

Year 7 Biology Units Studied & Learning Outcomes

Overview of Unit/No. lessons

Cells and Organisation and Survival/16 lessons

Lesson Sequence of Content:

Lesson 1-Understanding what makes something living
Lesson 2 & 3-Learning about parts of plant and animal cells.
Lesson 4-The light microscope and how it works
Lesson 5-Using the light microscope to observe specimens
Lesson 6-Learning about specialised animal cells
Lesson 7-Learning about specialised plant cells
Lesson 8-Classification
Lesson 9-Understanding diffusion
Lesson 10-Learning about tissues
Lesson 11-Learning about organs
Lesson 12-Learning about organ systems
Lesson 13-Adaptations of organisms for survival
Lesson 14-Natural selection and the survival of organisms
Lesson 15-End of unit test and application
Lesson 16- Long Answer Question

Prior	Current	Next
Year 6 – Identifying heart, lungs and blood vessels. Adaptations of organisms to their environment.	Year 7- The content of a healthy human diet. -Consequences of imbalances in the diet - Tissues and organs of the human digestive system and how food is digested.	Year 9 – Cells, tissues, organs and systems. Microscopy and stem cells. Year 10 – Transport in and out of cells. Year 11 – Adaptations for survival, Natural selection and the theories of evolution.

- **GW:** Identify names cell organelles, tissues, organs and systems. State substances that move in and out of cells
- **BI:** Can link organs in the organ systems to their roles and the adaptations they have to perform the role. Can describe the roles of specialised cells and the adaptations they have. Can predict which way substances might diffuse.
- **EW:** Can suggest how unfamiliar adaptations might allow organisms to survive. Can understand how diffusion might speed up or slow down and identify how cells are adapted to maximise diffusion.

○

Overview of Unit/No. lessons

Reproduction: 11 lessons

Lesson Sequence of Content:

Lesson 1-The Egg and The Sperm
Lesson 2-Male and Female reproductive organs
Lesson 3-Growth in the womb
Lesson 4-The Menstrual Cycle
Lesson 5-Puberty

Lesson 6-Mother to Baby
 Lesson 7-Plant structure and fertilisation
 Lesson 8-Spreading pollen
 Lesson 9-Inside the Nucleus
 Lesson 10-End of unit test and application
 Lesson 11-Long Answer Question

Prior	Current	Next
N/A	Understand Reproduction in Humans and Plants	Year 9 – Hormones Year 11 – Inheritance

- **GW:** Recall the main cells and organs involved in reproduction
- **BI:** Describe how reproduction occurs in plants and animals
- **EW:** Explain the role of the nucleus in reproduction

○

Overview of Unit/No. lessons

Nutrition and digestion/11 lessons

Lesson Sequence of Content:

Nutrition and digestion:

Lesson 1-Understanding what diet means and how foods can be grouped and what nutrients are

Lesson 2-Knowing what a balanced diet is and how this links to the nutrients we need.

Lesson 3 & 4-Using chemical reagents to test for nutrients in food

Lesson 5 & 6-Learning about the structure and function of the digestive system

Lesson 7-Modelling absorption of nutrients in the small intestines

Lesson 8-Understand what digestive enzymes are and how they work inside the digestive system

Lesson 9-The consequences of imbalances in the diet

Lesson 10-End of unit test and application

Lesson 11-Long answer question

Prior	Current	Next
-------	---------	------

Year 6 – Lifestyle and health – impact on the body Year 7 - Organ systems	KS3 NC- The content of a healthy human diet. -Consequences of imbalances in the diet - Tissues and organs of the human digestive system and how food is digested.	Year 10 – Digestive system and enzymes.
---	---	--

- **GW:** Identify names of nutrients, foods that contain them and basic structures of the digestive system
- **BI:** Can link organs in the digestive system to their roles and the adaptations they have to perform the role. Can describe what a digestive enzyme is.
- **EW:** Can evaluate the role of digestive enzymes and explain their importance – making links to absorption.