Bishop Heber High School

Subject	Year	Term
Biology	10	2

| Subject | Year | Term |

Unit 4 – Bioenergetics and Unit 7 Ecology

Content (Intent)

Prior Learning (Topic) Unit 3 Infection and Response

Unit 4 Bioenergetics - Plant tissues, organs and systems, Transport of substances in plants, Leaf structure and photosynthetic reactions, Rate of photosynthesis required practical lesson, Glucose and photosynthesis, Aerobic respiration, Anaerobic respiration, Responses to exercise.

Future Learning (Topic) Unit 7 Ecology

What Knowledge and Skills will be taught (Implementation)	How will your understanding be assessed & recorded (Impact)
Unit 4 Bioenergetics - Plant tissues, organs and systems, Transport of substances in plants, Leaf structure and photosynthetic reactions, Rate of photosynthesis required practical lesson, Glucose and photosynthesis, Aerobic respiration, Anaerobic respiration, Responses to exercise. **Maths Skills –** Data, mean calculations, graph drawing. **Practical Skills -** Required practical activity 6 Investigate the effect of light intensity on the rate of photosynthesis. **Interleaving Topics** **Y9 Cells, Structure and Transport; The Body, Health and Lifestyle –** Key Terms and concepts will be reviewed prior to the start of the Unit 4 such as structure of cells, specialised cells, transport in cells and heart structure.	**Key Piece of work (Homework)** Pupils given a percentage and formative feedback provided. **End of topic test** Pupils given a percentage and GCSE equivalent grade. Formative feedback provided. **Year 10 Assessment 2 and Year 11 Assessment 1** Pupils given a percentage and GCSE equivalent grade. Formative feedback provided.
Unit 7 Ecology – Communities, Abiotic and Biotic factors, Adaptations, Levels of organisation (feeding relationships), Predator prey cycles. **Maths Skills** – data collection, % cover, graph drawing. **Interleaving Topics** **Y9 The Body, Health and Lifestyle and Unit 4 Bioenergetics –** Key Terms and concepts will be reviewed prior to the start of this unit such as food molecules, the effect of temperature on enzymes, photosynthesis, aerobic/anaerobic respiration.	**Key Piece of work (Homework)** Pupils given a percentage and formative feedback provided. **End of topic test** Pupils given a percentage and GCSE equivalent grade. Formative feedback provided. **Year 11 Assessment 2** Pupils given a percentage and GCSE equivalent grade. Formative feedback provided.

How can parents help at home?

Ensure all class notes are completed, sheets are stuck in and homework submitted on time.
Assist in ensuring the active use of the EDUCAKE online learning platform where each pupil is given a personal log in.
Encourage pupils to revise for tests and exams and to create revision resources such as flash cards and posters.
Ensure all pupils have all their resources required for science lessons, including exercise books, pens and calculators.

Helpful further reading/discussion (including Reading and Vocabulary Lists)

Reading

AQA revision guides
AQA revision cards
Resources on Teams
EDUCAKE online learning platform.
GCSE POD

Vocabulary Lists

Photosynthesis	Xylem
Respiration	Phloem
Limiting Factor	Guard Cells
Aerobic Respiration	Abiotic/biotic factors
Anaerobic Respiration	Populations
Fermentation	Community
Mesophyll	Food chain/web