

CLASSIFICATION STUDY GUIDE

Taxonomy: study of classification, describing, naming organisms

Linnaeus: developed modern classification system, started taxonomy

In his day, 2 kingdoms: plants and animals

Today: 8-level system

8 Levels of classification: Domain Kingdom Phylum Class Order Family Genus Species

Domains:

Archaea: prokaryotes –single cell, no nucleus, found in extreme environments

Bacteria: prokaryotes- have cell wall; found inside/outside our bodies

Eukarya: eukaryotes–have nucleus and membrane bound organelles

Kingdoms:

Protists: protozoans, algae, slime molds

Fungi: molds, mushrooms; do not use photosynthesis-absorb their nutrients

Plants: green, cell walls, cannot move around, use photosynthesis

Animals: complex, lack cell walls, move around

Binomial Nomenclature: 2-word naming system for organisms

Written in *italics*

Written in Latin

Uses genus and species to name each organism

Homo sapiens (modern man)

Canis familiaris (house dog)

Cladogram: branching diagram–shows similarities and differences between organisms

