

# Just enough cell biology

Steven Salzberg

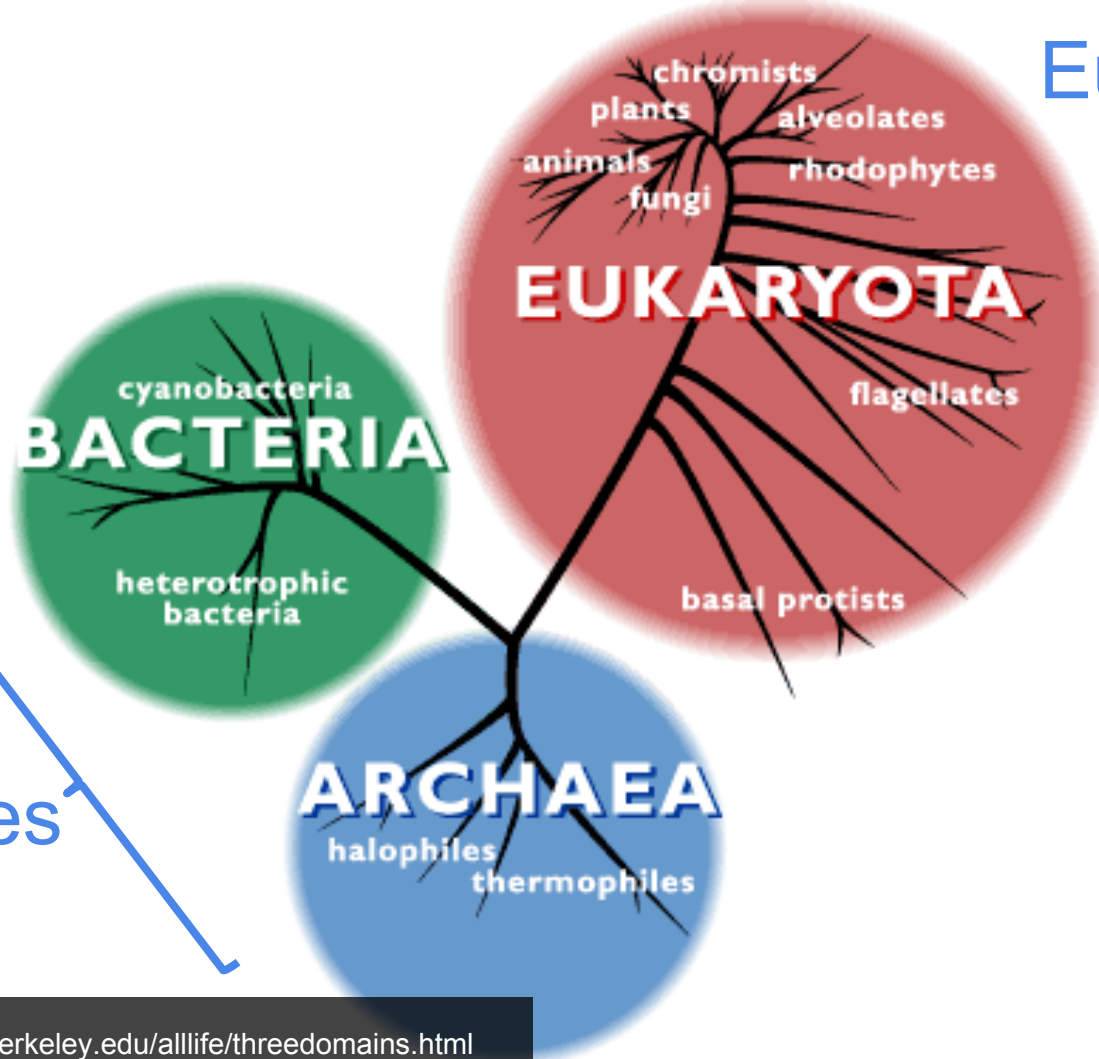
There are three basic domains of life

Eukaryota

Bacteria

Archaea

