		Key areas					
Organisers	Experiences and outcomes	National 3	National 4	National 5	Higher	Higher Human	
Planet Earth Biodiversity and interdependence	Sampling and identifying living things from different habitats to compare their	Sampling and identifying living things from different habitats to compare their		Sampling techniques, biotic and abiotic factors.	Biodiversity.		
	biodiversity and suggest reasons for their distribution.	biodiversity and suggest reasons for their distribution.		Biodiversity and distribution of life.			
	SCN3-01A Interdependence.		Interdependence.	Energy in ecosystems.	Interrelationships and dependence.		
	Adaptation for survival.		Adaptation for survival.				
	Impact of population growth and natural hazards on biodiversity. SCN4-01A		Impact of population growth and natural hazards on biodiversity.	Human impact on the environment.			
	Photosynthesis SCN3-02A	Photosynthesis		Photosynthesis.			
	Photosynthesis limiting factors.		Photosynthesis limiting factors.				
	Propagating and growing plants.		Propagating and growing plants.				
	Commercial uses of plants. SCN4-02A		Commercial uses of plants.		The science of food production.		
	Factors affecting respiration. SCN4-02B		Factors affecting respiration.	Respiration.	Metabolism is essential for life.	Cell metabolism.	

		Key areas				
Organisers	Experiences and outcomes	National 3	National 4	National 5	Higher	Higher Human
	Different types of chemicals in agriculture, the alternatives and their impact on global food production. SCN3-03A	Different types of chemicals in agriculture, the alternatives and their impact on global food production.				
	Nitrogen cycle. Fertiliser design and environmental impact. SCN4-03A		Nitrogen cycle. Fertiliser design and environmental impact.			
Biological systems Body systems and cells	Structure and function of organs and organ systems and their role in sustaining life. SCN3-12A	Structure and function of organs and organ systems and their role in sustaining life.		Control and communication. The need for transport. Effect of lifestyle choices on animal transport and exchange systems.		The nervous system. The cardiovascular system.
	Biological actions to maintain stable body conditions. SCN4-12A		Biological actions to maintain stable body conditions.		Maintaining metabolism.	
	Learned behaviour in response to stimuli linked to species survival. SCN4-12B		Learned behaviour in response to stimuli linked to species survival.			Communication and social behaviour.

		Key areas				
Organisers	Experiences and outcomes	National 3	National 4	National 5	Higher	Higher Human
	Role of technology in monitoring health and improving quality of life. SCN3-12B	Role of technology in monitoring health and improving quality of life.				
	Structure and variety of cells and their functions. SCN3-13A	Structure and variety of cells and their functions.		Cell structure. Transport across cell membranes. Cells, tissues and organs.		
	Cell division and its role in growth and repair.		Cell division and its role in growth and repair.	Stem cells and meristems.		Division and differentiation in human cells.
	Therapeutic use of cells. SCN4-13A		Therapeutic use of cells.			
	Different types of microorganisms and how microorganisms growth can be controlled. SCN3-13B	Different types of microorganisms and how their growth can be controlled.			Metabolism in microorganisms.	
	Properties and use of enzymes and microorganisms and use in industries. SCN4-13B		Properties and use of enzymes and microorganisms and use in industries.			

		Key areas				
Organisers	Experiences and outcomes	National 3	National 4	National 5	Higher	Higher Human
	Body defences against disease and role of vaccines. SCN3-13C	Body defences against disease and role of vaccines.				Immune system. Infectious diseases and immunity.
	Controversial biological procedures. SCN4-13C		Controversial biological procedures.			
Inheritance	Fertilisation and embryonic development and risks to embryo. SCN3-14A	Fertilisation and embryonic development and risks to embryo.		Producing new cells.		
	Growth and development of different organisms. SCN4-14A		Growth and development of different organisms.			
	Function of DNA. Risks and benefits of DNA profiling. SCN3-14B	Function of DNA. Risks and benefits of DNA profiling.				
	Sexual and asexual reproduction and their importance for survival of species. SCN4-14B		Sexual and asexual reproduction and their importance for survival of species.	Reproduction.		Reproduction.

		Key areas				
Organisers	Experiences and outcomes	National 3	National 4	National 5	Higher	Higher Human
	DNA, genes and chromosomes.		DNA, genes and chromosomes.	DNA and production of proteins.	Structure and replication of DNA.	Structure and replication of DNA.
				Proteins and enzymes.	Gene expression.	
	Genetic inheritance. SCN4-14C		Genetic inheritance	Variation and inheritance.	Genome.	
				Genetic engineering.		
				Adaptation, natural selection and evolution of species.		