

Classifying Life

→ Taxonomy

Modern classification is a

system for grouping all known species

↓
group of "parts"

each "part" has its own function

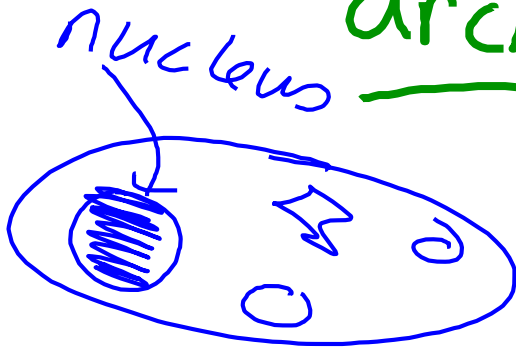
the "parts" work together / or are used for
a common purpose

3 Domains of Life

Domain: Bacteria - prokaryotes

Domain: Archaea - prokaryotes

comes from
archeo → ancient



no cell parts
↓
organelles

3 Domains of Life

Domain: Eukaryotes

4 kingdoms

→ organelles
in their
cells

Kingdom: Animals

Kingdom: Plants

Kingdom: Fungi

Kingdom: Protists

→ one-celled
creatures

Domain: Eukaryotes
(cells with a nucleus)

Kingdom: Animals



Phylum: chordates → includes
vertebrates
↳ nervous system

Class: Reptiles

⋮

Species: Chrysemys picta

binomial nomenclature

↓ ↓ ↓

2 name naming

 ↓

 system

A handwritten diagram in blue ink illustrating the components of binomial nomenclature. The words 'binomial' and 'nomenclature' are written in green and underlined with blue lines. Below 'binomial', a blue arrow points down to the number '2'. Below 'nomenclature', a blue arrow points down to the word 'name'. A second blue arrow points down from the underlined 'nomenclature' to the word 'naming'. A large blue curved arrow originates from the underlined 'nomenclature' and points down and to the left to the word 'system'.

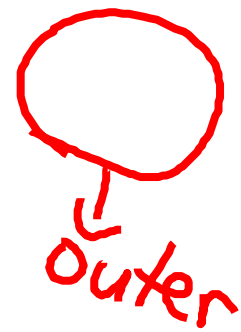
Reptiles: ectotherms
 ↓ ↓
 "outside" "heat"



lungs
scales







outer

Taxonomy Recap

1. All living things are **classified** in domains.
2. **Prokaryotes** and **Eukaryotes** – explain the difference.
↳ no organelles ↳ have organelles
3. **Taxonomy** is a classification system.
4. Sharks are **chordates**, so are other fish. How are sharks different – in terms of classification?
5. What are the **5 classes of vertebrates**?
6. Reptiles and amphibians are **ectotherms** – explain.
7. How are **reptiles** different from amphibians?
8. How are crocodiles **adapted** to swimming underwater?
↳ scales/lungs

Taxonomy Recap

Sharks → cartilage skin
other fish → bones

5 → fish
birds
mammals
reptiles
amphibians

→ classes

6. ectotherm - body heated from the outside.

Taxonomy Recap

sharks → cartilage for a skeleton

↓
nervous system

reptiles
amphibians
fish



ectotherms

→ internal body T° controlled from the outside.

mammals
birds



endotherms

classes

eyes → membrane

throat → closes

heart → blood flow to lungs
stops