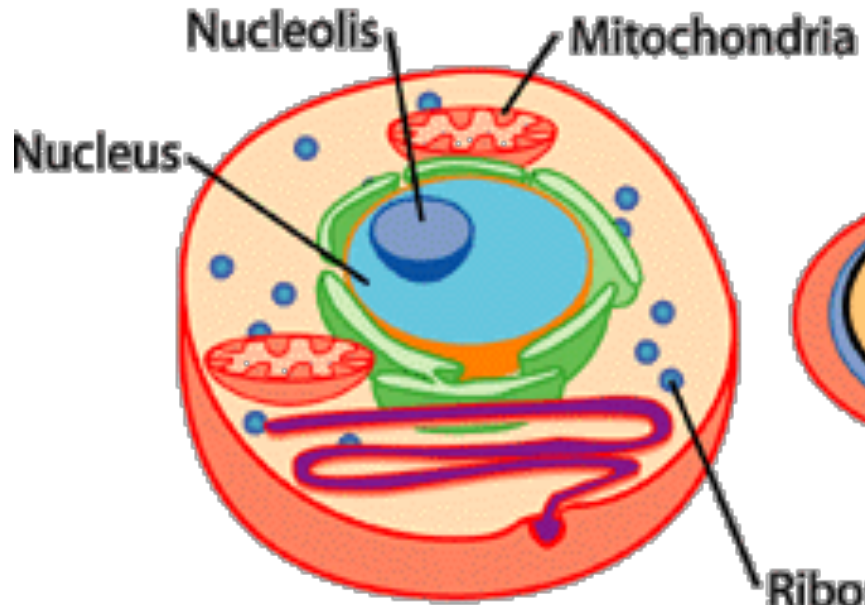
Eukaryotes



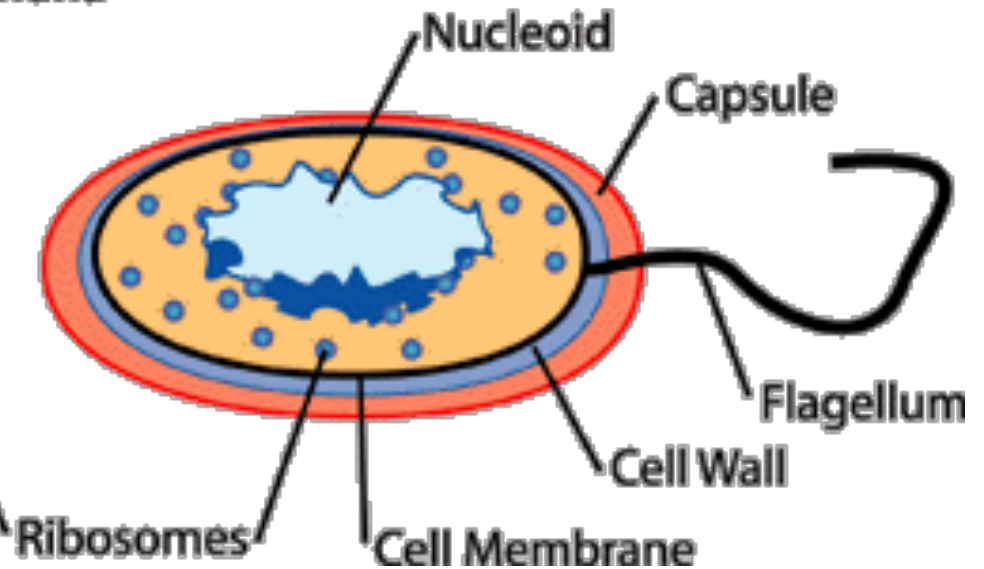
Prokaryotes

There are two basic types of cells  
prokaryotic (no nucleus)  
eukaryotic (nucleus)

