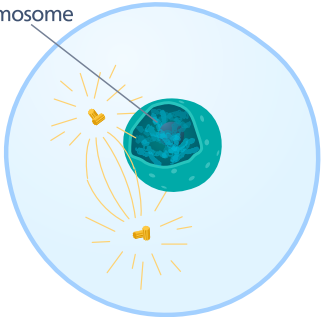


**A**

Chromosome

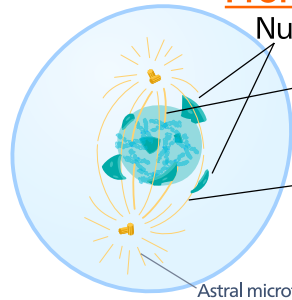


## Prophase

**Chromatin** condenses into **chromosomes**  
Nucleolus disappears

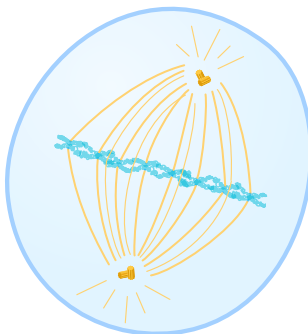
**B**

## Prometaphase



Nuclear membrane breaks down  
**Kinetochore microtubules** invade nuclear space, and attach to **kinetochores**  
**Polar microtubules** push against each other, moving centrosomes apart

Astral microtubules

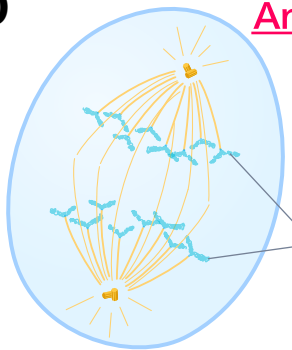
**C**

## Metaphase

Chromosomes line up along **metaphase plate** (imaginary plane)

**D**

## Anaphase



Chromosomes break at **centromeres**, and **sister chromatids** move to opposite ends of the cell

Sister chromatids

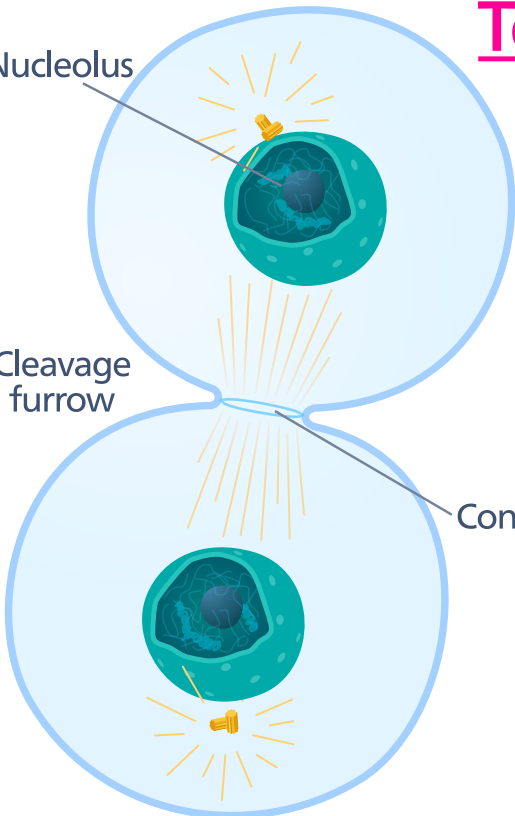
**E**

## Telophase and Cytokinesis

Nucleolus

Cleavage furrow

Contractile ring



Nuclear membrane reforms, nucleoli reappear, chromosomes unwind into chromatin

**Myosin II** and **actin** filament ring contract to cleave cell in two