Warm Up (1/30-1/31)

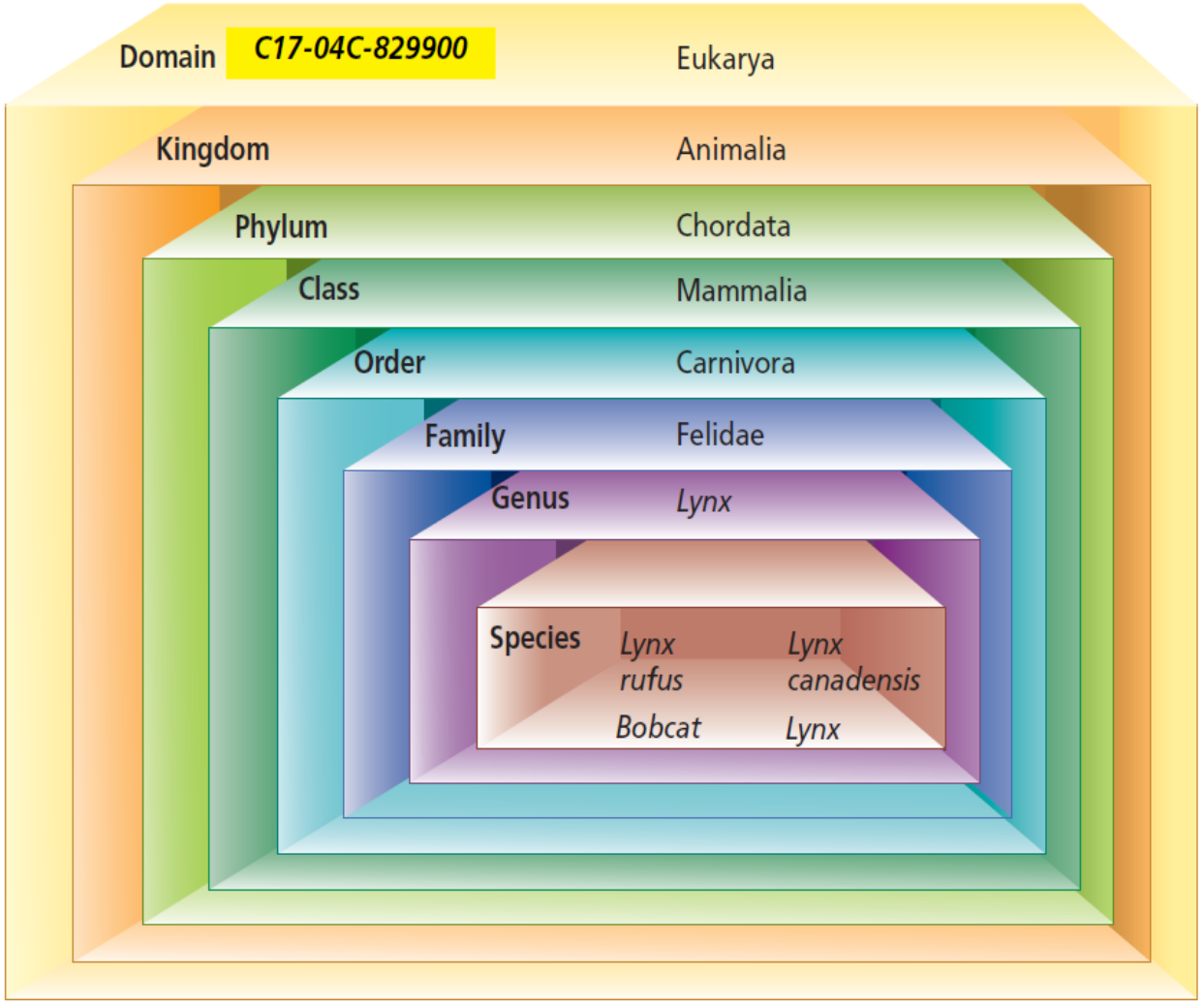
1. Take out your dichotomous key
2. Trade with the person next to you
3. Review their keys and let them know if there are any last minute changes they need to make before you turn them in!

