

Need to Knows (NTK's)

Classification – The 3 Domains and 6 Kingdoms of Life

Scientific

examples

A. The Prokaryotes: Organisms that lack a nucleus

Domain- Archae

1. Kingdom: Archaeobacteria

methanogens

Domain- Bacteria

2. Kingdom: Eubacteria

Phylum Schizophyta

bacteria, blue green algae

Phylum Cyanophyta

bacteria

blue green algae

B. The Eukaryotes: Organisms with cells that have a nucleus

Domain- Eukarya

3. Kingdom: Protista (Protozoa)

Phylum Ciliophora

diatoms, paramecium, ameba, most algae

Phylum Sarcodina

paramecium

Phylum Euglenophyta

Ameba

Euglena

4. Kingdom: Fungi

Phylum Basidiomycota

Mushrooms, molds, yeast, slime molds

Mushrooms

5. Kingdom: Plantae (Plants)

Phylum Bryophyta

Mosses

Phylum Tracheophyta

Vascular plants

Class Gymnospermae

Pines, cedars, redwoods

Class Angiospermae

Flowering plants – Roses, orchids, iris, apple

6. Kingdom: Animalia – Metazoa (Animals)

Phylum Porifera

Sponges

Phylum Cnidaria

jellyfish, Sea Anemones, Corals

Phylum Platyhelminthes (flatworms)

planarians**, tapeworms

Phylum Nematoda (round worms)

Ascaris sp., hookworms

Phylum Annelida (segmented worms)

earthworms**, leeches

Phylum Mollusca

Snails, **Clams****, octopus

Class Cephalopoda

Squid**, Octopus

Class Gastropoda

Snails, slugs

Class Bivalva

Clams**, Mussels

Phylum Arthropoda

crabs, lobsters, insects, spiders

Class Crustacea

crabs, lobster, **crayfish****

Class Insecta

grasshoppers**, flies, butterflies

Class Arachnida

Spiders, scorpions, ticks

Class Chilopoda

Centipedes

Class Diplopoda

Millipedes

Phylum Echinodermata

Starfish**, 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

Perch**, sardines, salmon, minnows

Class Amphibia (Amphibians)

Toads, **frogs****, salamanders

Class Reptilia (Reptiles)

Lizards, snakes, turtles, alligators, and crocodiles

Class Aves (birds)

Eagles, penguins, hummingbirds, etc.

Class Mammalia (mammals)

Elephants, monkeys, **pigs****, humans, etc.

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