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| Why do biologists organize living things in groups?  What is taxonomy and how is it useful?  What is classification?  What are the major levels of classification?  What is binomial nomenclature?  What is the difference between genus and species?  What characteristics are used to classify organisms into domains and kingdoms?  What are the three domains?  What are the characteristics are used to classify the domain Eukarya?  Summary~ | Biologists use classification to organize living things into groups so that the organisms are easier to study.  The study of how living things are classified. Taxonomy is useful because once an organism is classified a scientist knows a lot about that organism.  Classification is the process of grouping things based on similarities.   * Dominion * Kingdoms * Phyla * Classes * Orders * Families * One or more genera * One or more species   In the 1750s, the Swedish naturalist Carolus Linnaeus devised a system of naming organisms using two names.  A genus is a classification grouping that contains similar, closely related organisms and species can mate to produce offspring.  Organisms are placed into domains and kingdoms based on their cell type, their ability to make food, and the number of cells in their bodies.   * Bacteria * Archaea * Eukarya   Scientists classify organisms in the domain Eukarya into one of four kingdoms: protists, fungi, plants, or animals. |