

Topic: <u>Biology in the World</u>	<u>Equations</u>	<u>Prior Knowledge:</u>
		Presenting data – graphs and charts Adaptations in habitats Human effects in the environment Transfers in food chains The Carbon Cycle

Cell systems and movement What are cells and how are they organised? <ul style="list-style-type: none"> • Microscopes • Animal and plant cells • Protoctista • Prokaryotes • Diffusion • Movements 	Organ systems How do the digestive and gas exchange systems work? <ul style="list-style-type: none"> • Plant nutrition • Animal nutrition • Human gas exchange • Smoking 	Reproduction and health How do mammals and flowering plants reproduce? <ul style="list-style-type: none"> • Reproduction • Life cycle • Health • Plant reproduction 	Energy in ecosystems How do animals and plants depend on one another? <ul style="list-style-type: none"> • Cellular respiration • Interdependence
Genetics and evolution Why do some species become extinct and others evolve? <ul style="list-style-type: none"> • Variation and adaptation • Biodiversity 	Disease How are viruses linked to diseases? <ul style="list-style-type: none"> • Microbes • Bacteria • Viruses • Fungus • Protist 	Control systems in organisms How are the body's responses controlled? <ul style="list-style-type: none"> • Nervous system • Hormonal system 	Investigations and research <ul style="list-style-type: none"> • Enzymes • Animal smuggling • Teeth

Key Ideas
<p>All organisms are made of up cells – which contain organelles which carry out specific functions. Organisms can be single celled or multicellular with systems made up of interconnected tissues making up organs, organs making up organ systems and organ systems making up the organism. Those organ systems allow the organism to meet the seven characteristics of all life.</p> <p>Organisms are subject to diseases caused by different microorganisms.</p> <p>Organisms in a specific habitat interact and depend upon each other for their long-term survival. But sometimes species become extinct because of different factors in the habitat.</p>



Keywords and Definitions	
Community	A group of different species of organisms interacting in a habitat
Ecosystem	The interaction of the living and non-living factors in an environment
Adaptation	Features of living organisms that help them to survive
Habitat	A place where organisms live
Tissue	A group of the same type of cells working together for a specific function
Prokaryote	A single celled organism without a nucleus
Protoctist	A single celled organism with a nucleus