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|  | **Kingdom**  **Archaebacteria** | **Kingdom**  **Eubacteria** | **Kingdom**  **Protista** | **Kingdom**  **Fungi** | **Kingdom**  **Plantae** | **Kingdom**  **Animalia** |
| **Prokaryotes or Eukaryotes** | PRO | PRO | EU | EU | EU | EU |
| **Unicellular or Multicellular** | UNI | UNI | Animal-like uni, most plant-like multi | MULTI EXCEPT YEAST | MULTI | MULTI |
| **Energy Source/Food** | AUTOTROPH  HETEROTROPH  DECOMPOSER | AUTOTROPH  HETEROTROPH  DECOMPOSER | Animal-like, heterotroph  Plant-like, autotroph  Fungus-like, decomposer | DECOMPOSER | AUTOTROPH | HETEROTROPH |
| **Reproduction: Asexual/Sexual** | Asexual = Binary Fission  Sexual = Conjugation | Asexual = Binary Fission  Sexual = Conjugation | Asexual = Binary Fission  Sexual = Conjugation | Mostly sexual by using spores | Sexual by either spores or seeds | Asexual or Sexual |
| **Important Facts or Vocabulary Words** |  |  |  |  |  |  |
| **Major groups** | Example Types:  1. Thermophiles  2. Halophiles  3. Acidophiles  **Kingdom Archaebacteria Continued** | 3 Shapes:  1. Coccus- round  2. Bacillus- rod  3. Spirillum- spiral  3 Arrangements:  1. Strepto- chains  2. Staphylo- clusters  3. Diplo- or Di- two  **Kingdom Eubacteria Continued** | 1. Animal-like  -unicellular and heterotrophs and no cell wall  Ex: a. Amoeba  b. Paramecium  2. Plant-like  -uni or multi and autotrophs and cell wall of cellulose  Ex: a. Macro-algae  b. Micro-algae  3. Fungus-like  -decomposers  **Kingdom Protista Continued** | 1. Zygomycota  a. bread mold  b. reproduces by zygospores  2. Ascomycota  a. Yeast  b. reproduces by ascospores  3. Basidiomycota  a. mushrooms  b. reproduces by basidiospores  4. Deuteromycota  a. Imperfect Fungi such as *Penicillium* (orange mold)  b. only fungus that reproduces asexually only, no spores  **Kingdom Fungi Continued** | 1. Bryophyta  a. moss  b. no seeds, reproduces by spores  c. no vascular tissue  2. Pterophyta  a. ferns  b. no seeds, reproduces by spores  c. does have vascular tissue  3. Coniferophyta  a. conifers (gymnosperms)  b. reproduce by seeds  c. does have vascular tissue  4. Anthophyta  a. angiosperms  b. reproduce by seeds  c. vascular tissue  **Kingdom Plantae Continued** | Invertebrates:  1. Porifera  a. sponges  b. sessile, filterers  2. Cnidaria  a. jellyfish  b. stinging cells  3. Platyhelminthes  a. tapeworm  b. flatworms  4. Nematoda  a. hookworms, pin  b. parasitic, round  5. Annelida  a. earthworms  b. segmented  6. Mollusca  a. octopus, snails, clams  b. muscular foot  7. Arthropoda  a. insects, lobsters  b. exoskeleton  8. Echinoderms  a. starfish, sand dollars, sea urchins  **Kingdom Animalia Continued** |
|  | Label a typical bacteria cell.    A. cell membrane  B. DNA region  C. cell wall  D. DNA  E. flagella  F. ribosomes | Draw the following examples:  1. Streptococcus    2. Streptobacillus  Image result for streptobacillus  3. Staphylococcus  Image result for staphylococcus | Label the amoeba and paramecium.    A. pseudopod  B. nucleus  C. cell membrane  D. food vacuole  E. contractile vacuole    A. cilia  B. cell membrane called a pellicle  C. nucleus  D. contractile vacuole | Label the mushroom.    A. cap  B. gills  C. spores  D. stalk  E. hyphae- one single filament  F. mycelium- a mass of underground hyphae | Diagram  Phototropism: plants grow and bend toward light  Image result for diagram of phototropism  Diagram Gravitropism: roots always grow down toward gravity no matter what direction you turn the plant.  Image result for diagram of gravitropism | Vertebrates:  1. Agnatha  a. jawless fish  b. lamprey  2. Chondrichthyes  a. cartilage skeleton  b. sharks  3. Osteichthyes  a. bony skeleton  b. salmon, trout  4. Amphibia  a. frogs  b. double life  5. Reptilia  a. snakes, lizards  b. amniotic eggs  6. Aves  a. birds  b. feathers  7. Mammalia  a. cat, dog, bear  b. hair and mammary glands |