

UTC Biology Department Learning Cycles 2019 – Year 13

<p align="center">Cycle 2.6</p> <p>Name: Energy transfers in and between organisms</p>	<p align="center">Cycle 2.7</p> <p>Name: Organisms respond to changes in their environments</p>	<p align="center">Cycle 2.8</p> <p>Name: Genetics, populations, evolution and ecosystems</p>	<p align="center">Cycle 2.9</p>	<p align="center">Cycle 2.10</p> <p align="center">Revision of all topics covered over the two years</p>
<p align="center">Topics</p> <p>Content: Photosynthesis Respiration Food chains and energy transfers Nutrient cycles Fertilisers and environmental issues</p>	<p align="center">Topics</p> <p>Content: Tropisms, taxes and kinesis Reflex arcs Receptors Control of heart rate Neurones, action potentials and synapses Structure and contraction of skeletal muscle Homeostasis Control of blood glucose Diabetes Control of water potential <ul style="list-style-type: none"> • Role of the nephron and hormones in osmoregulation </p>	<p align="center">Topics</p> <p>Content: Monohybrid inheritance Dihybrid inheritance Codominance and multiple alleles Sex-linkage Autosomal linkage Epistasis The chi-squared test Population genetics Variation in phenotype Natural selection and evolution Speciation Ecosystems Succession and conservation</p>	<p align="center">Topics</p> <p>Content: Gene mutations Stem cells and totipotency Regulation of transcription and translation Epigenetics Gene expression and cancer Genome projects Recombinant DNA technology PCR Gene probes Genetic fingerprinting</p>	<p align="center">Topics</p> <ul style="list-style-type: none"> •
<p align="center">Keywords</p>	<p align="center">Keywords</p>	<p align="center">Keywords</p>	<p align="center">Keywords</p>	<p align="center">Keywords</p>
<p align="center">Topic Assessments Used</p>	<p align="center">Topic Assessments Used</p>	<p align="center">Topic Assessments Used</p>	<p align="center">Topic Assessments Used</p>	<p align="center">Topic Assessments Used</p>