**SIX KINGDOMS CHARACTERISTICS REFERENCE CHART**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Eubacteria** | **Archaebacteria** | **Protista** | **Fungus** | **Plant** | **Animal** |
| **Cell Type** | prokaryotic | prokaryotic | eukaryotic | eukaryotic | eukaryotic | eukaryotic |
| **Number of Cells** | unicellular | unicellular | most unicellular | most multicellular | multicellular | multicellular |
| **Level of Organization** | cell | cell | most cell | most tissue | systems | systems |
| **Mode of Nutrition** | auto/heterotroph | auto/heterotroph | auto/heterotroph | heterotroph (absorption) | autotroph | heterotroph |
| **Reproduction** | asexual | asexual | sexual/asexual | sexual/asexual | sexual/asexual | sexual/asexual |
| **Examples** | *Escherichia coli*  *Streptococcus* | methanobacteria | algae, diatoms, amoebas | lichen, yeast, mushrooms | trees  flowers  grass | sponges  mammals |

The six kingdoms are grouped according to major categories in addition to other major characteristics. The categories are:

**I. CELL TYPE:** (kind of cell) all cells are made of the same organic material)

A. PROKARYOTIC: no organized nucleus, no membrane-bound organelles

B. EUKARYOTIC: membrane-bound nucleus and organelles

**II. CELLULAR ORGANIZATION:**

**A. NUMBER OF CELLS**

1. UNICELLULAR: (single-celled) all life functions, solitary or colonial (chains or clumps)

2. MULTICELLULAR: (many-celled)

**B. LEVELS OF ORGANIZATION** (Tissue Differentiation)

1. cells, 2. tissues, 3. organs, 4. organ system, 5. organism

**III. MODE OF NUTRITION** (how obtain energy/gets food)

A. AUTOTROPHIC: make own food, contain chlorophyll (photosynthetic), (some without chlorophyll are chemotrophic)

B. HETEROTROPHIC: get food from other organism, no chlorophyll, ingestion or absorption

**IV. Method of REPRODUCTION**

A. ASEXUAL: only one parent, offspring genetically identical to parent, no union of sex cells (gametes)

B. SEXUAL: two parents, offspring genetically different from parents (a combination of the two), union of sex cells (gametes)