Sterling Middle School Scope and Sequence

Internal Document





Block 1: Identity & Character		
Central Concepts	Supporting Concepts	
Introduction to ScienceHealthDisease	 Scientific method Molecular biology (food as energy) Major body systems (human) Wellness, diet and exercise Spread, treatment and prevention of disease 	
Central Question(s)	NC State Standards Alignment	
How can the process of science be used to increase our understanding of life?	 Health & Molecular biology - 8.L.5, Disease, Epidemic & Pandemic - 7.L.2.3, 8.L.1.2 Major body systems - 7.L.1.4 	
How do the major body systems interact with one another and the environment to maintain a state of health and wellness?		

Block 2: Systems & Organizations		
Central Concepts	Supporting Concepts	
Cell BiologyGenetics	 Cell structure and function Hierarchical organization of multi-cellular organisms Cellular reproduction Patters of inheritance 	
Central Question(s)	NC State Standards Alignment	
How do the processes, structures and functions of living organisms enable them to survive, reproduce and carry out the basic functions of life?	 Cell Biology - 7.L.1.1, 7.L.1.2, 7.L.1.3 Genetics - 7.L.2 	

Block 3: Connections & Associations	
Central Concepts	Supporting Concepts
 Ecosystems 	 Populations Predator/Prey relationships Competition, Parasitism, Mutalism Food chains & webs Ecological pyramids Theory of Evolution Plate tectonics Law of Superposition Adaptation Taxonomy (biological classification)
Central Question(s)	NC State Standards Alignment
How do organisms interact with and respond to the biotic	o Ecosystems – 8.L.3
and abiotic components of their environment?	○ Theory of Evolution, Adaptation – 8.L.4

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Block 4: Explorations & Discoveries		
Central Concepts	Supporting Concepts	
 Microbiology 	 Bacteria, Virus and Fungi 	
o Careers in Science	 Biotechnology 	
Central Question(s)	NC State Standards Alignment	
TBD	Bacteria, Virus and Fungi – 8.L.1.1	
	 Biotechnology – 8.L.2 	