

Scope and Sequence

Subject/Title of Unit	Grade	6 Weeks	Estimated Time Frame (# of days)
PreAP Biology Unit 10 – Microorganisms and Fungi	9	4 th Cycle	10 days
TEKS/Student Expectations		Examples/Specifications:	
<p>1A Students will demonstrate safe practices during field and laboratory investigation</p> <p>1B Students will make wise choices in the use and conservation of resources and the disposal or recycling of materials.</p> <p>2A Students will plan and implement investigative procedures</p> <p>2B Students will collect data and make measurements with precision;</p> <p>2C Students will organize, analyze, evaluate, make inferences, and predict trends from data;</p> <p>2D Students will communicate valid conclusions.</p> <p>3A Students will analyze, review, and critique scientific explanations, as to their strengths and weaknesses using scientific evidence and information</p> <p>3B Students will evaluate promotional claims that relate to biological issues</p> <p>3F Students will research and describe the history of biology and contributions of scientists</p> <p>4A Students will identify the parts of prokaryotic and eukaryotic cells</p> <p>4C Students will compare the structures and functions of viruses to cells and describe the role of viruses in causing diseases and conditions</p> <p>4D Students will identify and describe the role of bacteria in maintaining health</p> <p>8C Students will identify characteristics of kingdoms including monerans, protists, fungi, plants, and animals</p> <p>11D Students will summarize the role of microorganisms in maintaining and disrupting equilibrium including diseases in plants and animals and decay in an ecosystem</p> <p>12B Students will interpret interactions among organisms exhibiting predation, parasitism, commensalisms, and mutualism</p>	<p>Students will:</p> <ul style="list-style-type: none"> -Gather data, graph data, interpret data, distinguish observations from inferences, using laboratory equipment properly. -Compare and contrast viruses and bacteria. -Classify microorganisms -Explain why microorganisms are vital to maintaining the living world. -Explain how microorganisms cause infections and diseases. -Describe how bacterial growth can be controlled. -Identify human uses of microorganisms. -Summarize the roles of microorganisms on the environment. -Compare and contrast fungi and plants. -Describe the kinds of mutualistic relationships that fungi form with other organisms 		

Language of Instruction:	Instructional Resources/Textbook Correlations:
Prokaryote, bacillus, coccus, spirillum, chemoheterotroph, photoheterotroph, photoautotroph, chemoautotroph, obligate aerobe, obligate anaerobe, facultative anaerobe, binary fission, nitrogen fixation, conjugation, endospore, virus, capsid, bacteriophage, lytic infection, lysogenic infection, prophage, retrovirus, pathogen, vaccine, antibiotic, viroid, prion, protist, pseudopod, amoeboid movement, food vacuole, cilia, trichocyst, macronucleus, gullet, anal pore, contractile vacuole, accessory pigment, eyespot, pellicle, phycobilin, filament, alternation of generations, gametophyte, spore, sporophyte, cellular slime mold, acellular slime mold, fruiting body, plasmodium, zoosporangium, antheridium, oogonium, chitin, hyphae, sporangium, rhizoid, stolon, gametangium, conidium, ascus, ascospore, basidium, basiospore, budding, saprobe, lichen, mycorrhiza	<p>Prentice-Hall Biology - Chapter 19 Sections 1-3, Chapter 20 Sections 1-5, Chapter 21 Sections 1-3</p> <p>Laboratory Investigations:</p> <p><i>Wanted Poster Project</i> <i>Bacteria Everywhere Lab</i> <i>Virus Factory Paper Lab</i> <i>Pond Water Critters Lab</i> <i>Mushroom Dissection Lab</i></p> <p>Weblinks/Other Resources:</p> <p>TAKS Workbook www.unitedstreaming.com Microbiology Video</p>
Evaluation/External Assessment/Local Assessment:	Best Instruction Timeline:
TAKS Bell Warmers and Workbook Key Terms and Reading Quiz Chapters 19, 20 and 21 Wanted Poster Project Laboratory reports and performance in lab Chapter worksheets Microorganisms and Fungi Unit Test	2 days - Viruses 2 days - Bacteria 2 days - Protists 2 days - Fungi (Impacts of each on the world) 2 days - Assessment