



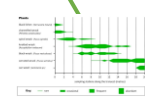
Further Education – University, College, Degree Apprenticeships

Employment – Jobs, Apprenticeships

Training

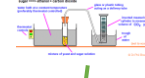


**DILUTION SERIES AND CALIBRATION CURVE**



Revision of all topics

Exam practice



**CHOICE CHAMBER AND ANIMAL MOVEMENT**

**RATE OF RESPIRATION IN UNICELLULAR ORGANISMS**

**DEHYDROGENASE ACTIVITY IN CHLOROPLASTS**

**CHROMATOGRAPHY AND PLANT PIGMENTS**

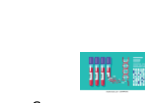
**ASEPTIC TECHNIQUE AND ANTIMICROBIAL SUBSTANCES**



**DISSECTION OF MASS TRANSPORT SYSTEM**



**Required Practicals (to be done throughout the course)**



Genome Projects  
Gene expression and cancer

Epigenetic control of gene expression

Pluripotent cells

Totipotent cells

Gene mutations

Conservation

Population Sampling

Allopatric and Sympatric Speciation

Selection Types

Hardy-Weinberg principle

Inheritance

Control of blood glucose concentration

Homeostasis and Negative Feedback

Skeletal Muscles

Synaptic Transmission

Nerve Impulses

Phloem

Xylem

Mass Transport in Plants

Blood Circulation

Blood Circulation

Prokaryotic cells

Viruses

Recombinant DNA  
PCR

Genetic Fingerprinting

3.8 **Control of gene expression**

Succession

Communities

Sources of genetic variation

Populations

Chi squared  $\chi^2 = \sum \frac{(O - E)^2}{E}$

3.7 **Genetics, populations, evolution and ecosystems**

Control of blood water potential

Homeostasis and Negative Feedback

Skeletal Muscles

Synaptic Transmission

Nerve Impulses

Phloem

Xylem

Mass Transport in Plants

Blood Circulation

Blood Circulation

Prokaryotic cells

Viruses

3.5 **Energy transfers in and between organisms**

Light Independent Reactions

Photosynthesis

3.1 **Biological Molecules**

DNA probes and DNA hybridisation

Rate of Enzyme Controlled Reactions

Root Tip Squash and Mitotic Index

Water Potential of Plant Tissue

Permeability of Cell Surface Membranes

3.6 **Organisms respond to changes in their internal and external environments**

Fertilisers and Environmental Issues

Tropisms

Taxes and Kineses

Pacinian Corpuscle

Control of Heart Rate

Reflex Actions

Retina

3.4 **Genetic information, variation and relationships between organisms**

Prokaryotic DNA

Translation

RNA molecules

Digestion

Mass Transport in Animals

Heart

3.3 **Organisms exchange substances with their environment**

SA to V ratio

Gas Exchange Surfaces

Human Gas Exchange

Absorption

Genetic Fingerprinting

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**YEAR 13**

**YEAR 12**



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