

Year: Y10 IGCSE EDEXCEL

Subject: Biology



Term	Week	Focus	Summary	Learning Outcomes	Learning skills
Term 1.1	1	Characteristics of living organisms	Characteristics of living organisms and their shared traits.	Understand how living organisms share characteristics such as nutrition, respiration, waste excretion, response to surroundings, movement, internal conditions control, reproduction, and growth and development.	Observation, Classification
		Variety of living organisms	Common features and classification of eukaryotic organisms.	Describe the common features shown by eukaryotic organisms, including plants, animals, fungi, and protoctists.	Critical Thinking, Analysis
		Variety of living organisms	Common features and classification of prokaryotic organisms.	Describe the common features shown by prokaryotic organisms, such as bacteria.	Critical Thinking, Analysis
	2	Variety of living organisms	Introduction to pathogens and their classification.	Understand the term "pathogen" and know that pathogens may include fungi, bacteria, protoctists, or viruses.	Critical Thinking, Analysis
		Level of organization	Organization of living organisms at different levels.	Describe the levels of organization in organisms, including organelles, cells, tissues, organs, and systems.	Understanding, Communication
		Cell structure	Structure and functions of key components in cells.	Describe cell structures, including the nucleus, cytoplasm, cell membrane, cell wall, mitochondria, chloroplasts, ribosomes, and vacuole.	Observation, Analysis
	3	Retrieval practise	Application of knowledge gained throughout topic.	Evaluate knowledge of all content from the cells topic and apply it to different retrieval tasks.	Critical thinking, Analysis, Recall, Mathematical skills



Year: Y10 IGCSE EDEXCEL

Subject: Biology



4	Biological molecules	Introduction to biological molecules and their elements.	Identify the chemical elements present in carbohydrates, proteins, and lipids.	Analysis, Application
	Biological molecules	Practical exploration of biological molecules in common foods.	Investigate food samples for the presence of glucose, starch, protein, and fat.	Laboratory Techniques, Analysis
5	Biological molecules	Enzymes and their importance in metabolic processes.	Understand the role of enzymes as biological catalysts in metabolic reactions.	Critical Thinking, Understanding, Analysis
6	Biological molecules	Practical exploration of the effect of pH and temperature on enzyme activity	Investigate the effect of pH and temperature on enzyme activity	Critical Thinking, Understanding, Analysis
7	Retrieval practise	Application of knowledge gained throughout topic.	Evaluate knowledge of all content from the cells topic and apply it to different retrieval tasks.	Critical thinking, Analysis, Recall, Mathematical skills



Year: Y10 IGCSE EDEXCEL

Subject: Biology



Term 1.2	1	Movement of substances into and out of cells	How substances move in and out of cells through different processes.	Understand the processes of diffusion, osmosis, and active transport.	Critical Thinking, Analysis
	2	Movement of substances into and out of cells	Practical investigation of diffusion and osmosis.	Investigate diffusion and osmosis using living and non-living systems.	Experimental Design, Observation
	3	Retrieval practise	Application of knowledge gained throughout topic.	Evaluate knowledge of all content from the cells topic and apply it to different retrieval tasks.	Critical thinking, Analysis, Recall, Mathematical skills
	4	Nutrition	Photosynthesis as a vital process in plants and its significance.	Understand the process of photosynthesis and its importance.	Critical Thinking, Evaluation
	5	Nutrition	Human digestive system and the function of digestive enzymes.	Understand the human digestive system and the role of digestive enzymes.	Critical Thinking, Understanding
	6	Nutrition	Measurement and evaluation of energy content in food.	Investigate the energy content in a food sample.	Experimental Design, Analysis
	7	Retrieval practise	Application of knowledge gained throughout topic.	Evaluate knowledge of all content from the cells topic and apply it to different retrieval tasks.	Critical thinking, Analysis, Recall, Mathematical skills

=