Science KS4 Biology Learning Journey

Springwood High School

Exam lead in

Exam lead in

GCSE Exams: Triple or combined

PPE 2

Ecology:
Levels or organisation
How materials are cycled
Biodiversity and waste management
Global warming
Revision
Triple: Environmental change, trophic levels, decay, trophic levels, impact of environmental change, decomposition, food security, farming techniques

Inheritance:
Inheritance and disorders
Variation and evolution
Selective breeding and genetic engineering
Classification
Triple:
DNA structure, cloning, understanding genetics, speciation, theory of evolution
Ecology:
Habitats, quadrats and adaptations

11

Health check

Homeostasis:
Spaced practice
Triple: kidney and plant hormones
Inheritance
Sexual and asexual reproduction
DNA and the genome
Spaced practice

PPE 1

Homeostasis:
Nervous system
Reaction time
Reflex arc
Endocrine system
Blood glucose concentration
Hormones and the menstrual cycle
Contraception
Triple: The brain, eye, control of body temperature.

Bioenergetics:
Photosynthesis
Respiration
Triple: spaced practice

10

Health check

Infection & Response:
Body defence systems
Vaccination
Drug development
Triple: plant diseases and monoclonal antibodies.

Assessment

Organisation cont:
Plant roots and active transport
Transpiration and translocation
Infection and response:
Communicable disease
Viral & Bacterial disease
Fungal and protist disease
Triple: microbiology

Organisation:
Respiratory system
Coronary heart disease
Cancer
Food tests required practical
Enzymes
Spaced practice
Digestive System
Amylase required practical

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

10

West Norfolk Academies Trust