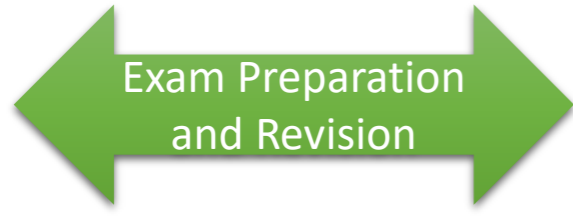


GCSE Biology Learning Journey



Rates of decomposition The water, carbon and nitrogen cycles Food security Preserving biodiversity Biodiversity and humans Parasitism and mutualism Assessing pollution Biotic factors and communities

HSW: How abiotic factors affect a population



Ecosystems and Material Cycles

Ecosystems Energy transfer



Efficient transport and exchange

Factors affecting diffusion The circulatory system Heart structure and function Components of blood and their function Cellular respiration *HSW: Investigating respiration rates*

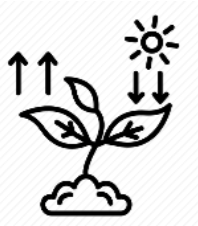
Abiotic factors and communities



Exchange and Transport

The kidneys Osmoregulation Thermoregulation Type 2 diabetes Glucoregulation Hormonal control of the menstrual cycle The menstrual cycle Hormonal control of metabolic rate Hormones

The endocrine system



Plant Structures and their Functions

Photosynthesis Factors affecting photosynthesis *HSW: Light intensity and photosynthesis* Absorbing water and mineral ions Transpiration and translocation Plant adaptations Plant hormones and plant tropism Commercial uses of plant hormones



Animal coordination, control and homeostasis

Gene mutation Multiple and missing alleles Inheritance Alleles The work of Mendel Genetics variants and phenotypes Protein synthesis *HSW: DNA extraction* DNA structure and discovery

Meiosis

Variation



Cells and Control

Sexual and asexual reproduction Mitosis Growth in animals and plants Stem cells Brain structure and function Brain and spinal cord problems Eye structure and function Neurotransmission Synaptic transmission



Genetics

