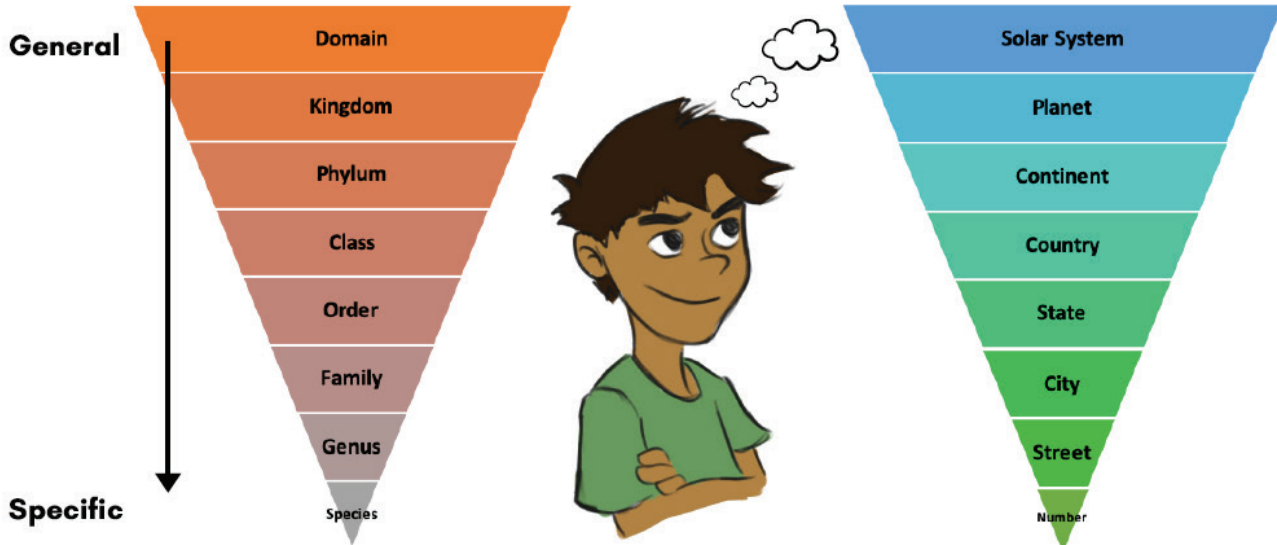


# Ernie's Way to Think About How to Classify Organisms

Taxonomy is the science of classifying and naming living organisms. How scientists classify organisms may seem difficult, but it's not. All you need to know is your address!

Here is how a scientist classifies organisms:      Here is how Ernie thinks about classification



The more specific a scientist describes an organism, the better the identification we have of that organism, much like the more specific we get with your location, the easier it is to find where you live. Scientist Carl Linneaus, the father of taxonomy used the Latin language to describe organisms. Since Latin is a language that is no longer used, its words no longer change in meaning: therefore, the classification name of an organism will have a specific meaning. Knowing a Latin-based language like Spanish, can help you to identify the meaning of species classifications. Even if you don't know Spanish but understand Latin roots, you may also decipher why a species got its name.

## Ernie created this chart to classify an El Paso desert animal: *Canis Latrans*

Classification	Organism	Meaning
Domain	Eukarya	Organisms that have cells with a nucleus
Kingdom	Animalia	Multicellular organisms that breathe oxygen and reproduce sexually
Phylum	Chordata	Animals that have bilateral symmetry and have a dorsal nerve chord
Class	Mammalia	Animals that have live births, have hair or fur and feed their young with milk from mammary glands
Order	Carnivora	Animals that eat the flesh of other animals
Family	Canidae	Of the dog family
Genus	Canis	Of the group: Wolves, Dogs, Coyotes and Jackals
Species	Latrans	"bark or roaring" dog (probably from its howl)

This animal's local name is taken from the Aztec word coyotl, which means "Trickster". Can you guess this animal's name? \_\_\_\_\_

# Ernie's El Paso Kingdom Research Page:

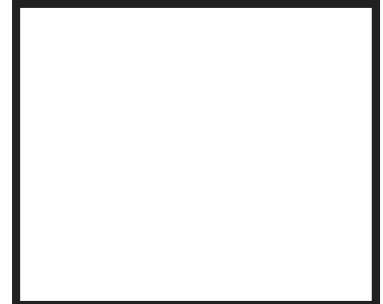
There are 6 Major Taxonomy Kingdoms, and El Paso has organisms from all of them! Help Ernie find the taxonomy of these organisms that live in the El Paso area.

