AKI		CDU	
HT1 (7 weeks)	**21**	**HT 1 (7 weeks)**	**21**
Statistics Recap and Intro (Chi^2, Corr. Co., T-Test)	3	**11. Photosynthesis (3.5.1)**	
19 Populations in ecosystems (3.7.4)		Over view of photosynthesis Chloroplast and leaf structure	1
Populations and ecosystems key terms	1	Oxidation and reduction	1
Variation in population size (plotting growth curves)	1	ATP recap Biological molecules (recap)	1
Competition	1	The light dependent reaction	3
Predation	1	The light independent reaction	3
Investigating populations (sampling techniques)	1	Lollipop Calvin experiment	1
Succession (recap)	4	Factors affecting photosynthesis	2
Conservation of habitats	1	Measuring photosynthesis	1
RP12 Investigate an environmental factor on the distribution of a species.	**3**	**RP7 Uses of Chromatography to investigate pigments in leaves.**	3
End of topic test: Populations and ecosystem	2	**RP8 Investigation into the effect of a named factor on the rate of dehydrogenase activity in extracts of chloroplasts.**	3
Block A assessment (Paper 1 2019)	3	**Block A assessment (Paper 1 2019)**	2
HT 2 (7 weeks)	**21**	**End of topic test: Photosynthesis**	2
13 Energy and ecosystems (3.5.3)		**HT 2 (7 weeks)**	**21**
Food chains and energy transfer	1	**12. Respiration (3.5.2)**	
Calculating efficiency of energy transfers	1	Recap respiration from GCSE	1
Productivity and farming practices	1	Glycolysis	2
Energy transfer and productivity (GPP NPP)	3	Link reaction and Krebs Cycle	2
Nutrient cycles	2	Mitochondria (recap) Cell structure (recap)	1
Use of natural and artificial fertilisers	1	Oxidative phosphorylation	3
Environmental issues concerning the use of nitrogen-containing fertilisers	1	Chemiosmosis in respiration and in photosynthesis comparison	2
End of topic test: Energy and ecosystems	2	Alternative respiratory substrates	1
17. Inherited change (3.7.1)		Anaerobic respiration Energy yields from anaerobic and aerobic respiration	1
Studying inheritance(key terms)	1	Investigating where certain respiratory pathways take place in cells	1
Monohybrid inheritance	1	**RP9 Investigate rate of respiration of cultures of single celled organisms**	3
Co dominance and multiple alleles	2	**End of topic test: Respiration plus resit**	4
Dihybrid crosses	2	**HT3 (6 weeks) Begin essay prep for Hwk**	**18**
Probability and genetic crosses	1	**Block B Assessment**	**3**
Sex linkage and autosomal linkage	2	**14. Response to stimuli (3.6.1.1)**	
HT 3 (6 weeks) Begin essay prep for Hwk	**18**	Survival and response (Stimulus and response, Taxis and kinesis)	2
Block B Assessment	**3**	Tropisms in plants and IAA	2
Epistasis	1	Discovering the role of IAA in tropisms experiments	2
End of topic test: Inherited change	**2**	**RP10 Choice chambers**	3
Y12 Immunity recap	3	A reflex arc	1

Y12 Protein synthesis recap	3	Receptors and Pacinian corpuscle	1
HT4 (5 weeks) **w/c 01/03/20 Y13 required practical catch up**	**15**	Human retina	2
18. Populations and evolution (3.7.2)		Control of heart rate (recap) Cardiac cycle (recap)	2
Population genetics (Hardy- Weinberg)	2	**HT 4 (5 weeks)** **w/c 01/03/20 Y13 required practical catch up**	**15**
Variation in phenotype	1	**End of topic test: Response to stimuli**	2
Natural selection	2	**15 Nervous co-ordination and muscles**	
Effects of different forms of selection on evolution	2	Neurones and nervous coordination (key terms)	2
Isolation and speciation	3	Resting potential	1
End of topic test: Populations and evolution	**2**	Action potential	2
16. Homeostasis (3.6.4.1)		Passage of an action potential in unmyelinated neurones and myelinated neurones (saltatory conduction)	2
Positive and negative feedback	1	Factors affecting the speed of the nerve impulse	1
Blood glucose level	2	All or nothing principle The refractory period	1
HT5 (7 weeks) up to 28th May	**21**	Structure and function of the synapse	2
Blood water level	4	Transmission across a synapse	2
RP 11 Glucose calibration curve	**3**	**HT5 (7 weeks) up to 28th May**	**21**
End of topic test: Homeostasis	**2**	Structure of skeletal muscle (IZA bands)	1
20. Gene expression (3.8.1)		Types of muscle fibre	1
Gene mutations and mutagenic agents	1	Neuromuscular junction comparison to synapse	1
Stem cells and totipotency	1	Contraction of skeletal muscle	2
Regulation of transcription and translation	1	Muscle relaxation and energy supply during muscle contraction	1
Epigenetic control of gene expression	2	**End of topic test: Nerves and muscles**	**2**
Gene expression and cancer	1	**21 Recombinant DNA technology (3.8.4.1)**	
Genome projects	1	DNA structure (recap) Biological molecules (recap)	1
End of topic test: Gene Expression Test	**2**	Producing DNA fragments	1
		In vivo gene cloning – the use of vectors	1
		Marker genes	1
		In vitro gene cloning – The polymerase chain reaction (PCR)	1
		Evaluation of DNA Technology	1
		Locating genes, genetic screening and counselling	3
		Genetic fingerprints	1
		DNA probes	1
		End of topic test: Recombinant DNA Technology	**2**