Pacing Guide

Content Area: Principals of Biomedical Sciences

Week	Essential Outcome / Concept / General Overview	NATIONAL SCIENCE Standards	Resources/Activities used (textbook pages, charts, assessments, etc.)
1	Introduction to Principals of Biomedical Sciences and Project Lead The Way		
2	UNIT 1: Human Body Systems Lesson 1.1 The Mystery	A, C, F	Crime Scene Investigation Observations Career Journals
3	UNIT 1: Human Body Systems Lesson 1.1 The Mystery	A, C, F	Construct a Human Body Cut-out Concept/Vocabulary Quiz
4	UNIT 1: Human Body Systems Lesson 1.1 The Mystery	A, C, F	Concept Mapping Body Systems Test
5	UNIT 2: Heart Attack Lesson 2.1 What Is a Pump?	A	Build a Pump Heart Quiz (Blood flow and anatomy)
6	UNIT 2: Heart Attack Lesson 2.2 The Structure of the Human Heart	A, C, E	Dissect a Lamb Heart Lab Practical Test Career Journals
7	UNIT 2: Heart Attack Lesson 2.3 The Heart at Work	A, C, E, F	LoggerPro-Heart Rate Lab LoggerPro- Blood Pressure Lab
8	UNIT 2: Heart Attack Lesson 2.3 The Heart at Work	A, C, E, F	LoggerPro- Blood Pressure Lab LoggerPro- EKG Lab
9	UNIT 2: Heart Attack Lesson 2.4 Blood- The River of Life	A, C, E	Microscope-Red/White Blood Cells Unit 2 Test Career Journals

Week	Essential Outcome / Concept / General Overview	NATIONAL SCIENCE Standards	Resources used (textbook pages, charts, assessments, etc.)
10	UNIT 3: Diabetes Lesson 3.1 What is in our food?	A, B, C	Analyze food labels
11	UNIT 3: Diabetes Lesson 3.1 What is in our food?	A, B, C	Career Journals Concept/Vocabulary Quiz
12	UNIT 3: Diabetes Lesson 3.2 Macromolecules	A, B, C	Build models of macromolecules Macromolecules Quiz
13	UNIT 3: Diabetes Lesson 3.3 Molecules Working Together	A, B, C, G	Concept Map Lock and Key Model Presentation
14	UNIT 3: Diabetes Lesson 3.4 The Diabetes Connection	A, B, C, E, F	Feedback System Loop 3D model of insulin Career Journals
15	UNIT 3: Diabetes Lesson 3.4 The Diabetes Connection	A, B, C, E, F	Type II Diabetes Research Project
16	UNIT 3: Diabetes Lesson 3.4 The Diabetes Connection	A, B, C, E, F	Quiz Diabetes and Insulin Career Journals
17	UNIT 3: Diabetes Lesson 3.5 Life with Diabetes	A, C, F	Plan a menu for a diabetic Teenager Unit 3 Test
18	Semester 1 Exam		

Week	Essential Outcome / Concept / General Overview	NATIONAL SCIENCE Standards	Resources used (textbook pages, charts, assessments, etc.)
19	UNIT 4: Sickle Cell Disease Lesson 4.1 What is Sickle Cell Disease?		Microscope observations of Cells Concept/Vocabulary Quiz
20	UNIT 4: Sickle Cell Disease Lesson 4.2What causes Sickle Cell Disease?		Microscope-HeLa Cells Career Journals
21	UNIT 4: Sickle Cell Disease Lesson 4.2What causes Sickle Cell Disease?		Pedigree Chart Probability Calculations
22	UNIT 4: Sickle Cell Disease Lesson 4.3 How do Chromosomes Carry Information?		Build a model of DNA Genetic Quiz
23	UNIT 4: Sickle Cell Disease Lesson 4.3 How do Chromosomes Carry Information?		Calculate Length of DNA Career Journals
24	UNIT 4: Sickle Cell Disease Lesson 4.4 What is the DNA Code?		Build a B-globin protein Identify exons and coding regions
25	UNIT 4: Sickle Cell Disease Lesson 4.4 What is the DNA Code?		Design a Protein Career Journals
26	UNIT 4: Sickle Cell Disease Lesson 4.5 Mistakes Happen		PowerPoint presentation- Genetic mutation leading to disease Unit 4 Test
27	UNIT 5: Hypercholesterolemia Lesson 5.1 Cholesterol		HDL and LDL Brochure

Week	Essential Outcome / Concept / General Overview	NATIONAL SCIENCE Standards	Resources used (textbook pages, charts, assessments, etc.)
	UNIT 5: Hypercholesterolemia		Gel Electrophoresis
28	Lesson 5.2 Molecular Biological Techniques for		Career Journals
	Diagnosing Disease		Unit Quiz/Test
	UNIT 6: Infectious Diseases		Gram Stain Lab
29	Lesson 6.1 Bacteria		Antibiotic Efficiency Lab
	UNIT 6: Infectious Diseases		Build a Virus
30	Lesson 6.2 Viruses		Presentation about Virus
			Start GRANT PROPOSAL
	UNIT 6: Infectious Diseases		Design a Public Health Campaign to
31	Lesson 6.3 Public Health Campaign		raise awareness about an infectious
			disease
			Work on GRANT PROPOSAL
	UNIT 7: Medical Interventions		Career Journals
32	Lesson 71. Medical Interventions		Draft 1 of Grant Proposal due
	UNIT 7: Medical Interventions		Draft 2 of Grant Proposal due
33	Lesson 71. Medical Interventions		
34	Unit 8: Grant Proposal		Presentation of Grant Proposals
35	Study for finals		
36	Final Exam		