## Eukaryote



## Prokaryote

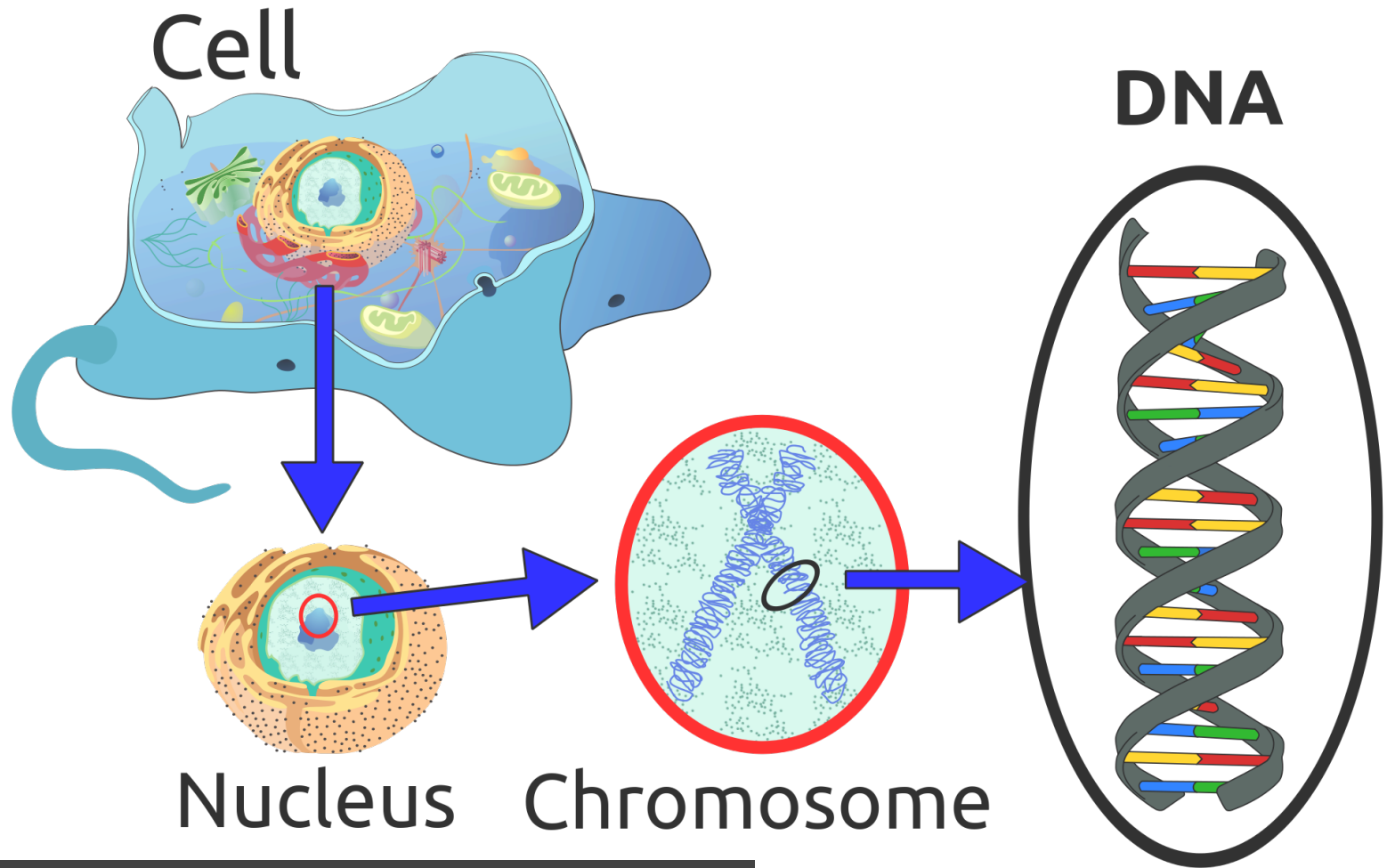


For eukaryotic cells

The nucleus is in the cell

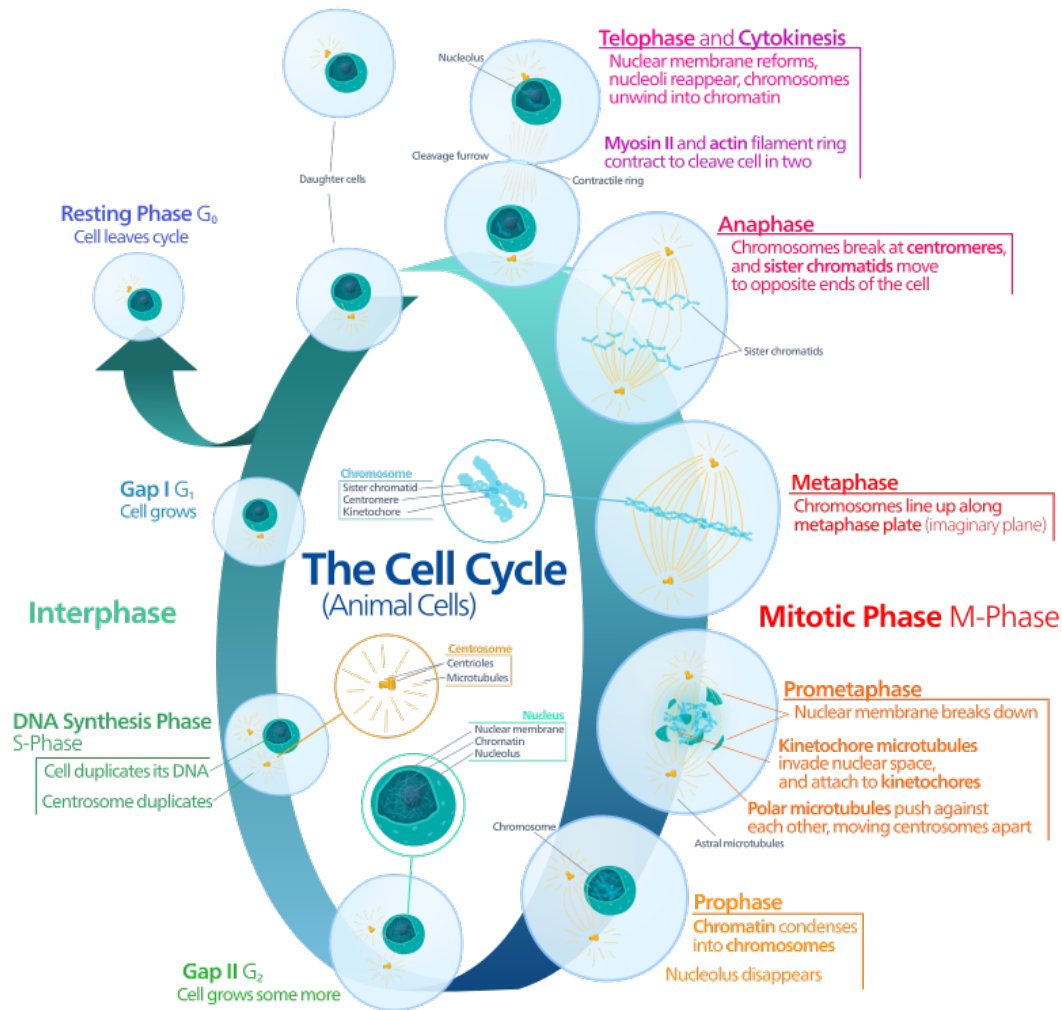
