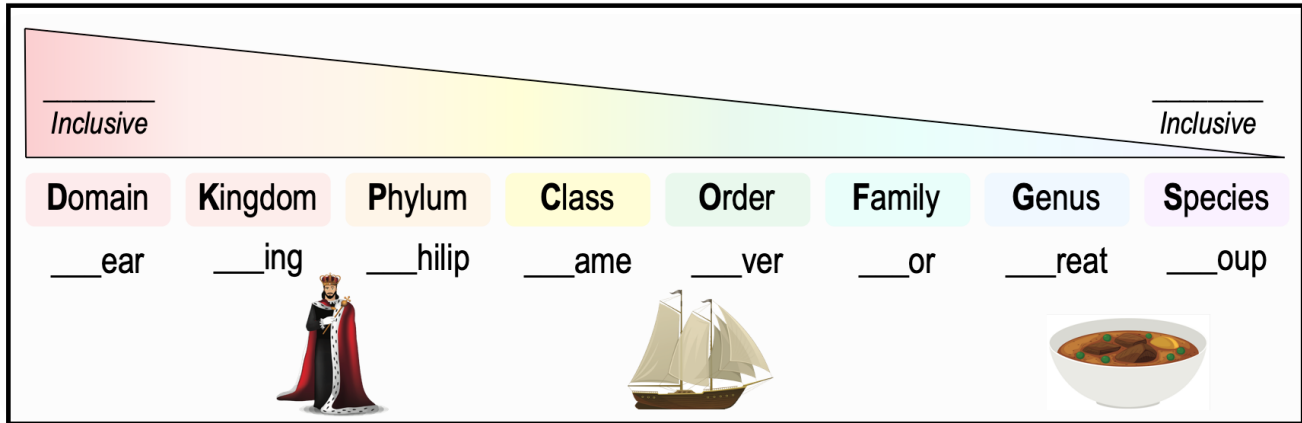


CONCEPT: INTRODUCTION TO TAXONOMY

- _____: the branch of science that *classifies, identifies & names* organisms.
 - _____ categories are used to classify *all* life.



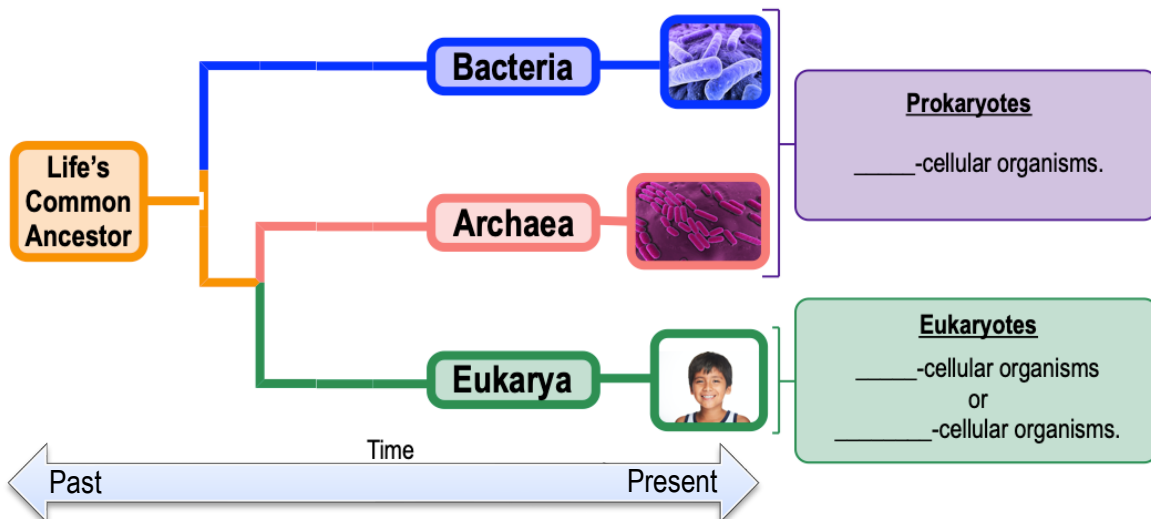
PRACTICE: Which branch of biology is concerned with the naming and classifying of organisms?

- a) Bioinformatics. b) Taxonomy. c) Genomics. d) Evolution. e) Biology.

3 Domains of Life

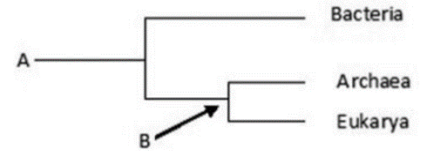
- The *broadest & most inclusive* categories of life are the *three domains*:

- 1) _____ } Consist of _____ cells (_____ a nucleus).
2) _____ }
3) _____ } Consist of _____ cells (*contain* a nucleus).



