

LECTURE (3)

Objectives, tasks & contribution of taxonomy to biology



Combining parts to make a new whole

Create

Judging the value of information or ideas

Evaluate

Breaking down information into component parts

Analyze

Applying the facts, rules, concepts, and ideas

Apply

Understanding what the facts mean

Understand

Recognizing and recalling facts

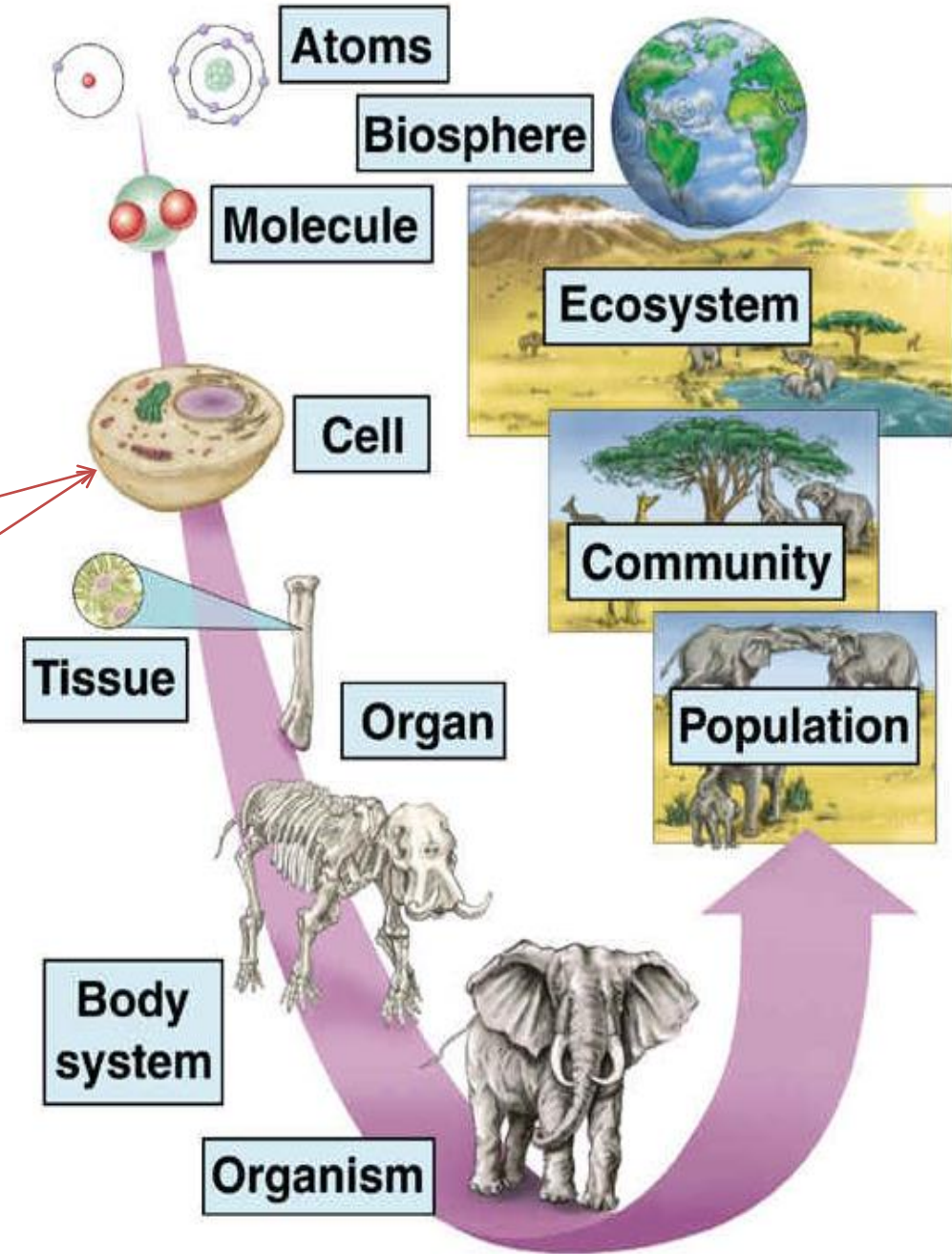
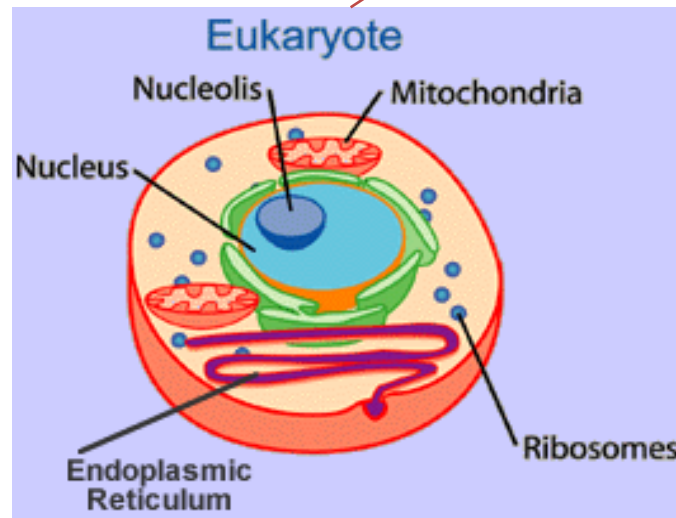
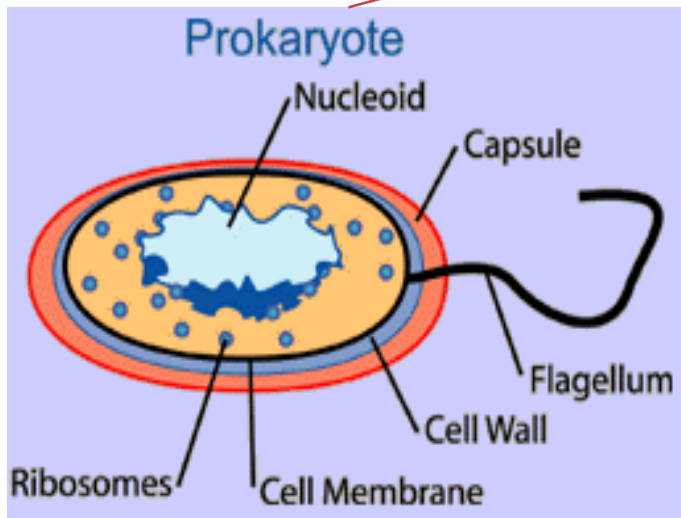
Remember

