Taxonomy is the science of classifying, naming, and identifying organisms, organizing biodiversity into hierarchical categories to enhance understanding. Its roots lie in Carl Linnaeus's 18th-century binomial nomenclature system (e.g., *Homo sapiens*), assigning two-part names (genus and species). Classification involves eight levels: Domain (Bacteria, Archaea, Eukarya), Kingdom (Animalia, Plantae, etc.), Phylum (e.g., Chordata), Class (e.g., Mammalia), Order (e.g., Carnivora), Family (e.g., Felidae), Genus (e.g., *Panthera*), and Species (e.g., *Panthera leo*). Taxonomy is crucial for species identification, ecological studies, conservation efforts, and various scientific research areas. It facilitates communication and contributes to knowledge of ecosystems and evolutionary relationships, constantly evolving with advancements like genetics.

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