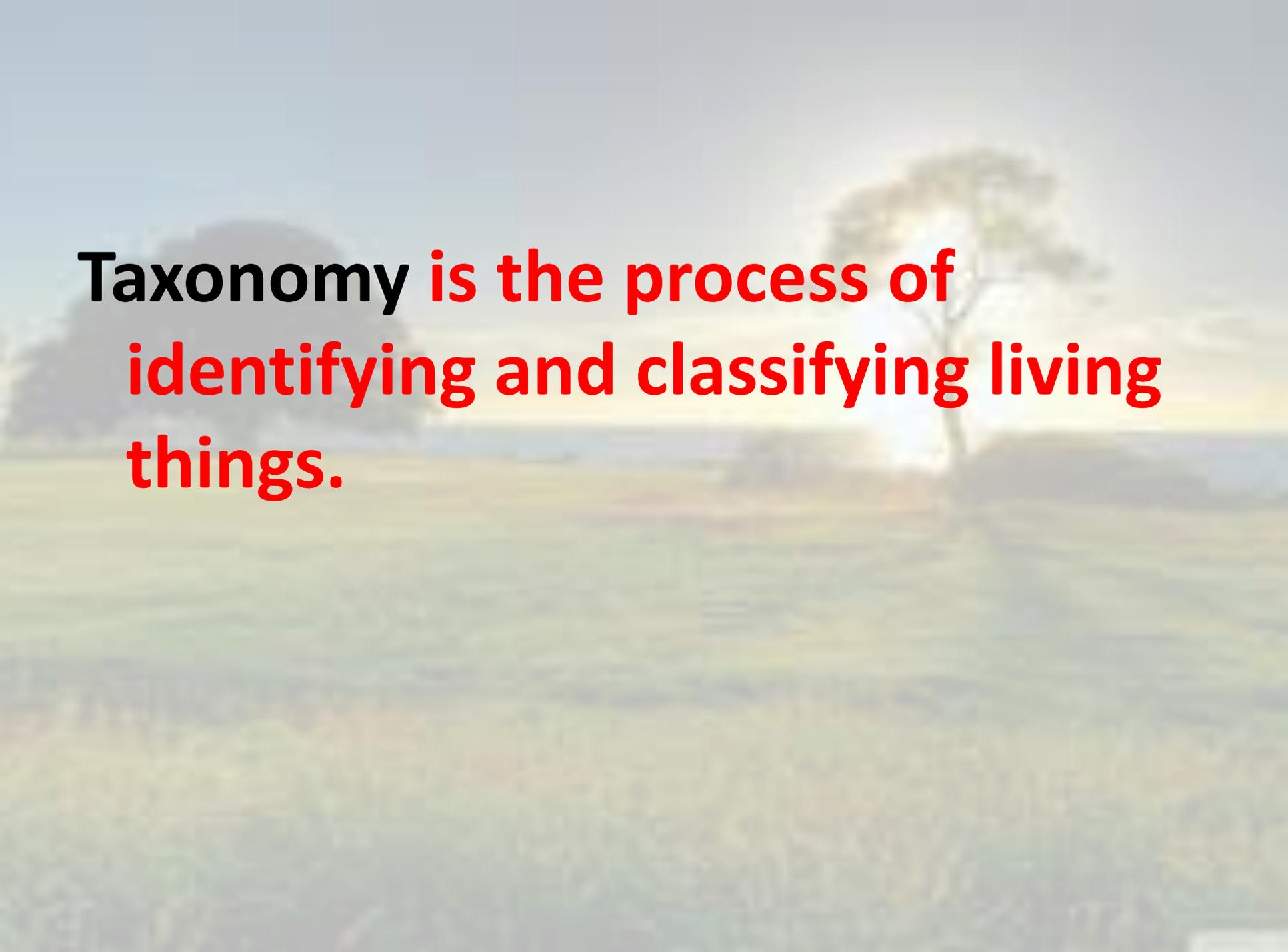


TAXONOMY

**Process of classifying
living things**



Taxonomy is the process of identifying and classifying living things.