**Domain:** Eukarya      **Kingdom:** Protista, Animalia, Plantae, Fungi

**Kingdom:** Animalia      **Organism:**

**Picture:**

Classification	Organism	Meaning
Domain	Eukarya	Organisms that have cells with a nucleus
Kingdom	Animalia	Multicellular organisms that breathe oxygen and reproduce sexually
Phylum		
Class		
Order		
Family		
Genus		
Species		



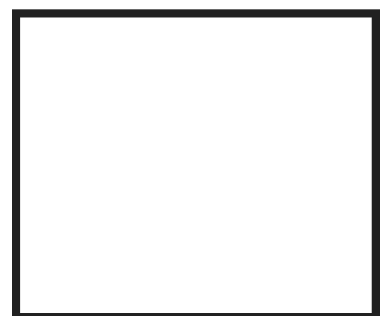
**Choose ONE of these species to research:**

- Horned Lizard
- Burrowing Owl
- Tiger Salamander
- Texas Brown Tarantula
- Striped Whiptail Lizard
- Cotton tail rabbit
- Kangaroo mouse
- Fairy Shrimp
- Texas Rattlesnake

**Kingdom:** Plantae      **Organism:**

**Picture:**

Classification	Organism	Meaning
Domain	Eukarya	Organisms that have cells with a nucleus
Kingdom	Plantae	Multicellular organisms that are mostly photosynthetic and can produce their own food. Their cell walls are rigid.
Phylum		
Class		
Order		
Family		
Genus		
Species		



**Choose ONE of these species to research:**

- Creosote Bush
- Ocotillo
- Texas Sage
- Buffalo Grass
- Lechugilla Cactus
- Prickly Pear Cactus
- Yucca Plant
- Tornillo Mesquite
- Texas Soapberry Tree

**Domain:** Eukarya

**Kingdom:** Protista, Animalia, Plantae, Fungi

**Kingdom:** Fungi

**Organism:**

**Picture:**

Classification	Organism	Meaning
Domain	Eukarya	Organisms that have cells with a nucleus
Kingdom	Fungi	
Phylum		
Class		
Order		
Family		
Genus		
Species		



**Choose ONE of these species to research:**

- Penicillium
- Aspergillus
- Chaetomium
- Gymnoascus
- Podaxis

**Kingdom:** Protista

**Organism:**

**Picture:**

Classification	Organism	Meaning
Domain	Eukarya	Organisms that have cells with a nucleus
Kingdom	Protista	
Phylum		
Class		
Order		
Family		
Genus		
Species		



**Choose ONE of these species to research:**

- Eimeria
- Falciformes,
- Eimeria Nieschulzi,
- Eimeria indianensis
- Algae such as *Polytomella*

**Domain:** Archaea      **Kingdom:** Archaea

**Kingdom:** Archaea      **Organism:**

**Picture:**

Classification	Organism	Meaning
Domain	Archaea	Prokaryotic, unicellular, anaerobic organisms
Kingdom	Archaea	Single-celled organisms that do not have a cell nucleus and do not require oxygen to survive
Phylum		
Class		
Order		
Family		
Genus		
Species		



**Choose this species to research or research other species of archaea**

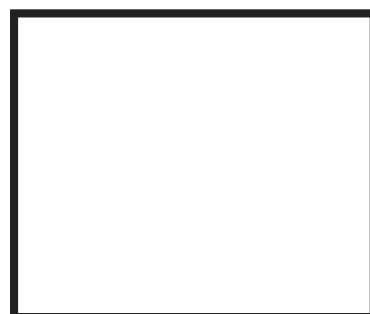
Crenarchaeota

**Domain:** Bacteria      **Kingdom:** Bacteria

**Kingdom:** Bacteria      **Organism:**

**Picture:**

Classification	Organism	Meaning
Domain	Bacteria	Prokaryotic, unicellular, aerobic organisms
Kingdom	Bacteria	Single-celled organisms that do not have a cell nucleus and need oxygen to survive
Phylum		
Class		
Order		
Family		
Genus		
Species		



**Choose ONE of these species to research:**

Microcoleus  
Cyanobacteria  
Clostridium  
Actinomycetes  
Pseudomonas  
Nitrobacter