The chromosomes are in the nucleus

The chromosomes consist of DNA

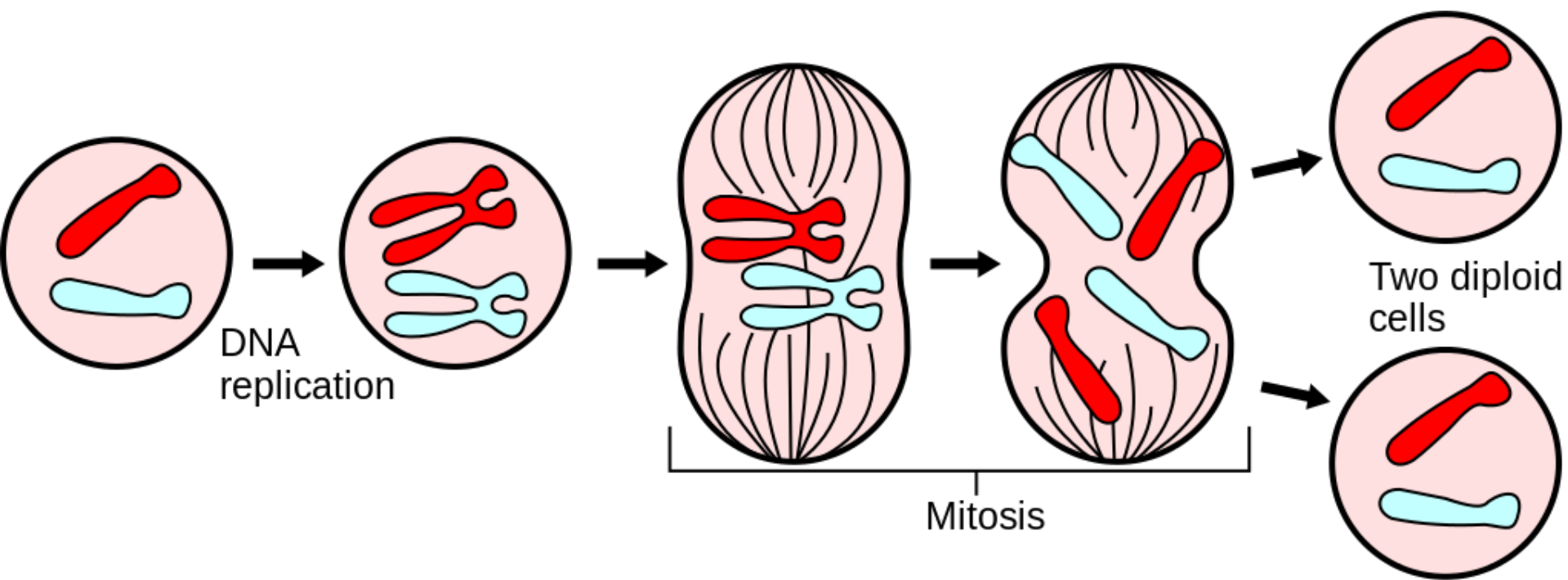


The cell cycle describes the life cycle of a cell