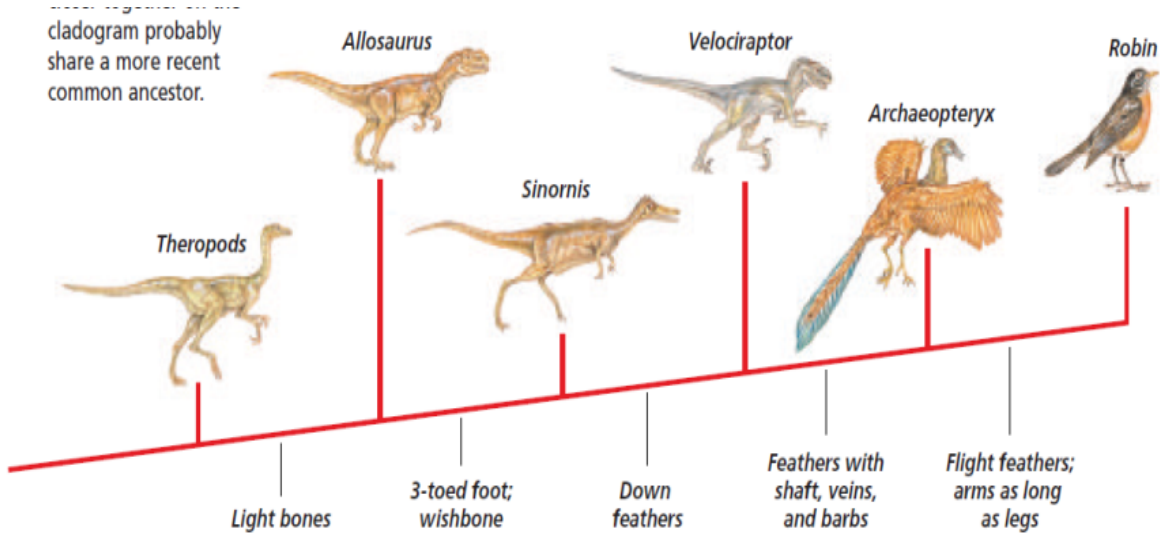
Agenda

- Warm up- Share dichotomous keys
- Chapter 17 Notes: Organizing Life's Diversity
- Cladogram activity

Homework: **Finish cladogram questions on Google Classroom**

Chapter 17: Organizing Life's Diversity





Classification & Taxonomy

- **Classification:** grouping of objects or information based on similarities.
- **Taxonomy:** branch of biology that groups and names organisms based on studies of their different characteristics.

Binomial nomenclature

Two-word system

Uses **genus** and **specific epithet**

Group of similar species

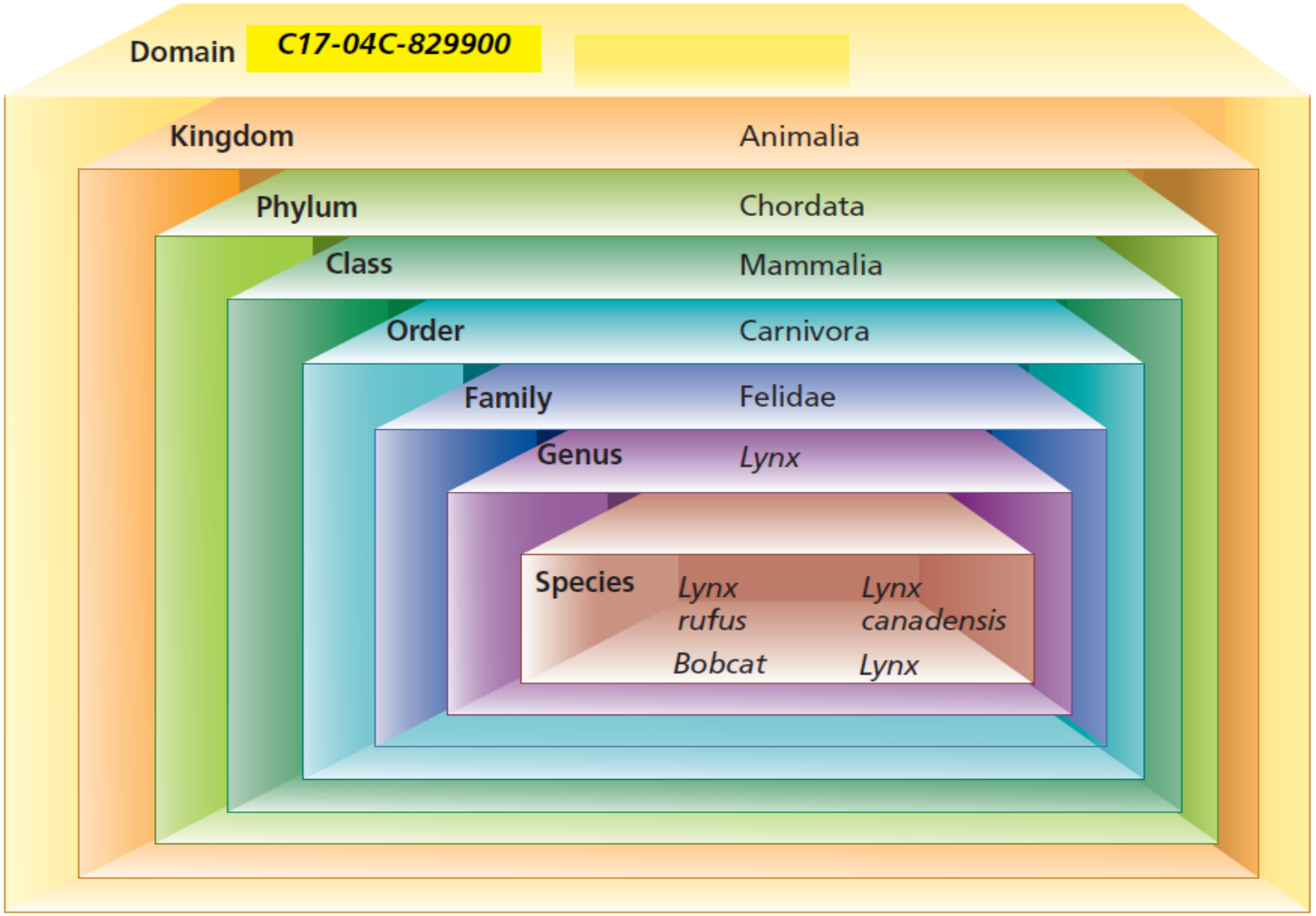
Often describes characteristic of organism

