

Unit 1: Chemistry of Life 1. Properties of water 2009B #3 2. Oxygen, physiology, use 2009B #4 3. Protein structure, sickle cell, role of protein 2008 #1 4. Biological molecules 2008B #2 5. Relationship structure to function 2006B #2	Unit 2: Cell Structure and Function 1. SHORT – Cells and types of organelles 2013 #6 2. Organelles, prokaryotes, eukaryotes 2011 #1 3. Transpiration, water potential 2011 #4 4. Membranes 2007 #1 5. Prokaryotes, eukaryotes, endosymbiotic 2006 #1 6. Relationship structure to function 2006B #2 7. Transpiration 2006B #3 8. Chromosome Structure 2005#2 9. Water potential 2005B #4 10. Cell membrane 2017 #8 (3) 11. Membranes 2019 #8 12. Organelles 2018 #6
Unit 3: Cellular Energetics 1. SHORT Metabolism, thermoregulation 2014 #7 2. Cellular Rep, Calculate energy 2015 #2 3. Light absorption, endosymbiotic 2013 #2 4. Metabolism, Rates, Cellular Respiration 2012 #2 5. Enzyme, reaction rate, amylase 2010#2 6. Chromatographic, light energy 2010B #1 - Skip a and c 7. ATP, GTP, energy flow, 2009 #2 - Skip d 8. Dissolved oxygen 2008B #1 9. Respiration, enzymes, yeast 2005 #1 10. Tooth Decay and pathway to metabolize sugar 2017 #7 11. Cellular respiration, heredity 2019 #3	Unit 4: Cell Communication and Cell Cycle 1. SHORT - Mitosis vs Meiosis short #4 2015 2. Cell cycle, mitosis, 2011B #1 - Skip b 3. Sexual reproduction, asexually, sexual 2006B #1 4. Chromosome structure 2005 #2 5. SHORT – Cell signaling 2013 #8 6. Cell communication 2018 #2 7. Cell signaling 2019 #4
Unit 5: Heredity 1. SHORT – DNA replication, genetic variation 2014 #8 2. SHORT – Amino acid table, evolution, protein structure 2013 #5 3. Cross-breeding, phenotypes, 2010#3 4. Protein structure, sickle cell mutation, 2010B #2 5. Flower color controlled by a single gene 2016 #7 6. Meiosis, Crossing Over, Chromosome abnormality, Parthenogenesis 2004 #1 7. Heredity, cellular respiration 2019 #3 8. Heredity 2018 #7	Unit 6: Gene Expression and Regulation 1. Regulation of protein synthesis 2012 #3 2. Primary Transcript 2016 #4 3. DNA, gene expression, protein synthesis 2009 #4 4. mRNA, transcription, protein folding 2007B #3 5. Protein synthesis 2005B #3 6. SHORT – GMO 2014 #5 7. Biotechnology, transgenic 2009B #1 8. PCR detection of eDNA fragments 2016 #6 (6) 9. Gibberellin is the primary plant hormone 2017 #3 10. Protein synthesis, symbiosis 2019 #1 11. Protein synthesis 2019 #7
Unit 7: Evolution 1. SHORT – Phylogenic tree - short #3 2015 2. SHORT – Guppies, evolution, SEM 2014 #4 3. SHORT – Fossils, dating, evolution 2014 #2 4. Cladogram construction, Specific immune 2014 #2 5. Reproduction, asexual, sexual 2011 #3 6. Phylogeny, speciation, methods 2011B #4 7. Phylogeny, amino acid 2009 #3 8. Protein structure, sickle cell, role of protein 2008 #1 9. Evolution, hardy-Weinberg 2008B #3 10. Homologous structure, evolution 2008B #4 11. Darwin contributions, Change by modern science 2004 #2 12. Graphing of Mussel Frequency 2016 #1 (10) 13. Adaptation in Bears 2018 #1 14. Cladogram 2019 #5	Unit 8: Ecology 1. SHORT – Snake, carrying cap. #6 2015 2. SHORT – Effect of clearing land #3 2014 3. SHORT – Material cycling, CO2 2013 #4 4. Herbivore Protection t-test #1 2014 5. Carbon, Carbon Cycle, Organic 2012 #4 6. Succession, experimental design, abiotic, biotic 2011B #2 7. Invasive species, eradication of pest 2011B #3 8. Succession, abiotic change 2010#4 9. Bacteria, ecological roles, 2010B #3 10. Millipede experiment 2010B #4 11. Primary productivity 2008 #2 12. Dissolved oxygen 2008B #1 13. Biomes, productivity, food web 2007 #3 14. Energy flow 2007B #4 15. Fossil, variation, population density 2006 #2 16. Producers, energy flow 2006B #4 17. Bacteria Graph Growth Rate 2016 #2 18. NPP #3 (8) 19. Plant Mutualistic Relationship 2016 #5 Graph (8)

	20. <u>Fires, Reading Graph, Claim ER 2017 #2</u> 21. <u>Aquatic Food Web 2017 #4 (6)</u> 22. <u>Dead zones reading graph 2017 #5 (4)</u> 23. <u>Animal Choice chamber, chi square 2013 #1</u> 24. <u>Behaviors, experimental design 2007B #1</u> 25. <u>Symbiosis 2018 #5</u>
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FRQ	Keys	Keys - B
2019	2019	
2018	2018	
2017	2017	
2016	2016	
2015	2015	2011
2014	2014	2010
2013	2013	2009
2012	2012	2008
2011	2011	2007
2010	2010	2006
2009	2009	2005
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