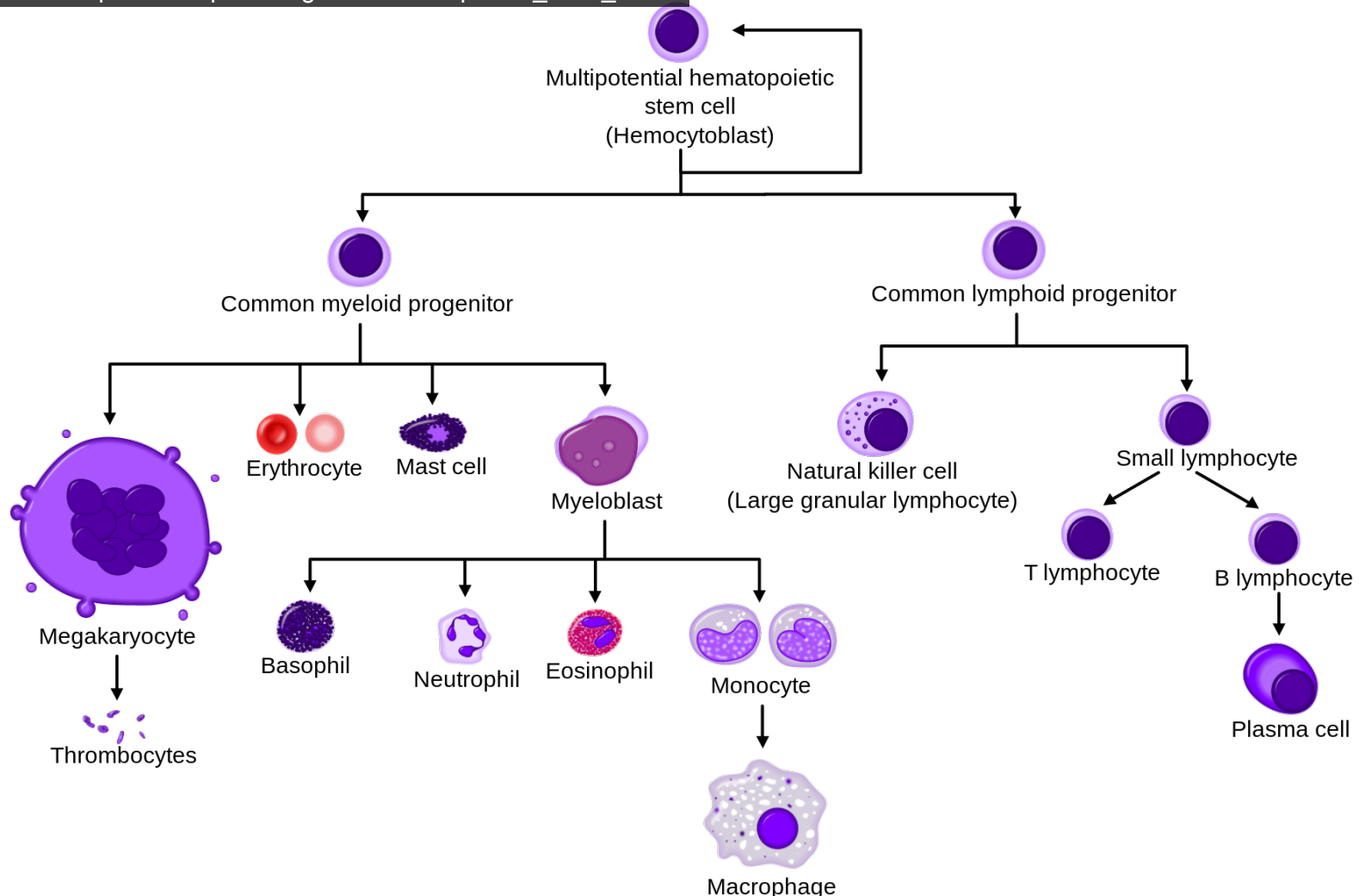




Mitosis is the process of separating chromosomes into daughter cells from a parent cell