examples:

*Why latin?

- *Homo sapiens* (human)
- *Lynx rufus* (bobcat)
- *Escherichia coli* (bacteria that you hear about on lettuce recalls)

Taxonomic rankings



Domain
Kingdom
Phylum
Class
Order
Family
Genus
Species

https://youtu.be/DVouQRAKxYo

Taxa – Mnemonic Device

Domain	Did	Dumb
Kingdom	King	Kids
Phylum	Phillip	Playing
Class	Call	Cards
Order	On	On
Family	Five	Freeway
Genus	Good	Get
Species	Soldiers?	Smashed

Mnemonic Device

Domain
Kingdom
Phylum
Class
Order
Family
Genus
Species

3 minutes!

Create your own & share with class

Life’s Six Kingdoms

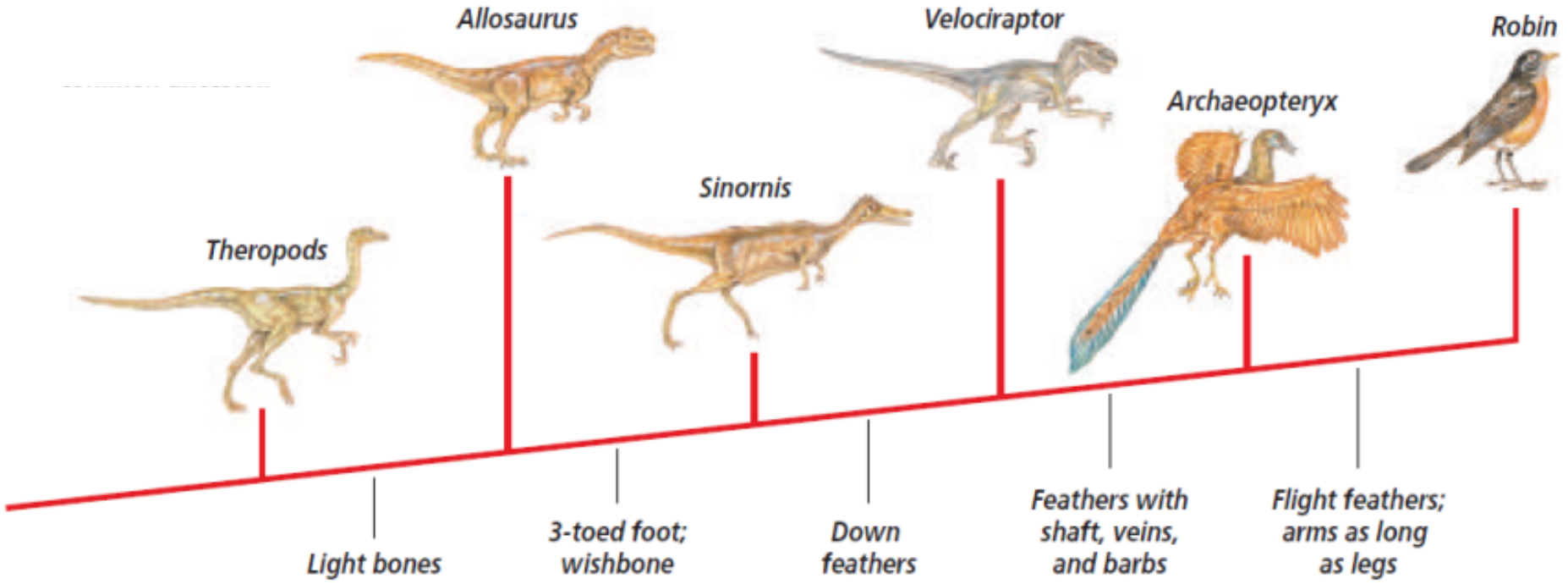
- Eubacteria
- Archaebacteria
- Protists
- Fungi
- Plants
- Animals

