# Science (Separate Biology, Chemistry, Physics and Trilogy Double Higher and Foundation)

You have 6 exams: Revise the right topics for each one

# B1 Exam:

- Cell Biology, (B1 in revision guide)
- Organisation, (B2 in revision guide)
- Infection and response, (B3 in revision guide)
- o Bioenergetics (B4 in revision guide)

# **Required Practicals:**

- o Microscopy
- Microbiology (Biology Triple only)
- o Osmosis
- Enzymes
- Food tests
- Photosynthesis

# C1 Exam:

- Atomic structure and the periodic table, (C1 in revision guide)
- Bonding, structure and properties of matter, (C2 in revision guide)
- Quantitative Chemistry, (C3 in revision guide)
- Chemical Changes, (C4 in revision guide)
- Energy Changes (C5 in revision guide)

# **Required Practicals:**

- Making Salts
- Neutralisation (Chemistry Triple only)
- o Electrolysis
- o Temperature changes

## <u>P1 Exam</u>

- Energy, (P1 in revision guide)
- Electricity, (P2 in revision guide)
- Particles, (P3 in revision guide)
- Radioactivity and Atomic structure, (P4 in revision guide)

## **Required Practicals:**

- o Specific Heat Capacity
- Thermal Insulation (Physics Triple Only)
- o Resistance
- o I-V Characteristics
- o Density

## B2 Exam: 9<sup>th</sup> June 2023

- Homeostasis and response, (B5 in revision guide)
- Inheritance, variation and Evolution, (B6 in revision guide)
- Ecology (B7 in revision guide)

## **Required Practicals:**

- o Reaction time
- Germination (Biology Triple only)
- o Field Investigations
- Decay (Biology triple only)

# C2 Exam:

- Rates of reaction, (C6 in revision guide)
- Organic Chemistry, (C7 in revision guide)
- Chemical Analysis, (C8 in revision guide)
- Chemistry of the Atmosphere, (C9 in revision guide)
- Using Resources (C10 in revision guide)

#### Required Practicals:

- Rates of Reaction
- o Chromatography
- o Identifying Ions (Chemistry Triple only)
- Water Purification

# P2 Exam:

- Forces and Motion, (P5 in revision guide)
- Waves, (P6 in revision guide)
- Magnetism and electromagnetism, (P7 in revision guide)
- Space (for Physics triple science only)

# Required Practicals:

- Force and Extension
- Acceleration
- o Waves
- Light (Physics Triple Only)
- Radiation and absorption

## Working Scientifically skills needed for all 6 exams

- Know apparatus names and required practical techniques
- Identify risks and hazards and safety precautions
- Identify variables (independent / dependent /control)
- Define Bias and how to prevent it with peer review
- How theories develop and testing a hypothesis
- Evaluate the limitations of models
- Describe sampling and use the results in calculations
- The Limitations of science and ethical issues
- Identify errors and describe how to correct them
- Remember off by heart every single Unit and convert non-SI units
- Substitute numbers into an equation,
- Re-arrange (change the subject) equations,
- Calculate a mean, range and uncertainty
- Spot an anomaly
- Add scales and labels to graphs
- Plot a point on a graph
- Add a line of best fit (curve and straight line)
- describe a trend from a graph (curve and straight line) and describe a trend from a table
- read a point from a graph or a scale
- calculate a gradient and tangent
- calculate a % and % increase and % decrease,