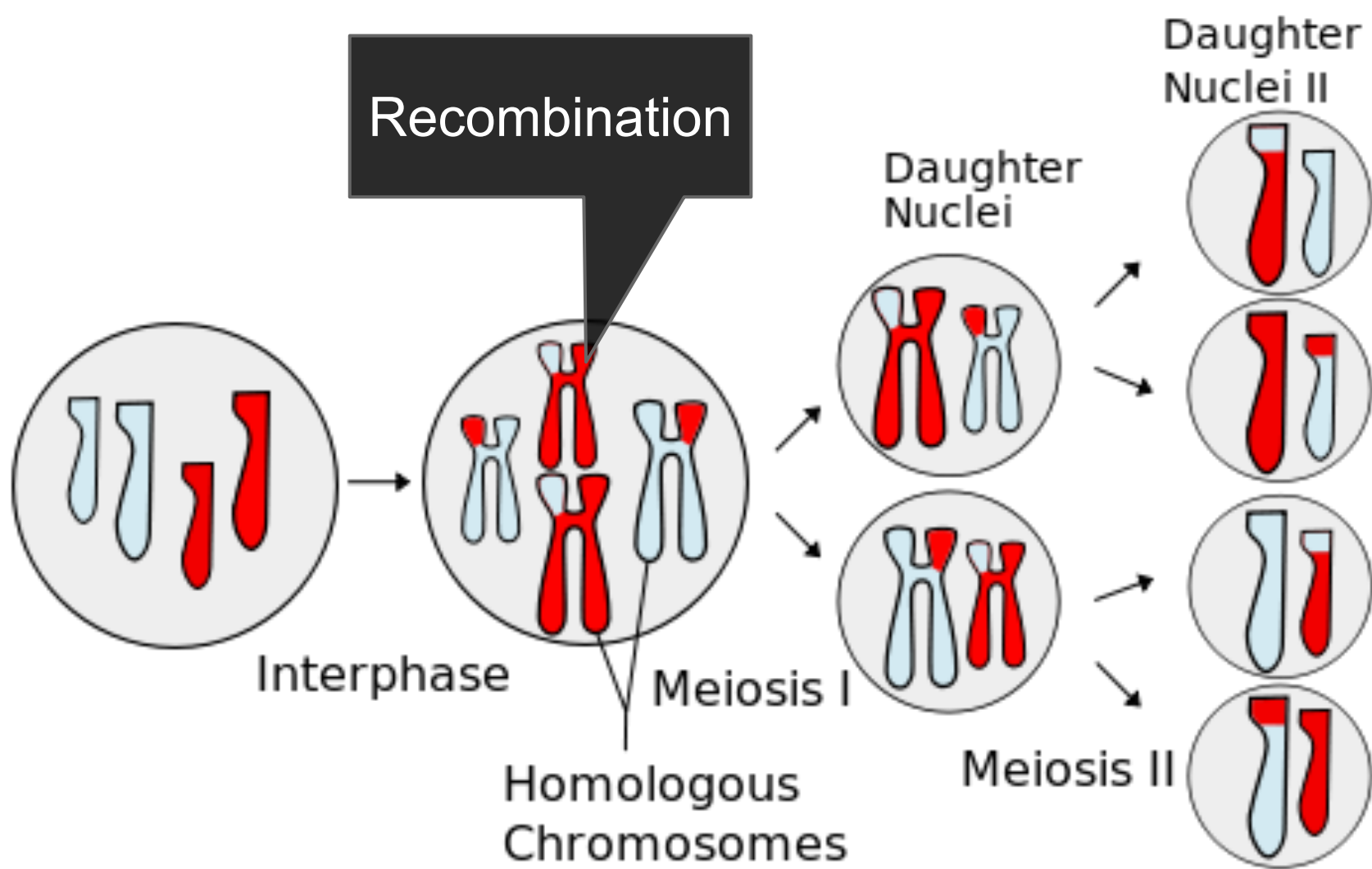
**Cells develop into different types over time**



**Meiosis is a specialized form of cell division that cuts the number of chromosomes in half**

**During sexual reproduction,  
recombination shuffles genetic  
information between parents**

Recombination





**Recombination is one of the reasons  
that family members aren't exactly  
alike**

