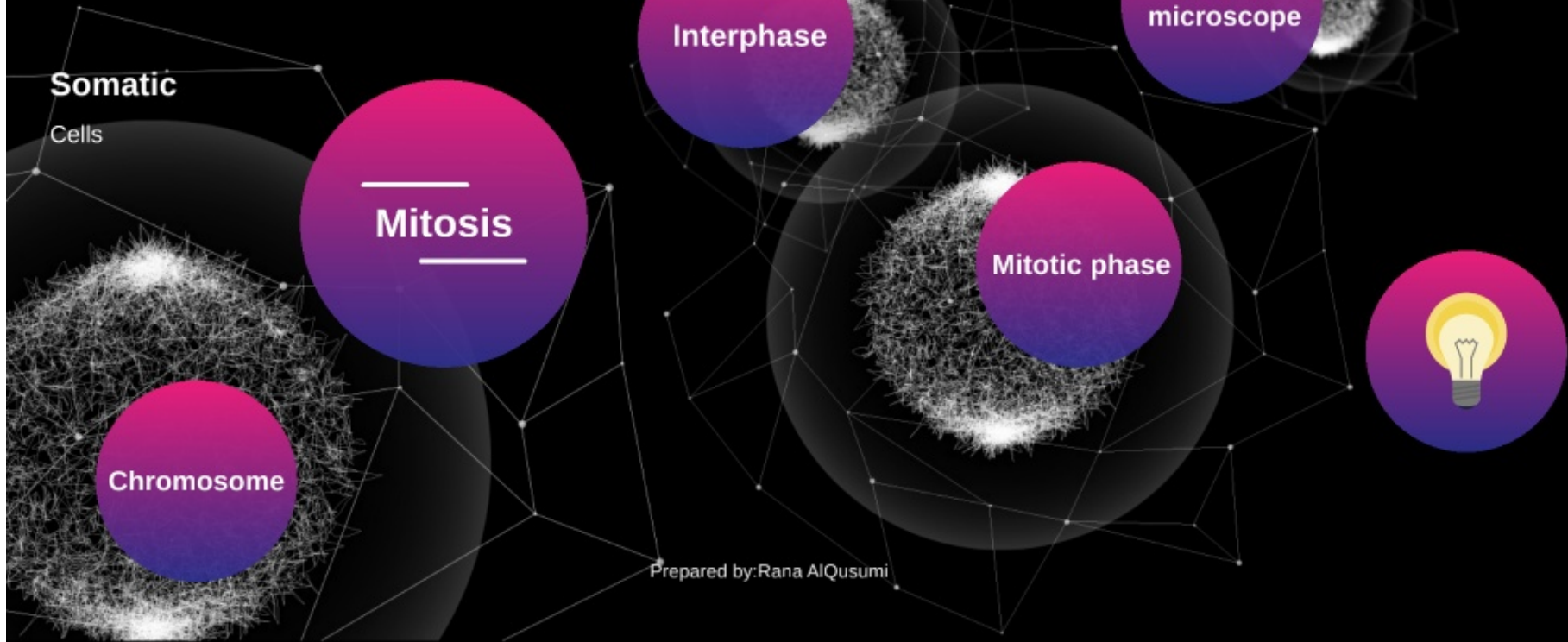
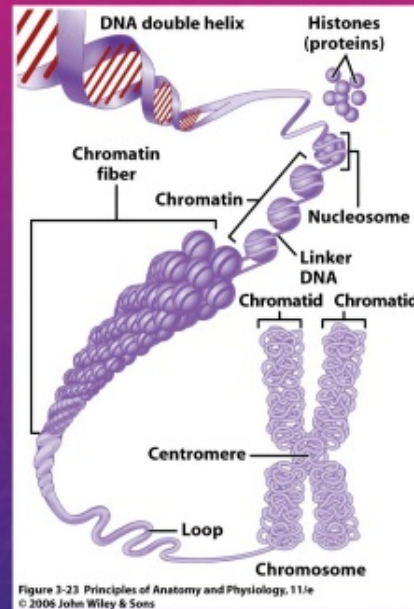


