Test for Ions

9.2 Hydrocarbons

9.3 Polymers

9.4 Alcohols & Carboxylic Acids

9.5 Bulk & Surface Properties of Matter



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Physics GCSE (9-1) Specification

Specification Summary

Section 1: Motion & Forces

1.1 Speed

1.2 Distance & displacement

1.3 Velocity

1.3 Acceleration

1.4 Graphs

1.5 Newton's First Laws of motion

1.6 Newton's Second Laws of motion

1.7 Newton's Third Laws of motion

1.8 Weight

1.9 Circular Motion

1.9.1 Momentum

1.9.2 Stopping Distances

Section 2: Conservation of Energy

2.1 Energy Transfers, GPE, KE & Efficiency

2.3 Energy Sources

Section 3: Waves

3.1 Properties of Waves

Section 4: Light

4.1 The Electromagnetic Spectrum

4.2 Reflection

4.3 Refraction

4.4 Lenses

4.5 Refraction & Lenses

4.6 EM Radiation

Section 5: Radioactivity

5.1 Radioactivity

5.2 Nuclear Fusion

5.3 Nuclear Fission

Section 6: Astronomy

6.1 Astronomy

Section 7: Energy - Forces Doing Work

7.1 Work Done

7.2 Power

7.3 Efficiency

Section 8: Forces & Their Effects

8.1 Vectors & Scalars

8.2 Free Body force diagrams

8.3 Moments

Section 9: Electricity

9.1 Types of Circuits

9.2 Practical Electricity

9.3 Current

9.4 Voltage

9.5 Resistance

9.6 Energy & Power

Section 10: Static Electricity

10.1 Static Electricity

Section 11: Magnetism & the Motor Effect

10.2 Magnetism

10.3 The Motor Effect

Section 12: Electromagnetic Induction

12.1 Electromagnetic Induction

Section 13: Particle Model

13.1 Density

13.2 The Kinetic Theory Model

13.3 Ideal Gas Molecules

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Section 14: Forces & Matter

14.1 Hooke's law

14.2 Pressure