# Biology KS4

Educate for life

**KEY** 

YR9



Organism



Ecosystems



Genes

## Y9 SUMMER TERM UNIT 1



What is the difference between eukaryotic and prokaryotic cells?

How do light and electron microscopes differ?

### Y9 SUMMER TERM UNIT 2



## What happens in cells?

What factors affect the ability of an enzyme to work?

How does the process of DNA replication happen?

## Y9 SUMMER TERM UNIT 3



## Respiration

Y9 SUMMER TERM UNIT 4

What is the difference between aerobic and anaerobic respiration?

How is anaerobic respiration useful in microorganisms?



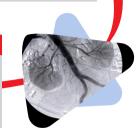


## **Photosynthesis**

What factors affect the rate of transpiration?

Y10 UNIT 1

How do limiting factors affect the rate of photosynthesis?



**Y10 UNIT 2** 





## Supplying the cell

What is the difference between osmosis and diffusion?

Why is the use of stem cells seen as controversial?



## The challenges of size

What are the different blood vessels and how are they different?

How do factors like wind and temperature affect transpiration?



## **Y10 UNIT 5**



## **Maintaining internal** environments

What is the difference between type 1 and type 2 diabetes?

How is body temperature controlled in humans?

## **Y10 UNIT 4**



What hormones are present in the menstrual cycle?

How are hormones used to treat infertility?

## Y10 UNIT 3



## he nervous system

What do the different neurons in the nervous system do?

How does damage affect the nervous system?

## **Y10 UNIT 6**

What is the difference between biotic and abiotic factors?

How do some organisms affect the population size of others?



**Y10 UNIT 7** 

What are the main differences between sexual and asexual reproduction?

How does a genetic cross show likelihood to have a particular trait?



## Y11 UNIT 1

## Natural selection and evolution

What is evolution by natural selection?

What is the evidence for evolution?



**Y11 UNIT 2** 

## Monitoring the environment

What sampling techniques are there and how are they used?

How is biodiversity being reduced and what are we doing to help?





## Feeding the human race

What is genetic engineering?

How is farming affected by genetic engineering?



## **Monitoring health**

What types of organisms cause diseases in plants and animals?

How do certain factors affect the development of non-communicable diseases?