CONCEPT: INTRODUCTION TO TAXONOMY

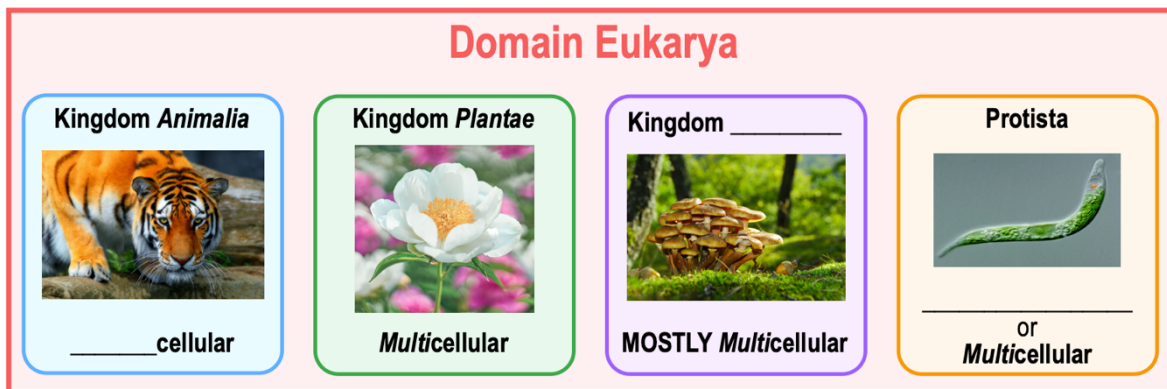
EXAMPLE: According to the diagram, "A" is _____; "B" is _____.



- a) The most recent species to evolve on Earth; an ancestor of group "A".
- b) The most recent species to evolve on Earth; the last common ancestor of Archaea and Eukarya.
- c) The common ancestor of all life; the common ancestor of Bacteria and Archaea.
- d) The common ancestor of all life; the last common ancestor of Archaea and Eukarya.

Kingdoms of the Eukarya Domain

- Recall: organisms in each domain are further subdivided into _____.
- Domain Eukarya has _____ kingdoms:



EXAMPLE: Which of the following kingdoms is NOT part of the Eukaryotic Domain?

- a) Kingdom Plantae.
- b) Kingdom Protista.
- c) Kingdom Fungi.
- d) Kingdom Eubacteria.

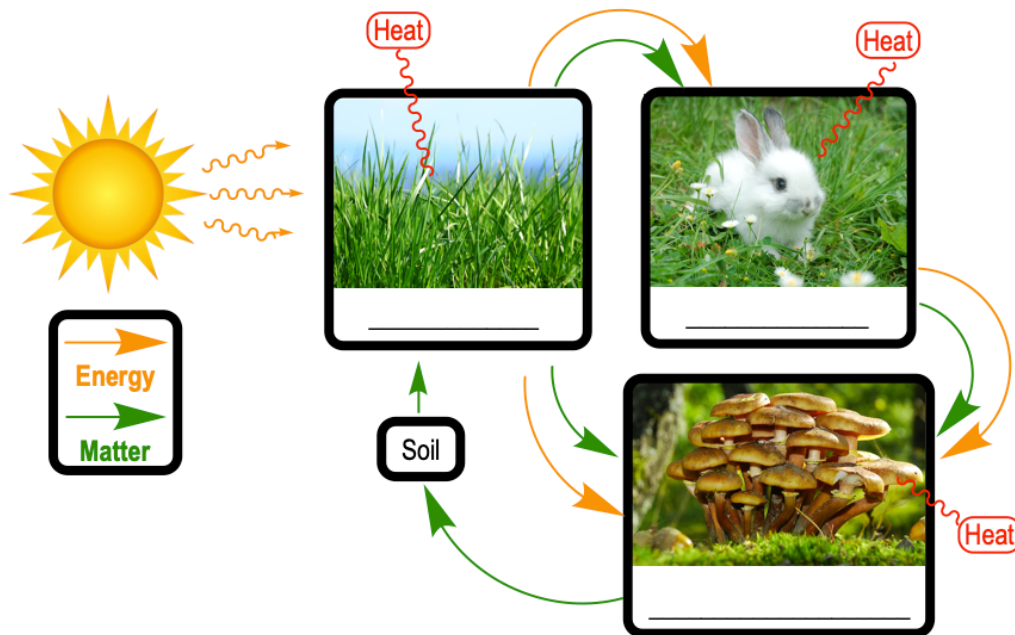
PRACTICE: The proposal that one type of organism can change into another type over a long period of time is known as:

- a) Creativity.
- b) Evolution.
- c) Natural history.
- d) Preconception.
- e) Preservation.

CONCEPT: INTRODUCTION TO TAXONOMY

Categorizing Life Based on Energy Acquisition

- Scientists can categorize living organisms into _____ classes based on how they acquire their *energy*:
 - 1) _____ (_____ trophs): acquire energy by *making their own food*.
 - 2) _____ (_____ trophs): acquire energy by eating other living organisms.
 - 3) _____: acquire energy from wastes & dead organisms.
- Most energy utilized by life originates from the _____.
 - With every transfer of energy, some energy is lost as _____.



EXAMPLE: Autotrophs are also called:

- a) Consumers.
- b) Synthesizers.
- c) Producers.
- d) Carnivores.

PRACTICE: Biologists can divide living organisms into two groups: autotrophs and heterotrophs, which differ in _____.

- a) Their method of obtaining energy.
- b) The characteristics of life.
- c) Their mode of inheritance.
- d) The way that they generate ATP.