Exam Board-AQA (8461)

Year 10

Year Group	Term	Module/Topic/Theme/	Content	Assessment Content
10	1	Infection and response	**Communicable diseases** • Bacterial diseases • Viral diseases • Fungal diseases • Protist diseases • Human defence systems • Vaccination	Standard Mid-point assessments with whole class feedback followed by end-of unit tests that test acquisition of knowledge and application. DTT applied.
	2	Infection and response	• Antibiotics and Painkillers • Discovery and development of drugs **Monoclonal antibodies** • Producing monoclonal antibodies • Use of monoclonal antibodies **Plant diseases** • Detection and identification of plant diseases • Plant defence responses	Standard Mid-point assessments with whole class feedback followed by end-of unit tests that test acquisition of knowledge and application. DTT applied.

	3	Bioenergetics	**Photosynthesis** • Photosynthesis reaction • Rate of photosynthesis **<u>Required practical activity 6</u>: investigate the effect of light intensity on the rate of photosynthesis using an aquatic organism such as pondweed**. • Uses of glucose from photosynthesis	Standard Mid-point assessments with whole class feedback followed by end-of unit tests that test acquisition of knowledge and application. DTT applied.

	4	Bioenergetics	**Respiration** • Aerobic and anaerobic respiration • Response to exercise • Metabolism	Standard Mid-point assessments with whole class feedback followed by end-of unit tests that test acquisition of knowledge and application. DTT applied.

	5	Ecology	**Adaptations, interdependence and competition** • Communities • Abiotic factors • Biotic factors • Adaptations **Organisation of an ecosystem** • Levels of organisation **<u>Required practical activity 9</u>: measure the population size of a common species in a habitat. Use sampling techniques to investigate the effect of a factor on the distribution of this species.** • How materials are cycled • Decomposition • Impact of environmental change	Standard Mid-point assessments with whole class feedback followed by end-of unit tests that test acquisition of knowledge and application. DTT applied.
	6	Ecology	**Biodiversity and the effect of human interaction on ecosystems** • Biodiversity • Waste management • Land use • Deforestation • Global warming • Maintaining biodiversity **Trophic levels in an ecosystem** • Trophic levels • Pyramids of biomass • Transfer of biomass	Standard Mid-point assessments with whole class feedback followed by end-of unit tests that test acquisition of knowledge and application. DTT applied.

			Food production • Factors affecting food security • Farming techniques • Sustainable fisheries • Role of biotechnology	

Year 11

Year Group	Term	Module/Topic/Theme/	Content	Assessment Content
11	1	Inheritance, variation and evolution	**Reproduction** • Sexual and asexual reproduction • Meiosis • Advantages and disadvantages of sexual and asexual reproduction • DNA and the genome • DNA structure • Genetic inheritance • Inherited disorders • Sex determination	Standard Mid-point assessments with whole class feedback followed by end-of unit tests that test acquisition of knowledge and application. DTT applied.

	2	Inheritance, variation and evolution	**Variation and evolution** • Variation • Evolution • Selective breeding • Genetic engineering • Cloning **The development of understanding of genetics and evolution** • Theory of evolution • Speciation • The understanding of genetics • Evidence for evolution • Fossils	Standard Mid-point assessments with whole class feedback followed by end-of unit tests that test acquisition of knowledge and application. DTT applied.

			• Extinction • Resistant bacteria **Classification of living organisms**	

	3	Homeostasis and response	**Homeostasis** **The Human Nervous System** • Structure and function **<u>Required practical activity 7</u>: plan and carry out an investigation into the effect of a factor on human reaction time.** • The brain • The eye • Control of body temperature **Hormonal coordination in humans** • Human endocrine system • Control of blood glucose concentration • Maintaining water and nitrogen balance in the body	Standard Mid-point assessments with whole class feedback followed by end-of unit tests that test acquisition of knowledge and application. DTT applied.
	4	Homeostasis and response	• Hormones in human reproduction • Contraception • The use of hormones to treat infertility • Negative feedback **Plant hormones** • Control and coordination • Use of plant hormones **<u>Required practical activity 8</u>: investigate the effect of light or gravity on the growth of newly germinated seedlings.**	Standard Mid-point assessments with whole class feedback followed by end-of unit tests that test acquisition of knowledge and application. DTT applied.

	5	Revision	**Revision and Re teaching based on feedback from tests and PPEs**	GCSE Examinations
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