# **GCSE Physics**

# **Course Specifications**

**Course Title: Separate sciences Physics** 

Exam Board: AQA Link to specification:

Grading: 9-1

### **Course Details**

# What will you learn?

#### Year 10

#### **Autumn**

- Energy
- Electricity

#### **Spring**

- Particle model of matter
- Atomic Structure

#### Summer

Forces

#### Year 11

#### <u>Autumn</u>

- Forces
- Waves

#### **Spring**

- Magnetism and electromagnetism
- Space Physics

#### **Summer**

Preparation for Summer Exams

# How will you be assessed?

#### **During the course:**

Year 10: Progress checks, End of unit assessments, Mid-year exams

Year 11: Progress checks, End of unit assessments, PPE1 and PPE2

#### At the end of the course:

Your final grade will be awarded based on the following examinations and / or coursework.

#### Paper 1:

Topics: Energy, Electricity, Particle Model of Matter and Atomic Structure

- Written exam: 1 hour 45 minutes
- Foundation and Higher Tier
- 100 marks
- 50% of GCSE

#### Paper 2:

Topics: Forces, Waves, Magnetism and Electromagnetism and Space Physics

- Written exam: 1 hour 45 minutes
- Foundation and Higher Tier
- 100 marks
- 50% of GCSE

### What independent work can you do?

#### Learn:

- Learn the prefixes for multiples
- Learn the required practical methods
- Learn the physics formulas that are not given in exam and understand how to rearrange them
- Keywords and meaning for the keywords using glossary available on Kerboodle for each topic.

#### **RAG and Revisit:**

### **PLCs**

#### **Explore:**

Isaac Physics and IOP Newsletters

#### Revise:

Top tips and strategies:

- Learn the prefixes for multiples
- Learn the required practical methods
- Learn the physics formulas that are not given in exam and understand how to rearrange them.
- Practice as many exam papers as possible

**Prepare: Exam papers** 

# Which resources should you use? Textbooks, websites, online resources **Equation Sheet** ScienceDoctor Booklets Save my exams Cognito <u>Seneca</u> Maths and physics tutor Free science lessons Playlist on Energy Free science lessons Playlist on Electricity Free science lessons Playlist on Molecules & Matter Free science lessons Playlist on Radioactivity Free science lessons Playlist on Forces Free science lessons Playlist on Waves Free science lessons Playlist on Magnetism Free science lessons Playlist on Space Past Papers Physics Past Papers - Paper I Physics Past Papers - Paper 2

Summary Video

**VIP ZONE** 

# **GCSE Biology**

## **Course Specifications**

Course Title: Separate sciences biology

Exam Board: AQA

Link to specification:

Grading: 9-1

#### **Course Details**

#### What will you learn?

#### Year 10

#### <u>Autumn</u>

## **Cells and Organisation**

- Cell structure and transport
- Cell division
- Human digestive system
- Organisation in animals and plans

#### **Spring**

#### **Disease and Bioenergetics**

- Communicable diseases
- Preventing and treating diseases
- Non-Communicable diseases
- Photosynthesis
- Respiration

#### **Summer**

#### **Biological Responses**

- The human nervous system
- Hormonal coordination
- Maintaining balance in the body

#### Year II

#### <u>Autumn</u>

#### **Genetics and Reproduction**

- Reproduction and Genetics inheritance
- Variation and Selection
- Evolution and Classification

#### **Spring**

#### **Ecology**

- Adaptation, interdependence, and competition
- Organising and ecosystem
- Biodiversity and Ecosystems

#### **Summer**

**Preparation for Summer exams** 

#### How will you be assessed?

#### **During the course:**

Year 10: Progress checks, End of unit assessments, Mid-year exams

Year II: Progress checks, end of unit assessments, PPE I, PPE 2,

#### At the end of the course:

Your final grade will be awarded based on the following examinations and / or coursework.

Paper 1: Topics 1 – 4: Cell biology; Organisation; Disease and Bioenergetics.

- Written exam: I hour 45 minutes
- Foundation and Higher Tier
- 100 marks
- 50 % of GCSE

#### Paper 2:

Topics 5 - 7: Homeostasis and response; Inheritance, variation and evolution; and Ecology.

- Written exam: I hour 45 minutes
- Foundation and Higher Tier
- 100 marks
- 50 % of GCSE

#### What independent work can you do?

#### Learn:

Glossary of Key Terms: Eukaryotic, Prokaryotic, Resolution, Magnification, Hormones, Synapse,

Neurotransmitters, Trophism, interdependence, biodiversity, Domains, Classification

#### **RAG** and Revisit:

**PLCs** 

**Explore:** 

Recommended Reading

**Revise:** 

Top tips and strategies

Prepare:

Exam papers, VIPzone

# Which resources should you use?

Textbooks, websites, online resources

**Kerboodle** 

**AQA Website** 

**Maths and Physics tutor** 

**S**eneca

**GCSE POD** 

# **GCSE Chemistry**

# **Course Specifications**

Course Title: Separate sciences Chemistry

Exam Board: AQA

Link to specification:

Grading: 9-1

#### **Course Details**

#### What will you learn?

#### Year 10

#### **A**utumn

- Atomic structure
- The periodic table
- Structure and bonding

#### **Spring**

- Chemical calculations
- Chemical changes
- Electrolysis

#### **Summer**

- Energy changes
- Rates and eqbm
- Crude oils and fuels

#### Year II

#### <u>Autumn</u>

- Organic reactions
- Polymers
- Chemical Analysis

#### **Spring**

- The earth's atmosphere
- The earth's resources
- Uisng our resources

#### **Summer**

**Preparation for Summer exams** 

#### How will you be assessed?

#### **During the course:**

Year 10: Progress checks, End of unit assessments, Mid-year exams

Year II: Progress checks, end of unit assessments, PPE I, PPE 2,

#### At the end of the course:

Your final grade will be awarded based on the following examinations and / or coursework.

Paper I: Topics Atomic structure and the periodic table; Bonding, structure, and the properties of matter; Quantitative chemistry, Chemical changes; and Energy changes.

- Written exam: I hour 45 minutes
- Foundation and Higher Tier
- 100 marks
- 50 % of GCSE

#### Paper 2:

Topics Topics 6-10: The rate and extent of chemical change; Organic chemistry; Chemical analysis, Chemistry of the atmosphere; and Using resources.

- Written exam: I hour 45 minutes
- Foundation and Higher Tier
- 100 marks
- 50 % of GCSE

#### What independent work can you do?

#### Learn:

- keywords and meaning for the keywords using glossary available on kerboodle for each topic.
- Learn the formulas for the chemical calculation topic
- Learn the reactivity series

#### **RAG** and Revisit:

**PLCs** 

#### **Explore:**

Recommended Reading

#### **Revise:**

Top tips and strategies

#### Prepare:

Exam papers, VIP zone

# Which resources should you use?

Textbooks, websites, online resources

<u>Kerboodle</u>

**AQA Website** 

**Maths and Physics tutor** 

**S**eneca

**GCSE POD** 

**VIP ZONE**