UNIT OF STUDY

Title: Classification of Animals	**Subject/Course**: Biology	**Length**: 1 week
Topic: Classification and the Diversity of Life (6)	**Grade**: 10th grade	**Designer**: Woods

UNIT GOALS AND EXPECTATIONS

IMPORTANT CONCEPTS/UNDERSTANDINGS:	ESSENTIAL QUESTIONS:
The great diversity of organisms is the result of more than 3.5 billion years of evolution that has filled every available niche with life forms. Natural selection and its evolutionary consequences provide a scientific explanation for the fossil record of ancient life forms, as well as for the striking molecular similarities observed among the diverse species of living organisms. The millions of different species of plants, animals, and microorganisms that live on earth today are related by descent from common ancestors. Biological classifications are based on how organisms are related. Organisms are classified into a hierarchy of groups and subgroups based on similarities which reflect their evolutionary relationships. Species is the most fundamental unit of classification.	How are all animals like? How are they different? How does evolution explain the differences in animals from the least complex, to the most complex?
STUDENT LEARNING EXPECTATIONS: CDL.7.B.20 Identify the symmetry of organisms: ▪ radial ▪ bilateral ▪ asymmetrical CDL.7.B.21 Compare and contrast the major invertebrate classes according to their nervous, respiratory, excretory, circulatory, and digestive systems CDL.7.B.22 Compare and contrast the major vertebrate classes according to their nervous, respiratory, excretory, circulatory, digestive, reproductive and integumentary systems	
SPECIFIC DECLARATIVE KNOWLEDGE – What I know List all the characteristics that animals share. Identify the important trends in animal evolution. Compare and contrast the major invertebrate classes according to their nervous, respiratory, excretory, circulatory, and digestive systems. Compare and contrast the major vertebrate classes according to their nervous, respiratory, excretory, circulatory, digestive, reproductive and integumentary systems.	SPECIFIC PROCEDURAL KNOWLEDGE – What I need to do Group invertebrates into phyla based on specific characteristics. Groups vertebrates in classes based on specific characteristics.

UNIT ASSESSMENTS
(Include tasks related to Dimensions 3 and 4 and Bloom's Taxonomy)

Vertebrate Project- Individual Learning Activity(graphic comparison chart)
Invertebrate Project- Individual Learning Activity(graphic comparison chart)

Traditional Assessments:	Other Evidence of Learning:
Starfish Pre-Lab Vertebrate Quiz Invertebrate Quiz	Starfish Post Lab Vertebrate Project Invertebrate Project

ACTIVITIES AND LEARNING EXPERIENCES	Resources
"Starfish Dissection" Lab with Pre and Post lab Discussion questions "Frog Dissection" Lab with Post lab Discussion questions Vertebrate Project- Individual Learning Activity Invertebrate Project- Individual Learning Activity Powerpoint Establish Habits of Mind for Science in Critical Thinking, Creative thinking, and Self Regulated Thinking Vocabulary Strategy Daily Notebook Entries	Prentice Hall Textbook: Biology Internet Powerpoint Frogs and Starfish Lab Equipment

Career Connections
Zoologist