OREL VINE SCHOOL

Course Outlines

Year 7

Cambridge Lower Secondary Science

BIOLOGY

Term I		Term II		Term III	
Topic/Subtopic	Objectives	Topic/Subtopic	Objectives	Topic/Subtopic	Objectives
Unit 7.1 Cells (10 hours)	 7Bs.01 Understand that all organisms are made of cells and microorganisms are typically single celled. 7Bs.02 Identify and describe the functions of cell structures (limited to cell membrane, cytoplasm, nucleus, cell wall, chloroplasts, mitochondria and sap vacuole). 7Bs.03 Explain how the structures of some specialised cells are related to their functions (including red blood cells, neurones, ciliated cells, root hair cells and palisade cells). 7Bs.04 Describe the similarities and differences between the structures of plant and animal cells. 7Bs.05 Understand that cells can be grouped together to form tissues, organs and organ systems. 	Unit 7.4 Classifying life (10 hours)	 7Bp.01 Describe the seven characteristics of living organisms. 7Bp.02 Discuss reasons for classifying viruses as living or non-living. 7Bp.03 Describe a species as a group of organisms that can reproduce to produce fertile offspring. 7Bp.04 Use and construct dichotomous keys to classify species and groups of related organisms. 	Unit 7.7 Environment and ecosystems (12 hours)	 7Be.01 Know and describe the ecological role some microorganisms have as decomposers. 7Be.02 Construct and interpret food chains and webs which include microorganisms as decomposers. 7ESc.01 Describe the water cycle (limited to evaporation, condensation, precipitation, water runoff, open water and groundwater).

Resources

- Cambridge Lower Secondary Science Stage 7 Student's work book.
- Cambridge Lower Secondary Science Stage 7 Student's book.
- Cambridge Lower Secondary Science past papers
- LMS e-learning platform.

Methodology

- Discovery method
- Experimentation
- Field study
- Integration of Information technology (IT)
- Research work
- Use of primary and secondary data from various sources

Mode of assessment

- Daily exercises from the course book
- End of month tests
- End of unit tests set from Cambridge Lower Secondary Science Stage 7 past papers
- Mid term & end of term assessments
- Quizzes and assignments on the LMS
- Weekly homework assignments