Course Title: Cells and Heredity Quarter: 1 Academic Year: 2018-2019

Essential Questions for this Quarter:

What is the structure and function of cells? 2. What is DNA's role in genetics?								
Unit/Time Frame	Standards	Content	Skills	Assessment	Resources			
Introduction To Cells	LS1.A.1	Discovering cells Looking inside cells Chemical compounds in cells The cell in its environment	LS1-1	Chapter Tests Benchmark Tests Diagnostic Tests	Pearson Interactive Resources including:			
Cell Processes and Energy	LS1.C.1	Photosynthesis Cellular respiration Cell division	LS1-2	\	Teacher resources, Tubs of equipment,			
Genetics: Science of Heredity	LS3.A.1	What is heredity Probability and heredity Patterns of inheritance Chromosomes and inheritance	LA3-1	\	STEM Labs, STEM Quest, Program resources,			
DNA: Code of Life	LS3.A.2	Genetic code How cells make proteins Mutations	LS3-2	\	Project-based activities; and			
Human Genetics and Genetic Technology	LS4.B.1	Human inheritance Human genetic disorders Advances in genetics Using genetic information	LS4-5	\	ESU8 models and SNAP media			
Change Over Time	LS4.A.3	Darwin's theory Evolutionary theory Bill Nye vs. Ken Ham debate Rate of change	LS4-3	\	\			

Course Title: Ecology and the Environment Quarter: 2 Academic Year: 2018-2019

course ritie. Ecology an	id the Environme		Quarter: 2	Academic	
Essential Questions for tl	his Quarter:				
How do living thing	ngs affect one and	other? 2. How do people us Ea	arth's resources?		
Unit/Time Frame	Standards	Content	Skills	Assessment	Resources
		1			
Populations and Communities	LS1.B.3	Living things and the environment Populations Interactions among living	LS1-4 LS2-2	Chapter Tests Benchmark Tests Diagnostic Tests	Pearson Interactive Resources including:
		things Changes in communities			
Ecosystems and Biomes	LS1.D.1	Energy flow in ecosystems Cycles of matter Biomes Aquatic ecosystems Biogeography	LS2-3	\	Teacher resources, Tubs of equipment,
Resources and Living Things	LS2.A.2	Introduction to environmental issues Introduction to natural resources Human population growth Forests and fisheries Biodiversity	LS2-4	\	STEM Labs, STEM Quest, Program resources,
Land, Air, and Water Resources	LS4.D.1	Conserving land and soil Waste disposal and recycling Air pollution and solutions Water pollution and solutions Ocean resources	LS4-6	\	Project-based activities; and
Energy Resources and Conservation	LS4.D.1	Fossil fuels Alternative sources	LS4-6	↓	ESU8 models and SNAP media

Course Title: Human Body Systems	Quarter: 3	Academic Year: 2018-2019
Course Title: Human Body Systems	Quarter: 3	Academic Year: 2018-2019

Essential Questions for this Quarter:

 How does your body work? How does disease affect one's health? 						
Unit/Time Frame	Standards	Content	Skills	Assessment	Resources	
The Human Body	LS1.A.3	Body organization System interactions Homeostasis	LS1-2	Chapter Tests Benchmark Tests Diagnostic Tests	Pearson Interactive Resources including:	
Bones, Muscle and Skin	LS1.A.3	Skeletal system Muscular system The skin	LS1-2	Diagnostic Tests ↓	Teacher resources, Tubs of equipment,	
Digestion	LS1.C.2	Food and energy Healthy eating Digestive process Final digestion & absorption	LS1-2	\	STEM Labs, STEM Quest, Program resources,	
Circulation	LS1.C.2	Body's transport system Blood vessels Composition of blood Cardiovascular health	LS1-2	↓	Project-based activities; and	
Respiratory and Excretion	LS1.C.2	Respiratory system Smoking affects health Excretory system	LS1-2	↓	ESU8 models and SNAP media	
Fighting Disease	LS3.B.2	Infectious diseases Body's defenses Non-infectious diseases Your health	LS1-5 LS3-1	\		
Nervous System	LS1.D.1	Divisions of nervous system The five senses Alcohol and other drugs	LS1-8	↓		
Endocrine System and Reproduction	LS1.B.2	Endocrine system Human life cycle	LS3-2	\		

Course Title: The Diversity of Life Quarter: 4 Academic Year: 2018-2019

Essential Questions for this Quarter:

Essential Questions for thi	•	10 O Have data a ' H	h 10		
How are living thin	ngs alike, yet diffe	erent? 2. How does animal be	navior affect survival?		
Unit/Time Frame	Standards	Content	Skills	Assessment	Resources
					_
Introduction To Living Things	LS4.A.4	What is life? Classifying life Domains and kingdoms Classification	LS4-3	Chapter Tests Benchmark Tests Diagnostic Tests	Pearson Interactive Resources including:
Viruses, Bacteria, Protists, and Fungi	LS4.A.4	Viruses, Bacteria, Protists, and Fungi	LS4-3	↓	Teacher resources, Tubs of equipment,
Plants	LS4.A.4	Classifying plants Plant structure Plant reproduction Plant growth Plants in daily life	LS4-3	\	STEM Labs, STEM Quest, Program resources,
Introduction To Animals	LS4.A.4	Invertebrates Vertebrates Vertebrate diversity	LS4-3	\	Project-based activities; and
Getting Around	LS4.A.4	Skeletons & muscles Nervous system Animal movement	LS1-7	\	ESU8 models and SNAP media
Obtaining Energy	LS2.8.1	How animals obtain and digest food How animals obtain oxygen Circulation and excretion	LS1-7	\	
Animal Reproduction and Behavior	LS1.B.2 LS1.B.3	Animal reproduction and fertilization Development and growth What is behavior? Patterns of behavior	LS1-4	\	