

Year 10 Biology Preview Sheet

Exam Board: AQA

Syllabus: 8461

Module 1

B1: Cell structure. Eukaryotes and prokaryotes; animal and plant cells
Pages 4 – 8

B1: Microscopy over time, types, magnification and resolution
Page 4

Required Practical 1: Draw and label a selection of animal and plant cells

B1: Specialisation and differentiation
Pages 10 – 12

B1: Diffusion, Osmosis & Active transport
Pages 14 – 20

B1: Chromosomes and mitosis
Pages 26 – 28

B1: Stem cells – cauliflower cloning (suggestion)
Pages 30 – 33

Module 2

Required Practical: Effects of salt concentration on tissue mass

B1: Tissue organisation – digestion and enzymes
Pages 36 – 48

B1: Heart, blood vessels and blood
Pages 52 – 56

Required Practical 5: Effect of pH on rate of amylase digestion

B1: Heart disease and lifestyle on non-communicable diseases, cancer
Pages 56 – 60

B1: Transport in plants, evaporation and transpiration
Pages 64 – 68

Module 3

Required Practical 4: Testing for carbs, lipids and proteins

B1. Breathing and gas exchange, plant tissues and organ systems
Page 62

B2: Communicable disease - viral, bacterial, protist and fungal
Pages 74 – 88

B2: Human defense systems, vaccinations, antibiotics and painkillers
Pages 90 – 100

Required Practical 2: Effect of antiseptics or antibiotics against bacterial growth

B2.: Discovery and development of drugs, monoclonal antibodies
Pages 102 – 108

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Module 4

B2: Plant disease, plant defence responses
Pages 92 – 94

B2: Photosynthesis - reaction, rate, use of glucose from photosynthesis
Pages 124 – 130

Required Practical 6: Effect of light intensity on rate of photosynthesis - pondweed

B2: Respiration – Anerobic and aerobic respiration, metabolism
Pages 134 – 140

Module 5

B3: Homeostasis, human nervous system
Pages 146 – 150

Required Practical 7: Effect of a factor on human reaction time

B3: Brain, eye
Pages 152 – 156

Module 6

B3: Human endocrine system, control of blood glucose.
Pages 160 – 166

B3: Hormones in human reproduction
Pages 168 – 172

B3: Infertility treatment, plant hormones
Pages 174 – 178

Required Practical 8: Effect of light or gravity on the growth of germinating seeds

