

# BIOLOGY - EDSL



	EMERGING	DEVELOPING	SECURE	REFINING
Structure and Function of Living Organisms	I am aware of some of the features of living organisms and the function of their parts.	I am developing an understanding of cells, and skeletal and muscular systems. I am aware of the effects of nutrition and digestion, and gas exchange in organisms. I have a basic understanding of reproduction.	I have a secure understanding of the structure and function of living organisms with a secure understanding of the effects of diet and on features of organisms - including toxins. I have a secure understanding of reproduction.	I have a precise understanding of the structure and function of living organisms with a detailed understanding of the positive and negative effects of exercise and consumption of different substances. I have a precise knowledge of different forms of reproduction.
Material Cycles and Energy	I am aware of photosynthesis and cellular respiration.	I am developing an understanding of the importance of photosynthesis for all living organisms and environmental adaptations where it occurs. I am aware of aerobic and anaerobic respiration.	I have a secure understanding of photosynthesis. I have a clear understanding of the differences between aerobic and anaerobic respiration, understanding reactants, products formed and implications.	I have a precise understanding of photosynthesis and cellular respiration. I have a precise understanding of the effects of a range of organic molecules on living organisms and have a precise understanding of the adaptations of leaves.
Interactions and Interdependencies	I am just beginning to understand how living organisms rely on each other for survival.	I have some understanding of how organisms rely on each other for survival and how these relationships are affected by other factors.	I have a clear understanding of interdependencies through food webs. I understand the processes of pollination and the effect of the environment on living organisms.	I have precise knowledge of interdependencies in ecosystems and can cite the specific effects of environmental factors such as the accumulation of toxic metals.
Genetics and Evolution	I have some understanding of how organisms evolve.	I am developing an understanding of heredity and the importance of variation in driving evolution.	I have a secure understanding of evolution and am comfortable with a simple model of chromosomes, genes and DNA. I am aware of the work of scientists who have advanced this field and can create a graphical representation of variation.	I have a precise understanding of evolution and genetics. I can cite how specific variations and adaptations have influenced the evolution of living organisms. I have a detailed understanding of the importance of biodiversity.