- **Prokaryote**

- “Before Nucleus”
- Simple organisms,
- No membrane bound organelles
- (cell organs)

- **Eukaryote**

- “True Nucleus”
- More complex organisms
- Membrane bound organelles



2 Types of Cells

PROKARYOTES

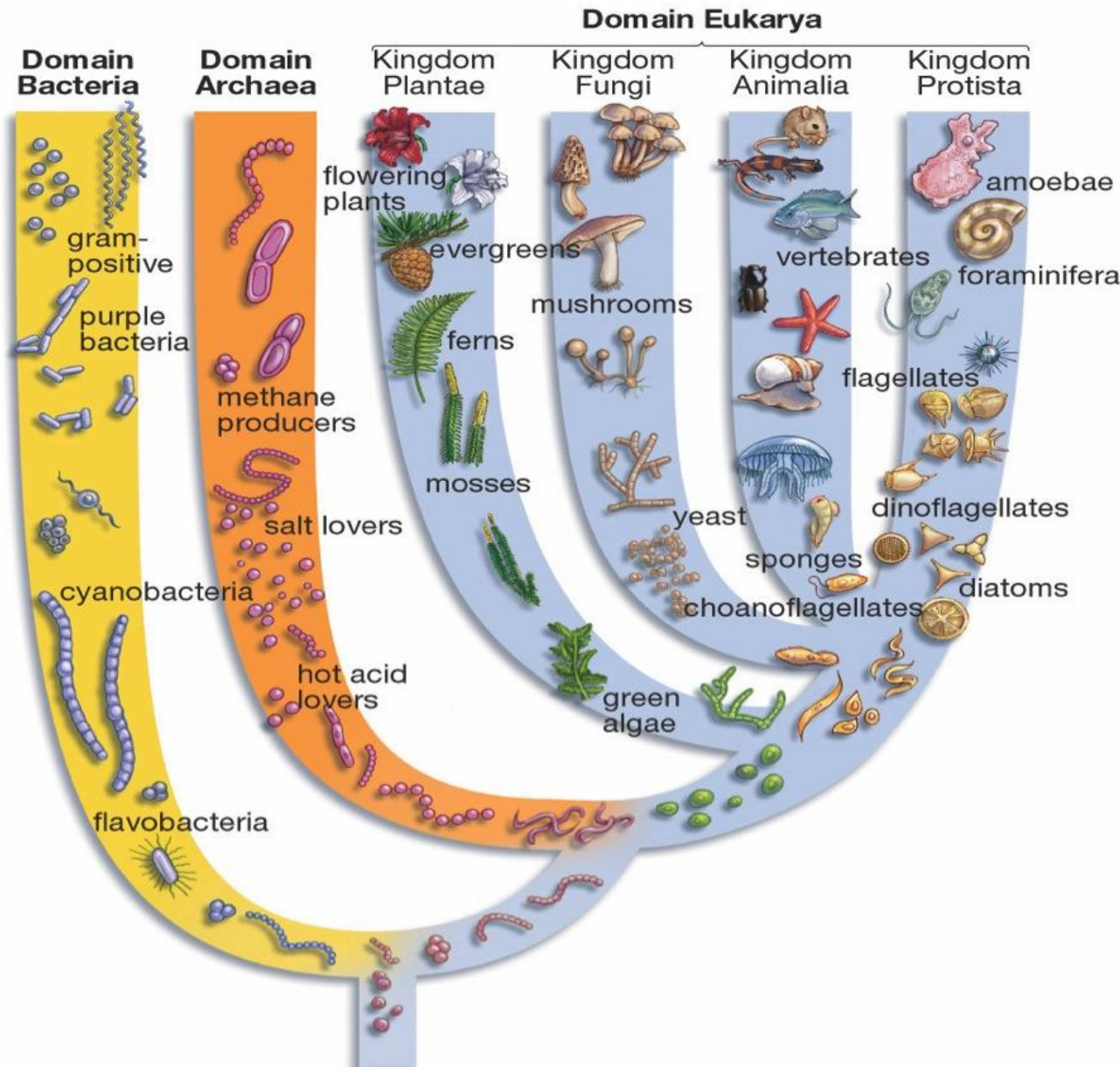
organisms with **no** nuclear membrane

EUKARYOTES

organisms **with a** nuclear membrane

The current system uses **3 overarching Domains and 6 Kingdoms**

3 Domains 6 Kingdoms









Three Domains

- Archaea
- Bacteria
- Eukaryota

Six Kingdoms

- Archaeobacteria
- Eubacteria
- Protista
- Fungi
- Plantae
- Animalia

Domains and Kingdoms

Domain	Bacteria	Archaea	Eukarya			
Kingdom	Bacteria	Archaea	Protista	Fungi	Plantae	Animalia
Example						
Characteristics	Bacteria are simple unicellular organisms.	Archaea are simple unicellular organisms that often live in extreme environments.	Protists are unicellular and are more complex than bacteria or archaea.	Fungi are unicellular or multicellular and absorb food.	Plants are multicellular and make their own food.	Animals are multicellular and take in their food.

ANIMALS

VERTEBRATES

These are animals that have a backbone.

INVERTEBRATES

These are animals that do not have a backbone.



Reptiles

Have dry scaly skin.
Lay eggs on dry land.
