

# *Need to Knows (NTK's)*

## *Classification – The 3 Domains and 6 Kingdoms of Life*

<i>Scientific</i>	<i>examples</i>
<b>A. The Prokaryotes: Organisms that lack a nucleus</b>	
<b>Domain- Archae</b>	
<b>1. Kingdom: Archaeobacteria</b>	methanogens
<b>Domain- Bacteria</b>	
<b>2. Kingdom: Eubacteria</b>	bacteria, blue green algae
Phylum Schizophyta	bacteria
Phylum Cyanophyta	blue green algae
<b>B. The Eukaryotes: Organisms with cells that have a nucleus</b>	
<b>Domain- Eukarya</b>	
<b>3. Kingdom: Protista (Protozoa)</b>	diatoms, paramecium, ameba, most algae
Phylum Ciliophora	paramecium
Phylum Sarcodina	Ameba
Phylum Euglenophyta	Euglena
<b>4. Kingdom: Fungi</b>	Mushrooms, molds, yeast, slime molds
Phylum Basidiomycota	Mushrooms
<b>5. Kingdom: Plantae (Plants)</b>	
Phylum Bryophyta	Mosses
Phylum Tracheophyta	Vascular plants
Class Gymnospermae	Pines, cedars, redwoods
Class Angiospermae	Flowering plants – Roses, orchids, iris, apple
<b>6. Kingdom: Animalia – Metazoa (Animals)</b>	
Phylum Porifera	Sponges
Phylum Cnidaria	jellyfish, Sea Anemones, Corals
Phylum Platyhelminthes (flatworms)	<b>planarians**</b> , tapeworms
Phylum Nematoda (round worms)	<i>Ascaris sp.</i> , hookworms
Phylum Annelida (segmented worms)	<b>earthworms**</b> , leeches
Phylum Mollusca	Snails, <b>Clams**</b> , octopus
Class Cephalopoda	<b>Squid**</b> , Octopus
Class Gastropoda	Snails, slugs
Class Bivalva	<b>Clams**</b> , Mussels
Phylum Arthropoda	crabs, lobsters, insects, spiders
Class Crustacea	crabs, lobster, <b>crayfish**</b>
Class Insecta	<b>grasshoppers**</b> , flies, butterflies
Class Arachnida	Spiders, scorpions, ticks
Class Chilopoda	Centipedes
Class Diplopoda	Millipedes
Phylum Echinodermata	<b>Starfish**</b> , sea urchins, sand dollars
Phylum Chordata (backbones)	sharks, toads, snakes, birds, mammals,
Class Agnatha	Lampreys and Hagfish
Class Chondrichthyes	sharks, skates, and rays
Class Osteichthyes	<b>Perch**</b> , sardines, salmon, minnows
Class Amphibia (Amphibians)	Toads, <b>frogs**</b> , salamanders
Class Reptilia (Reptiles)	Lizards, snakes, turtles, alligators, and crocodiles
Class Aves (birds)	Eagles, penguins, hummingbirds, etc.
Class Mammalia (mammals)	Elephants, monkeys, <b>pigs**</b> , humans, etc.

**\*\* These are critters we will be dissecting during the course of the year!!**