- When classifying organisms, the levels of classification start very **broad** and then become very **narrow or specific**.



For example: humans and elephants are both members of the kingdom Animalia, but start to differ once it reaches the classification level of order.

Level of Classification	
Kingdom	the most general of the seven levels of classification
Phylum	the level of classification after kingdom; the organisms from all the kingdoms are sorted into several phyla
Class	the level of classification after kingdom; the organisms from all the kingdoms are sorted into several phyla

Order	the level of classification after class; the organisms in all the classes are sorted into orders
Family	the level of classification after order; the organisms in all orders are sorted into families
Genus	the level of classification after family; the organisms in all families are sorted into genus.
Species	the most specific of the seven levels of classification; characterized by a group of organisms that can mate with one another to produce fertile offspring

Kingdom ANIMALIA



Number of described groups

These are the numbers for only 1 kingdom of organisms!!!



Here's a nifty way to remember...

Kings Play Cards On Fat Green Stools

Kingdom-Phylum-Class-Order-Family-Genus-Species



According to the chart, what is the highest level at which humans and dogs are the same?



Human	Dog
Animalia	Animalia
Chordata	Chordata
Mammalia	Mammalia
Primates	Carnivora
Homonidae	Canidae
Homo	Canis
Homo sapiens	Canis familiaris

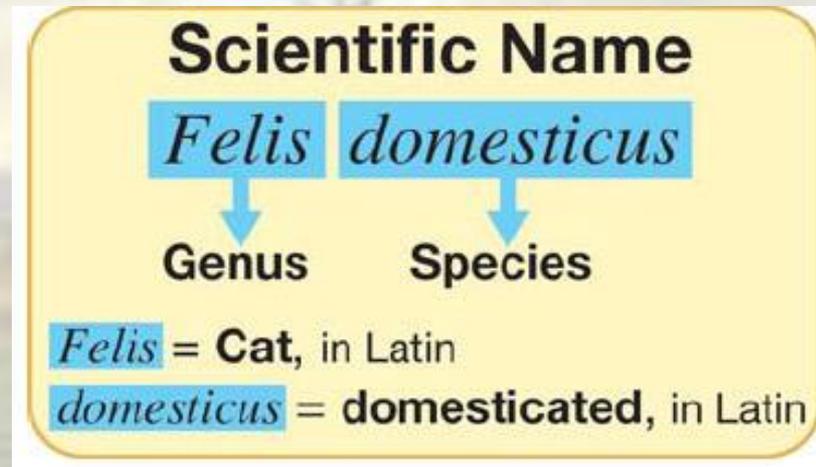
Scientific Names

- A **scientific name** is the two-part, scientifically recognized name given to an organism, consisting of its **genus** and **species**.
- *EX: homo sapiens*
(scientific name for humans)



Scientific Names

- You may have a difficult time understanding scientific names because they are usually in Latin or Greek.
- *Felis* is Latin for “cat” and *domesticus* is Latin for “domesticated.”



The more classification levels that two organisms share, the more characteristics they have in common.

In this case, all these animals belong to the **Felidae** family, however, they belong to different subfamilies, which explains their differences.



Panthera: The genus Panthera is characterized by the large size of its members and the ability to roar.



Felis: The genus felis is characterized by their ability to purr.



Table 1: Use the table to determine which organism is the most different.



Common Name	Kingdom	Family	Species
Bonobo	Animalia	Hominidae	<i>Pan paniscus</i>
Chimpanzee	Animalia	Hominidae	<i>Pan troglodytes</i>
Baboon	Animalia	<u>Cercopithecidae</u> <i>Family is different!</i>	<i>Papio anubis</i>
Orangutan	Animalia	Hominidae	<i>Pongo pygmaeus</i>

Table 2: Let's try with plants. Which two would share the most characteristics? Which would be the most different?

Family:

Rosacea

Pinaceae

Malus sylvestris

Malus domestica

Prunus persica

Pinus palustris



Most Shared: *Malus domestica* and *malus sylvestris*
Most Different: *Pinus palustris*