



Learning Journey Map –Y10 biology combined

Developing the scientific skills to be an informed citizen



OCR
Oxford Cambridge and RSA

Move on to Year 11



Next Level



Year 10 Survival Top Tips	
Tip 1	Learn and revise vocabulary weekly, use glossaries given and - Quizlet/Seneca/Educake
Tip 2	Use ' Youtube- e.g. myGCSE, MrExham to help review key skills and concepts
Tip 3	Use GCSE Bitesize/Kerboodle resources/past OCR questions
Tip 4	Use the Pixl Resources on Firefly & therapy questions
Tip 5	Read online science news, watch science documentaries

B4 Community level systems:

B4.1 Ecosystems

- Biotic & Abiotic factors
- Competition & interdependence
- Trophic levels
- Decomposition
- Water, Carbon & Nitrogen cycles

Differences between Biotic and Abiotic Factors

Carbon Cycle



B3 Organism level systems:

B3.1 Co-ordination & control

- The nervous system
- Reflexes
- PAG-reaction times

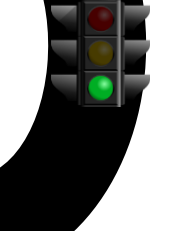
B3 Organism level systems:

B3.2 Co-ordination & control

- The endocrine system
- Menstrual cycle
- Contraception
- Fertility

B3.3 Maintaining internal environments

- Homeostasis
- Blood glucose control
- Diabetes



B2 Scaling Up:

B2.2 The challenges of size

- Exchange surfaces & transport systems
- Surface area: volume ratio
- Human circulatory system
- Plant transport
- PAG-transportation experiments

B2 Scaling Up:

B2.1 Supplying the Cell

- Transport into & out of cells; diffusion, osmosis & active transport
- Mitosis
- Cell differentiation
- Stem cells



B1 Cell level systems:

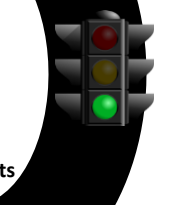
B1.3 Respiration

- Key biomolecules
- Aerobic v anaerobic respiration
- PAG-Respiration experiments

B1 Cell level systems:

B1.4 Photosynthesis

- Photosynthesis
- Limiting factors
- Inverse square law
- PAG-Photosynthesis experiments



B1 Cell level systems:

B1.2 What happens in cells

- DNA
- Protein synthesis
- Enzymes
- PAG- Enzyme reactions

How do Enzymes Work

Review of prior knowledge

B1 Cell level systems:

B1.1 Cell structure

- Eukaryotic v prokaryotic cells
- Microscopy
- PAG-Making slides
- Magnification



CURRICULUM OVERVIEW

Development of key scientific skills: planning valid experiments, carrying out practicals safely, displaying & processing data, as well as analysing & evaluating results

Possible careers

Research scientist, Biologist, Doctor, Nurse, Forensic scientist, Ecologist, Farmer, Athlete, Nutritionist, Sports scientist, Personal trainer, Biochemical engineer, Civil Engineer, Paramedic, CSI, Police officer and many more!!

CURRICULUM OVERVIEW