Science KS4 Biology Learning Journey

Springwood High School

Exam lead in

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GCSE Exams: Triple or combined

Assessment

Ecology:
Levels or organisation
How materials are cycled
Biodiversity and waste management
Global warming
Revision
Triple: Environmental change, trophic levels, decay

Homeostasis Tr: plant hormones
Inheritance:
DNA and the genome
Inheritance and disorders
Variation and evolution
Selective breeding and genetic engineering
Classification
Triple:
DNA structure, understanding genetics, speciation, theory of evolution
Ecology:
Habitats, quadrats and adaptations
Spaced practice

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Health check

Homeostasis:
Blood glucose concentration
Hormones and the menstrual cycle
Triple: The brain, eye, kidney, control of body temperature.
Inheritance:
Sexual and asexual reproduction

Assessment

Bioenergetics cont:
Maximising growth
Aerobic and anaerobic respiration
Metabolism
Homeostasis:
Nervous system
Reaction time
Reflex arc
Endocrine system

Assessment

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Health check

Infection & Response:
Communicable disease
Viral & Bacterial disease
Body defence systems
Vaccination
Drug development
Triple: microbiology, plant diseases and monoclonal antibodies.

Bioenergetics:
Photosynthesis
Spaced practice

Organisation Cont:
Digestive System
Enzymes
Amylase required practical
Plants and active transport
Transpiration and translocation
Spaced practice

Organisation:
Respiratory System
The lungs
Coronary heart disease
Cancer
Food tests required practical
Enzymes
Spaced practice

Cell Biology:
Plant & Animal Cells
Microscopes & Calculations
Transport in cells
Organisation:
Cells, tissues and organs
The heart, blood vessels and blood

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West Norfolk Academies Trust