

## Cobb County School District 2018-2019

### Zoology Teaching & Learning Framework

Unit 1 2 weeks BL/4 weeks YR	Unit 2 1 wk BL/2 wks YR	Unit 3 1 wk BL/2 wks YR	Unit 4 1 wk BL/2 wks YR	Unit 5 1 wk BL/2 wks YR	Unit 6 1 wk BL/2 wks YR	Unit 7 2 wks BL/4 wks YR	Unit 8 2 wks BL/4 wks YR	Unit 9 2 wks BL/4 wks YR	SLO Exam	Unit 10 3 wks BL/6 wks YR
<b>Ecology</b>	<b>Evolution</b>	<b>Classification &amp; Organization</b>	<b>Porifera &amp; Cnidarians</b>	<b>Worms</b>	<b>Mollusks &amp; Echinoderms</b>	<b>Arthropods</b>	<b>Fish and Amphibians</b>	<b>Reptiles and Birds</b>		<b>Mammals</b>
<p><b>ZS5. Students will evaluate the relationships between humans and other animals.</b></p> <p>a. Describe the effects of human activities such as habitat destruction, over hunting, introduced species, and pollution on animal biodiversity.</p> <p>b. Explain the importance of species diversity to the biological resources needed by human populations including food, medicine, and natural aesthetics.</p> <p>c. Compare and contrast how humans can preserve animal diversity in captive and natural environments with regard to habitat creation and conservation, research, legislation, animal enrichment, diet, medical, breeding programs and management of genetic diversity at local and global levels.</p> <p>d. Investigate how moral, legal, societal, political, and economic decisions impact animal diversity with short-term and long-term effects.</p>	<p><b>SZ2. Students will explain the evolutionary history of animals over the geological history of Earth.</b></p> <p>a. Outline the geological history of Earth and discuss the major environmental changes that have occurred over time.</p> <p>b. Explain the concepts evolution, adaptation, natural selection, convergence, and speciation.</p> <p>c. Describe the fossil record of the animals including discussing the Cambrian Explosion and major extinction events.</p>	<p><b>SZ1. Students will derive the phylogeny of animal taxa (monophyletic clades in a cladogram) using informative characteristics.</b></p> <p><b>SZ3. Students will compare form and function relationships within animal groups (clades) and across key taxa.</b></p>	<p><b>SZ3. Students will compare form and function relationships within animal groups (clades) and across key taxa.</b></p> <p><b>Invertebrates</b></p> <p>a. Explain the similarities and differences among major body plans (e.g., asymmetry, radial and bilateral symmetry).</p> <p>b. Compare and contrast taxa based on morphological and genetic characters.</p> <p>c. Relate important structural changes to key functional transitions</p> <p>d. Dissect representative taxa and describe their internal anatomy and the function of major organ systems and organs and relate to cell specializations.</p> <p><b>SZ4. Students will assess how animals interact with their environment including key adaptations found within animal taxa.</b></p> <p><b>SZ5. Students will evaluate the relationships between humans and other animals.</b></p>				<p><b>SZ3. Students will compare form and function relationships within animal groups (clades) and across key taxa.</b></p> <p><b>Vertebrates</b></p> <p>The learner will compare and contrast the nature of vertebrates including fish, amphibians, reptiles, birds, and mammals.</p> <p>a. Explain the similarities and differences among major body plans (e.g., asymmetry, radial and bilateral symmetry).</p> <p>b. Compare and contrast taxa based on morphological and genetic characters.</p> <p>c. Relate important structural changes to key functional transitions</p> <p>d. Dissect representative taxa and describe their internal anatomy and the function of major organ systems and organs and relate to cell specializations.</p> <p><b>SZ4. Students will assess how animals interact with their environment including key adaptations found within animal taxa.</b></p> <p><b>SZ5. Students will evaluate the relationships between humans and other animals.</b></p>		<p><b>SZ3. Students will compare form and function relationships within animal groups (clades) and across key taxa.</b></p> <p><b>Vertebrates</b></p> <p><b>SZ4. Students will assess how animals interact with their environment including key adaptations found within animal taxa.</b></p> <p><b>SZ5. Students will evaluate the relationships between humans and other animals.</b></p>	

These units were written to build upon concepts from prior units, so later units contain tasks that depend upon the concepts addressed in earlier units.

All units will include the co-requisite **Characteristics of Science Standards** including the **Nature of Science** and **Habits of Mind** elements of the Georgia Performance Stan.