

Biology Honors
Unit 2: Taxonomy

Name _____

While much has changed since Linnaeus proposed his system of hierarchical organization, the basics are still in use by most zoologists and botanists. Linnaeus recognized the following 7 groupings: Kingdom, Phylum, Class, Order, Family, Genus & Species. To help you understand this system, your homework is to find the names of each taxonomic category for the following species: Humans or *Homo sapiens*, Chimpanzees or *Pan troglodytes*, Brown Planaria or *Dugesia tigrina*, and a species of your own choosing (please choose something exotic and no one at the same table should choose the same organism).

After finding the names of each taxon for each species, give 2-4 characteristics exhibited at that level. An example is given below.

Giant Sequoia

Kingdom Plantae: multicellular organisms made up of eukaryotic cells with cell walls made of cellulose, have chlorophyll and chloroplasts, autotrophs, have organs & organ systems, nonmotile, both sexual & asexual reproduction.

Phylum Tracheophyta: vascular plants with true roots, stems, & leaves, dominant stage is sporophyte.

Class Pinopsida: small simple evergreen leaves, male and female cones.

Order Pinales: male producing cones and seed-bearing cones.

Family Cupressaceae: junipers and redwoods, needle-like evergreen leaves, seed cones are woody, leathery or berry-like, seedlings with 2 cotyledons.

Genus *Sequoiadendron*: evergreen tree with only 2 species, only 1 found today.

Species *giganteum*: largest living thing on the planet reaching up to 95m in height and 11m in diameter, tapering reddish brown trunk, deeply furrowed with thick bark, scale-like leaves spirally arranged, both male and female cones on same tree, winged seeds.