

Here is a list of BioBeyond units and lessons as they map to the OpenStax free textbook for introductory biology, *Concepts of Biology*. The mapping was created by one of our science curriculum developer and BioBeyond specialist. For more information about the mapping, contact our team at support@inspark.education.

BioBeyond Unit	BioBeyond Lesson	OpenStax Concepts of Biology Reading
Unit 1: Biology Bootcamp	A Course Like No Other	
	Scientific Reasoning	1.2 The Process of Science Appendix: Measurements and the Metric System
	Scientific Tools	
	Graphing Skills	
	Scientific Skills	
Unit 2: World Biodiversity Expedition	Unit 2: World Biodiversity Expedition	1.1 Themes and Concepts of Biology 12.1 Organizing Life on Earth 15.1 Features of the Animal Kingdom 14.1 The Plant Kingdom 13.1 Prokaryotic Diversity (Optional) Remainder of chapters 13 , 14 , 15
Unit 3: Journey to the Galapagos	Why You Look the Way You Do	8.1 Mendel's Experiments 8.2 Laws of Inheritance
	Disease Detectives	8.3 Extensions of the Laws of Inheritance
	Peer Pressure in Nature	20.1 Energy Flow through Ecosystems 11.1 Discovering How Populations Change 19.4 Community Ecology
	The Birds and the Moths	11.2 Mechanisms of Evolution 19.2 Population Growth and Regulation
	Galapagos Exploration	11.4 Speciation 11.5 Common Misconceptions about Evolution
Unit 4: Time Traveller's Guide to Life on Earth	Written in Stone	Appendix: Geological Time 11.3 Evidence of Evolution 12.2 Determining Evolutionary Relationships
	End of an Era: Hell Creek, USA	
	Rise of the Animals: Nilpena,	

	Australia	
	First Signatures of Life: North Pole, Australia	
Unit 5: Into the Cell	Into the Animal Cell	3.1 How Cells Are Studied 3.3 Eukaryotic Cells
	Into the Plant Cell	
	Into the Bacteria Cell	3.2 Comparing Prokaryotic and Eukaryotic Cells
Unit 6: Searching for Signatures	Chemical Basis of Life	2.1 The Building Blocks of Molecules 2.2 Water 2.3 Biological Molecules 3.4 The Cell Membrane Appendix: The Periodic Table of Elements
	Gathering Energy	4.1 Energy and Metabolism
	Energy Challenge: Respiration	4.2 Glycolysis 4.3 Citric Acid Cycle and Oxidative Phosphorylation 4.4 Fermentation 4.5 Connections to Other Metabolic Pathways
	Energy Challenge: Photosynthesis	5.1 Overview of Photosynthesis 5.2 The Light-Dependent Reactions of Photosynthesis 5.3 The Calvin Cycle
	Genetic Blueprints	6.1 The Genome 9.1 The Structure of DNA
	Cellular Replication	6.2 The Cell Cycle 6.4 Prokaryotic Cell Division 7.2 Meiosis
	Genetic Replication	9.2 DNA Replication
	Making Proteins	9.3 Transcription 9.4 Translation
Unit 7: Blue Planet	Our Blue Planet	
	Then and Now	20.3 Terrestrial Biomes 20.4 Aquatic and Marine Biomes

		21.2 Threats to Biodiversity
	History Repeats Itself, With a Twist	21.3 Preserving Biodiversity
	Finding the Cause	
	Keeping Balance	20.2 Biogeochemical Cycles
	Designer Planet	
Unit 8: A Mission Beyond	Making the Dream Team	
	Unseen Danger: Radiation	
	The Bare Bones	16.5 Musculoskeletal System
	Lifting Tons and Skeletons	
	Getting Under Your Skin	
	Maintaining Peak Performance	
	Counting Calories	9.5 How Genes Are Regulated
	Fueling Your Team	16.2 Digestive System 16.4 Endocrine System
	Knocked Out	16.3 Circulatory and Respiratory Systems
	A Change of Heart	