# Biology GCSE Student Learning Journey and Progress Record

# Separate and Combined Science (S = separate science only)

Year 9

# B1.1 Cells

Animal and Plant Cells Prokaryotic Cells Using a Microscope Practical Size Calculations Electron Microscopes

**Cells Test Result** 

**B1.2 Reactions in Cells** DNA structure Protein synthesis How Enzymes Work Enzyme Practical Factors that Affect Enzymes

### **DNA and Enzymes Test Result**

# **B1.3 Respiration**

Proteins, fats, sugars and starch Testing Biological Molecules Practical Aerobic Respiration Anaerobic Respiration Exercise Practical

Respiration Test Result (Yr 9 exam)

#### **B1.4** Photosynthesis

Photosynthesis equation Testing Leaves for Starch Practical Factors affecting Photosynthesis Rate Pondweed Practical Limiting Factors

# Photosynthesis Test Result

Sex Education PSHE Lessons (not examined) Contraception STI Menopause and Infertility Year 10

**B2.1 Membranes and Mitosis** Diffusion, Osmosis and Active Transport Osmosis Practical Mitosis and Cell Division Stem cells and Specialised Cells

Membranes and Mitosis Test Result

**B2.2 Transport Around Organisms** SA to Volume Ratio Alveoli and Villi Human Circulatory System Exercise Practical Plant Transport

Transport Test Result

#### **B3** Nerves and Hormones

Nerves and Reflexes Eyesight **S** The Brain **S** Hormones, Adrenaline and Thyroxine Homeostasis and -ve Feedback Reproductive Hormones IVF and Contraception Glucose Control Kidneys **S** Plant Hormones **S** 

Year 10 Exam Result

# **B4 Ecology**

Food webs and energy flow Ecology Pyramids Interactions between Organisms Nutrient Cycles Decomposers **S** 

**Ecology Test result** 

#### Year 11

**B5 Genetics** 

Variation and Meiosis Genetic Crosses Effects of Mutation History of Genetics **S** Natural Selection and Evolution Classification

# **Genetics Test Result**

**B6.1 The Environment** Sampling and Practical Biodiversity Loss Conservation

# Mock Exam Result

**B6.2 Food Security** Food security and Farming **S** Selective Breeding Genetic Engineering

# **B6.3 Health and Disease**

Communicable Disease Human Disease Plant Disease The Immune System Medicine and Antibiotic Practical

Non-Communicable Disease Heart Disease Modern Medicine

**Revision for GCSE Summer Exams** 

# Further study resources for independent work

You should have a kerboodle login for access to the online textbook.

You may choose to buy a CGP revision guide or workbook and answers from the department.

You should have an educake login which gives access to lots of short factual recall questions.

Many students find Seneca online learning a useful revision resource.

But good independent study is also just to review your classwork.