

### Unit 1

#### There are 6 Kingdoms of Life:

**Plantae:** consists of plants, which produce their own food by photosynthesis.

**Protists:** are mostly unicellular eukaryotes that are found in a variety of aquatic or moist habitats. They may be autotrophic, heterotrophic, or mixotrophic.

**Animalia:** characterized by heterotrophic eukaryotic organisms that are multicellular and their cells lack cell walls. They directly or indirectly depend on plants for food.

**Fungi:** is a diverse group whose members mostly decompose the remains of dead organisms and organic wastes and absorb the nutrients into their cells

**Eubacteria:** Classified under the bacteria domain, these organisms live in almost every type of environment and are often associated with disease. These are the main microscopic organisms that compose the human microbiota. They reproduce at an alarming rate, most reproduce asexually by binary fission.

**Archaeobacteria:** Is one of two groups of prokaryotic organisms with no nuclear membrane. They are believed to be the earliest form of life on Earth. They do not require oxygen or sunlight for photosynthesis.

### Domains

**Eukarya:** Animalia, Plantae, Fungi, Protista

**Archaea:** Archaeobacteria

**Bacteria:** Eubacteria

### Classifications and examples

DOMAIN	Bacteria	Archaea	EUKARYA	
KINGDOM	Eubacteria	Archaeobacteria	Protista	Fungi
NUMBER OF CELLS	Unicellular	Unicellular	Most unicellular, some colonial, some multicellular	Most unicellular some unicellular
MODE OF NUTRITION	Autotroph or heterotroph	Autotroph or heterotroph	Autotroph or heterotroph	Heterotroph
CELL TYPE	Prokaryote	Prokaryote	Eukaryote	Prokaryote
EXAMPLE	Streptococcus, Escherichia coli	Methanogens, halophiles, Amoeba, Paramecium, slime molds	Amoeba, Paramecium, slime molds	Mushrooms, yeasts

