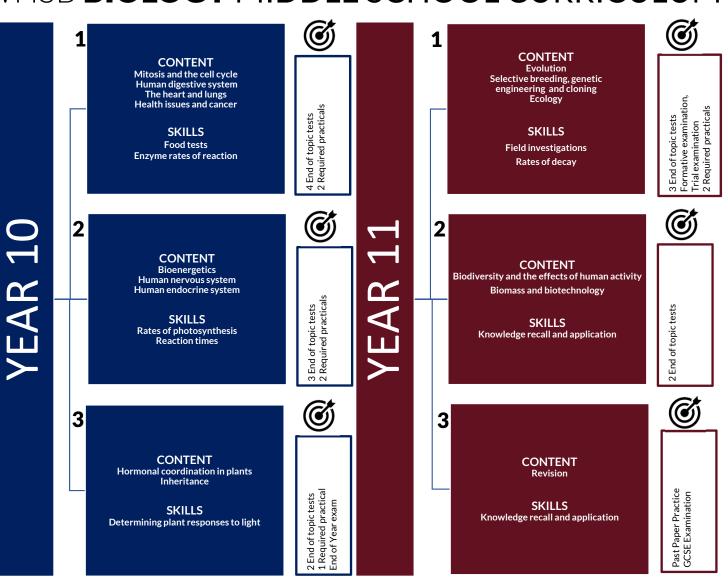
# SCHOOL PRIOR LEARNING INFORMS **-OWER**

# WHSB BIOLOGY MIDDLE SCHOOL CURRICULUM MAP





# GCSE EXAMINATION BOARD: AQA

# LINKS TO A LEVEL STUDY:

Cell division
Biomolecule – Enzymes and
absorption of the products of digestion
Gas exchange in humans
Mass transport in animals
Gene expression and cancer
Photosynthesis and respiration
Nervous coordination
Homeostasis
Inheritance
Evolution & speciation
Gene isolation, cloning and gene therapy
Populations
Biodiversity
Gene isolation, cloning and gene therapy

# **ENRICHMENT OPPORTUNITIES:**

Biology Challenge Attendance at lectures from guest speakers

# MIDDLE SCHOOL PRIOR LEARNING INFORMS

# WHSB **BIOLOGY SIXTH FORM CURRICULUM MAP**



# CONTENT Biomolecules Cells Genetic information and genetic diversity Immune system **SKILLS** CONTENT Cell division Biodiversity **SKILLS** Mitotic index

Gas exchange in insects, fish and plants

**Enzyme rates of reactions** Identification of cell water potential Effect of alcohol on membrane permeability

> Gas exchange in humans Species and taxonomy Mass transport in animals

Mass transport in plants Absorption of the products of selection

Effect of antibiotics on microbial growth Heart dissection

# CONTENT

Response **Nutrient cycles Nervous coordination Energy and ecosystems** 

### **SKILLS**

Knowledge recall and application



Formative Exam 3 Required practicals 7 End of topic tests

# Ø

4 End of topic tests 3 Required practicals

3



4 End of topic tests End of Year Exam

# 1

Mathematics in Biology Respiration Homeostasis, Populations Gene expression Inheritance Gene isolation, cloning and gene therapy

CONTENT

**Photosynthesis** 

### **SKILLS**

Rate of respiration in yeast Use of chromatography to investigate isolated pigments Effect of NH<sub>4</sub>OH on dehydrogenase activity

Population sampling Determination of glucose concentration

## CONTENT

Speciation Gene probes and DNA fingerprinting Muscles

# SKILLS

Investigating phototaxis

## CONTENT

Revision of all content covered

### SKILLS

Knowledge recall and application



5 End of topic tests Formative exam 5 Required practicals



3 End of topic tests Trial exam 1 Required practical



Past Paper Practice A Level Examination

# A LEVEL EXAMINATION BOARD: **AQA**

# **PREPARATION FOR UNIVERSITY AND DESTINATIONS:**

**Biochemist** Molecular biologist Microbiologist Neuroscientist Marine biologist Medicine **Dentistry** Vet

# **ENRICHMENT OPPORTUNITIES:**

**Biology Olympiad** Attendance at Reading University for Molecular Biology Experience Biology Live Lectures Attendance at lectures given by UCL and the University of Cambridge