Are cold blooded.
(Snake, Crocodile)



Fish

Have scales on their bodies.
Have gills for breathing.
Are cold blooded.
(Shark, Tuna)



Amphibians

Have moist slimy skin.
Lay eggs in water.
Are cold blooded.
(Frog, Newt)



Birds

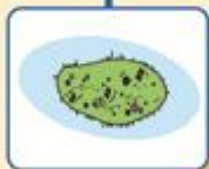
Have feathers and wings.
Have beaks and lay eggs.
Are warm blooded.
(Wren, Swan)



Mammals

Have fur or hair.
Feed young on milk.
Are warm blooded.
(Cow, Human)

Warm-Blooded animals



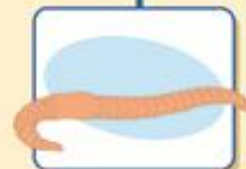
Protozoa

Single cell organisms
all microscopic.



Flatworms

Simple and soft bodied.
(Tape worm, Flukes)



Annelid Worms

Segmented bodies.
(Earthworm, Leech)



Echinoderms

Spiny sea creatures.
(Starfish, Sea urchin)



Coelenterates

Soft bodies, stinging cells.
(Jellyfish, Sea anemone)

Arthropods

Hard external skeleton
and jointed limbs.



Molluscs

Soft bodied, most have shells.
(Snails, Limpet)



Arachnids

Eight legs, two body
parts, no antennae.
(Spider, Scorpion)



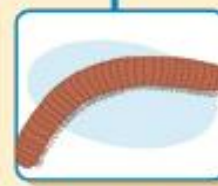
Crustaceans

Mostly sea creatures.
Many legs and two
sets of antennae.
(Crab, Lobster)



Insects

Wings, six legs, three
body parts, one pair
of antennae.
(Bee, Ladybird)



Myriapods

Many legs and
body segments.
(Centipede, Millipede)

Thank you