

	Week	Unit	Topics by week	Lab / Simulation / Activity
Quarter 1	1	Unit 1 Nature of Life Chapter 1 Nature of Life	1.1 What is Science 1.2 Science In Context 1.3 Patterns In Life	Chapter 1 Case Study: Biology and technology solve problems 1.1: What Is Science? 1.1 Lesson Review 1.2 Science in Context 1.2 Lesson Review 1.2 EJ-PBL Engineering Interactivity: Optimize Solar Stills 1.3 Patterns of Life
	2		2.1 Nature of Matter 2.2 Properties of Water	Types of Bonding Simulation Properties of Water Simulation
	3	Chapt 2. The Chemistry of Lif	2.3 Carbon Compounds (Macromolecules)	Macromolecules Lab
	4		2.3 Carbon Compounds (Macromolecules / Nutrition)	Science Skills Activity: Dietary Fats and Blood Cholesterol Levels
	5		2.4 Chemical Reactions & Enzymes UNIT 1 EXAM	Lab Activity: Simulating a Chemical Reaction or Interactivity: Functioning of Enzymes
	6	Unit 2 Ecology	3.1 Introduction to Global Systems 4.3 Cycles of Matter	Science Skills Activity: Factors Affecting Growth
	7	Chapter 3 The Biosphere	3.2 Climate & Weather 3.3 Biomes and Aquatic Ecosystems	Characteristics of Aquatic Ecosystems Simulation: Where Organisms Live
	8	Chapter 4 Ecosystems	4.1 Energy, Producers, and Consumers	Interactivity: Producers and Consumers
	9		4.2 Energy Flow in Ecosystems	EJ-PBL Science Skills Activity: Food Webs and Invasives , Engineering Interactivity: Construct a Wetland
Fall Break				
Quarter 2	10	Chapter 5 Populations	5.1 How Populations Grow 5.2 Limits to Growth 5.3 Human Pop Growth	Interactivity: Human Population Growth EJ-PBL Science Skills Activity: Pythons in the Everglades , Simulation: Investigate Population Growth Rates
	11	Chapter 6 Communities and Ecosystem Dynamics	6.1 Habitats, Niches, Species Interactions 6.2 Succession 6.3 Biodiversity	Interactivity: Symbiotic Relationships Science Skills Activity: Life on the Reef , Science Skills Activity: Identifying Disturbances Engineering Interactivity: Designing a Rainwater Capture System
	12	Chapter 7 Humans and Global Change	7.1 Ecological Footprints 7.2 Causes & Effects of Global Change UNIT 2 EXAM	CaseStudy: How Do Interactions Shape Ecosystems Engineering Interactivity: Wetland Restoration Science Skills Activity: Plan an Urban Tree Planting Science Skills Activity: Biogas Farming EJ-PBL Science Skills Activity: Controlling Invasives
	13	Unit 3 Cells	8.1 Life is Cellular 8.2 Cell Structure	Interactive Video: Microscopes Science Skills Activity: Specialized Cells
	14	Chapter 8 Cell Structure and Function	8.3 Cell Transport 8.4 Homeostasis	Explode a Grape - Osmosis Lab Interactive Video: Maintaining Homeostasis
	15	Chapter 11 Cell Growth & Division	11.1 Cell Growth Division & Reproduction	EJ-PBL Interactivity: Optimizing Algal Growth
	16		11.2 Cell Division 11.3 Regulating the Cell Cycle 11.4 Cell Differentiation	Simulation: Exploring the Cell Cycle Science Skills Activity: Investigating Cell Regulation Interactivity: Cell Differentiation
	17		9.1 Energy and Life 9.2 Photosynthesis Overview 9.3 Process of Photosynthesis	Interactivity: ATP and Energy Interactive Video: Amazing Autotrophs Science Skills Activity: The Effect of Light on the Rate of Photosynthesis Science Skills Activity: Photosynthesis and Cellular Respiration
	18	Chapter 10 Cellular Respiration	10.1 Cellular Respiration: 10.2 Process of Cellular Respiration 10.3 Fermentation UNIT 3 EXAM	EJ-PBL Science Skills Activity: Algae and Biofuels Science Skills Activity: Exercise and Mitochondria Interactivity: Comparing Cellular Respiration and Fermentation Interactive Video: Fermentation and Exercise
	19	Semester Finals	Exam Review & Semester Finals	Summative Assessment - Final Exam
Winter Break				
Quarter 3	20	Unit 4 Genetics & Heredity Chapter 12 Introduction To Genetics	12.1 The Work of Gregor Mendel 12.2 Applying Mendel's Principles 12.3 Other Patterns of Inheritance 12.4 Meiosis	Replicating Procedures
	21	Chapter 13 DNA	13.1 Identifying the Substance of Genes 13.2 The Structure of DNA 13.3 DNA Replication	
	22	Chapter 14 RNA and Protein Synthesis	14.1 RNA 14.2 Ribosomes and Protein Synthesis	
	23		14.3 Gene Regulation and Expression 14.4 Mutations	
	24	Chapter 15 The Human Genome	The Human Genome Cracking the Code of Life Pt 1 Cracking the Code of Life Pt 2 Cracking the Code of Life Pt 3 with pre/post questions	Chapt 15 Case Study The Human Genome
	25		15.1 Human Chromosomes 15.2 Human Genetic Disorders 15.3 Studying the Human Genome	
	26	Chapter 16 BioTechnology	16.1 Changing the Living World 16.2 The Process of Genetic Engineering GATTACA (3-Day Genetic Engineering Feature Film) with Pre/Post Questions and Discussions.	
	27		16.3 Applications of Biotechnology 16.4 Ethics and Impacts of Biotechnology UNIT 4 EXAM	

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Quarter 4	28	Unit 5 Evolution Chapter 17 Darwin's theory of evolution	17.1 A Voyage of Discovery 17.2 Ideas That Influenced Darwin	Chapter 17 Case Study - Lizards, Legs and the Diversity of Life 17.1 A Voyage of Discovery - Analyzing Data and Lesson Review 17.2 Ideas That influenced Darwin	
	29		17.3: Darwin's Theory: Natural Selection 17.4 Evidence of Evolution	17.3: Darwin's Theory: Natural Selection; 17.3 Lesson Review 17.4 Evidence of Evolution; 17.4 Lesson Review Chapter 17 Case Study Wrap Up - Lizards, Legs and the Diversity of Life	
	Spring Break				
	30	Chapter 18 Evolution of populations	18.1 Genes and variation 18.2 Evolution as genetic change 18.3 Process of speciation		
	31	Chapter 19 Biodiversity and classification	18.4 Molecular evolution		
	32		19.1 Finding order in biodiversity 19.2 Modern evolutionary classification		
	33	Chapter 20 History of Life	20.1 The Fossil Record 20.2 Evolutionary Patterns and Processes 20.3 Earth's Early History		
	34	Unit 6 Diversity of Life Chapter 21 Viruses, Prokaryotes, Protists & Fungi	21.1 Viruses 21.2 Prokaryotes 21.3 Protists 21.4 Fungi		
	35	Chapter 22 & 23 Plants	22.1 What is a Plant? 22.2 Plant Diversity 22.3 Flowers Fruits & Seeds		
	36	Chapter 24 Animal Evolution, Diversity & Behavior	24.1 Introduction to ANimals 24.2 Animal Evolution & Diversity 24.3 Primate Evolution		
	37	Finals Review Week			
	38	Finals week	Exam Review Semester Finals		