

Scope and Sequence

Subject/Title of Unit	Grade	6 Weeks	Estimated Time Frame (# of days)
Biology Invertebrates	9 - 12	5 th Six Weeks	15 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>3C Students will evaluate the impact of research on scientific thought, society, and the environment</p> <p>5A Students will compare cells from different parts of plants and animals including roots, stems, leaves, epithelia, muscles and bones to show specialization of structure and function</p> <p>5B Students will identify cell differentiation in the development of organisms</p> <p>5C Students will sequence the levels of organization in multi-cellular organisms to relate the parts to each other and to the whole</p> <p>6E Students will compare the processes of mitosis and meiosis and their significance to sexual and asexual reproduction</p> <p>7A Students will identify evidence of change in species using fossils, DNA sequences, anatomical similarities, physiological similarities, and embryology</p> <p>8A Students will collect and classify organisms at several taxonomic levels such as species, phylum, and kingdom using dichotomous keys</p> <p>8C Students will identify characteristics of kingdoms including monerans, protists, fungi, plants, and animals</p> <p>10A Students will interpret the functions of systems in organisms including circulatory, digestive, nervous, endocrine, reproductive, integumentary, skeletal, respiratory, muscular, excretory and immune</p> <p>11A Students will identify and describe the relationships between internal feedback mechanisms in the maintenance of homeostasis</p> <p>12C Students will compare variations, tolerances, and adaptations of plants and animals in different biomes</p>		<p>Students will:</p> <p>Gather data, graph data, interpret data, distinguish observations from inferences, using laboratory equipment properly.</p> <p>Learn the general characteristics of animals</p> <p>Study the evolutionary trends in animal development</p> <p>Compare the feeding, respiration, circulation, excretion, response, movement, and reproduction of sponges, cnidarians, worms, mollusks, arthropods, echinoderms,</p> <p>Perform laboratory dissections</p> <p>Relate the importance of invertebrates to their environments, to humans, to society</p>	

Language of Instruction:	Instructional Resources/Textbook Correlations:
<p>Invertebrate, vertebrate, blastula, protosome, deuterostome,anus, endoderm, mesoderm, ectoderm, radial symmetry, bilateral symmetry, cephalization, choanocyte, osculum, spicule, archaeocyte, internal fertilization, larva, gemmule, cnidocyte, nematocyst, polyp, medusa, gastrovascular cavity, nerve net, hydrostatic skeleton, external fertilation, acoelomate, coelom, pharynx, flame cell, ganglion, eyespot, hermaphrodite, fission, scolex, proglottid, testis, pseudocoelom, anus, septum, seta, crop, gizzard, closed circulatory system, gill, nephridium, clitellum, trochophore, foot, mantle, shell, visceral mass, radula, siphon, open circulatory system, exoskeleton, chitin, appendage, tracheal tube, spiracle, book lung, Malphigian tubule, molting, cephalothorax, thorax, abdomen, carapace, mandible, cheliped, swimmeret, chelicera, pedipalp, spinneret, incomplete metamorphosis, nymph, complete metamorphosis, pupa, pheromone, society, caste, endoskeleton, water vascular system, madreporite, tube foot, intracellular digestion, extracellular digestion,</p>	<p>Textbook – Chapter 26 Sections 1-3, Chapter 27 Section 1-4, Chapter 28 Section 1-4, Chapter 29 Section 1-2</p> <p>Lab – Earthworm dissection Lab – Squid dissection</p> <p>Invertebrate coloring sheets</p> <p>Weblinks/Other Resources:</p> <p>TAKS Workbook Discovery Videos National Geographic Videos Planet Earth Videos</p>
Evaluation/External Assessment/Local Assessment:	Best Instruction Timeline:
<p>Chapter Worksheet TAKS Bell ringers Homework Daily work Coloring sheets Lab reports Teacher-designed test</p>	<p>3 days - Sponges and Cnidarians 4 days - Worms and Mollusks 4 days - Arthropods and Echinoderms 2 days - Comparing Invertebrates 2 days - Assessment</p>