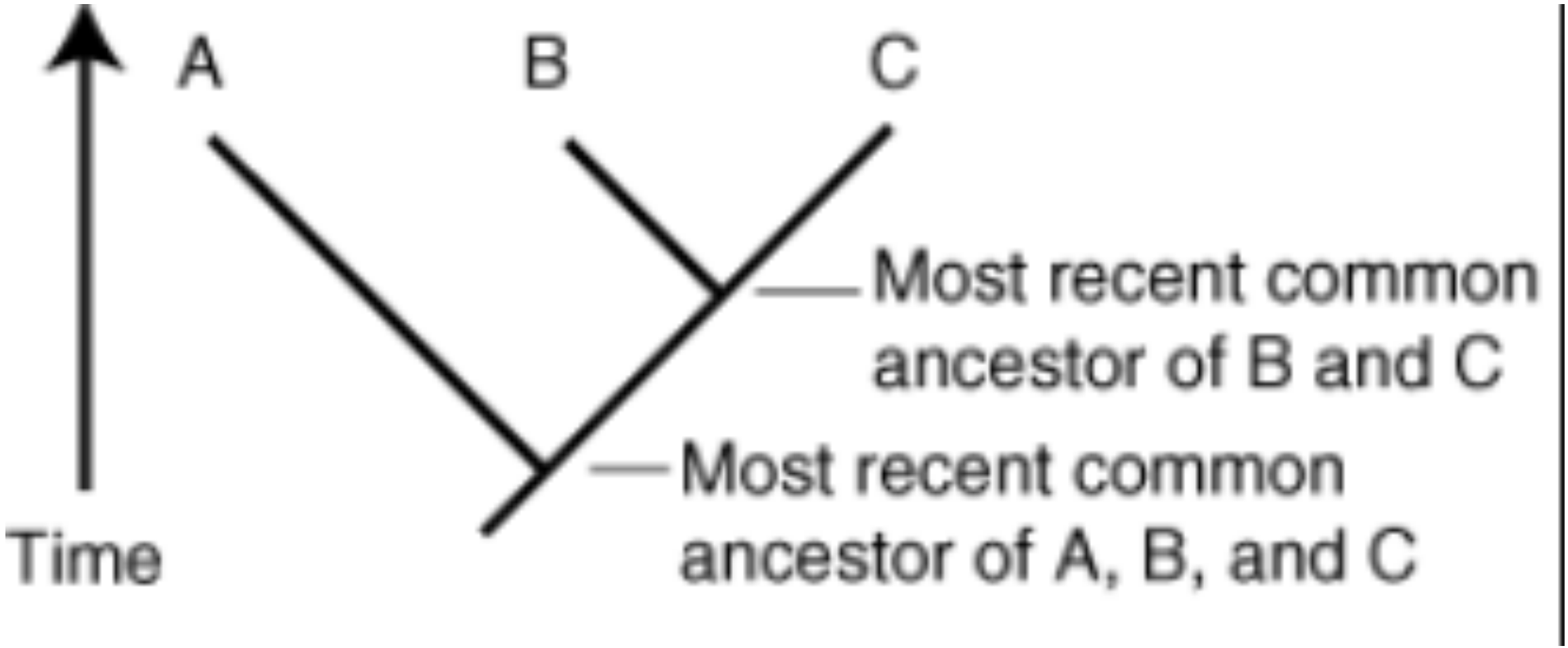
https://youtu.be/aH5ST8gmSCU

Cladogram

Model of the **phylogeny** of a species

The evolutionary history of a species




A
B
C
Most recent common ancestor of B and C
Most recent common ancestor of A, B, and C
Time

How are evolutionary relationships determined?

- Structural similarities
- Breeding behavior
- Geographical distribution
- Chromosome comparison
- Biochemistry