Mitosis



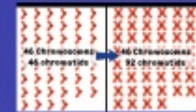
Prepared by: Rana AlQusumi

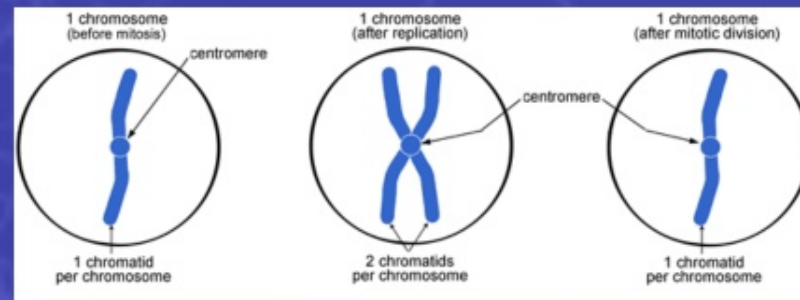
Chromosome structure



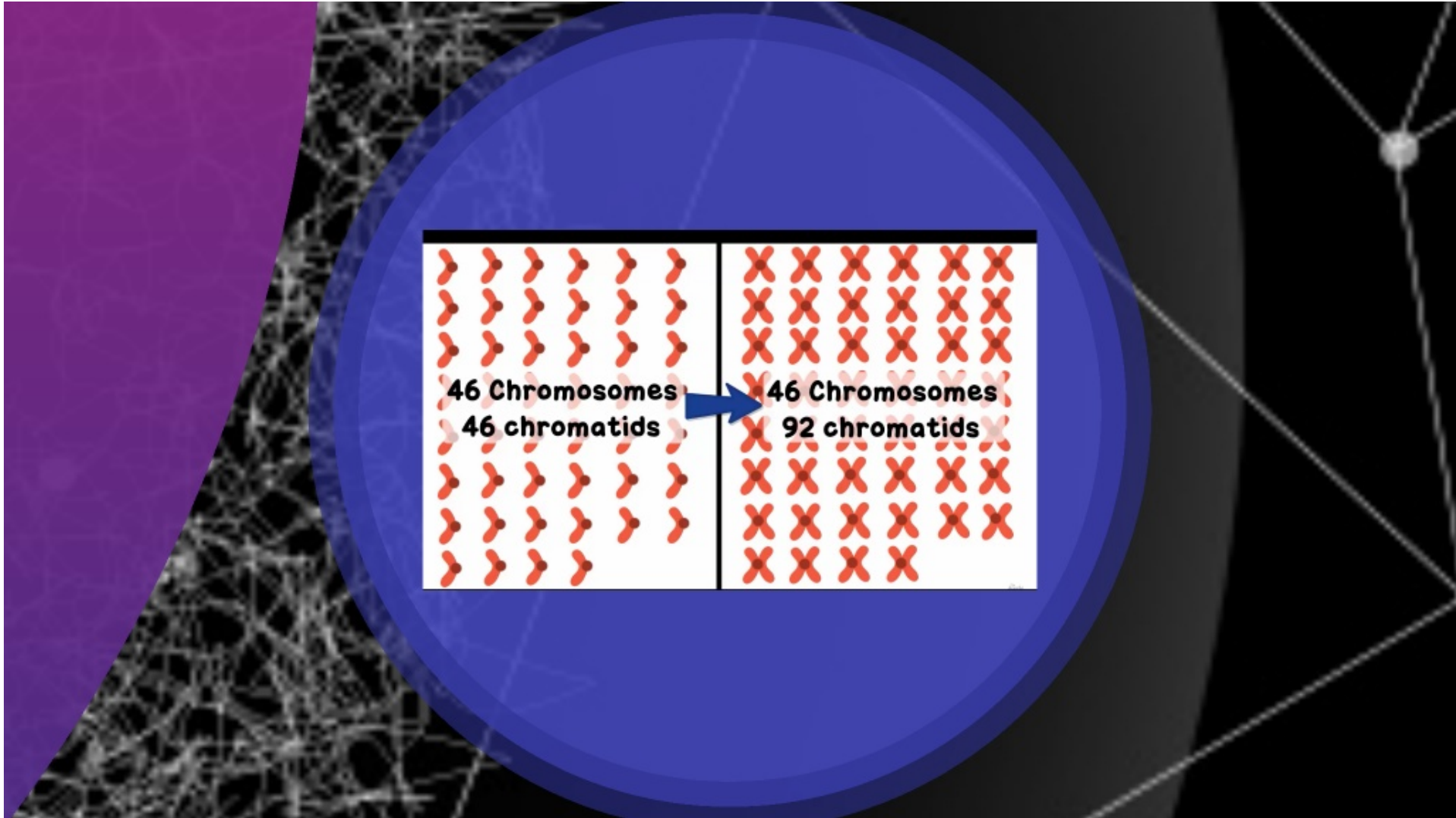
Prepared by: Rana AlQusumi

Chromatid

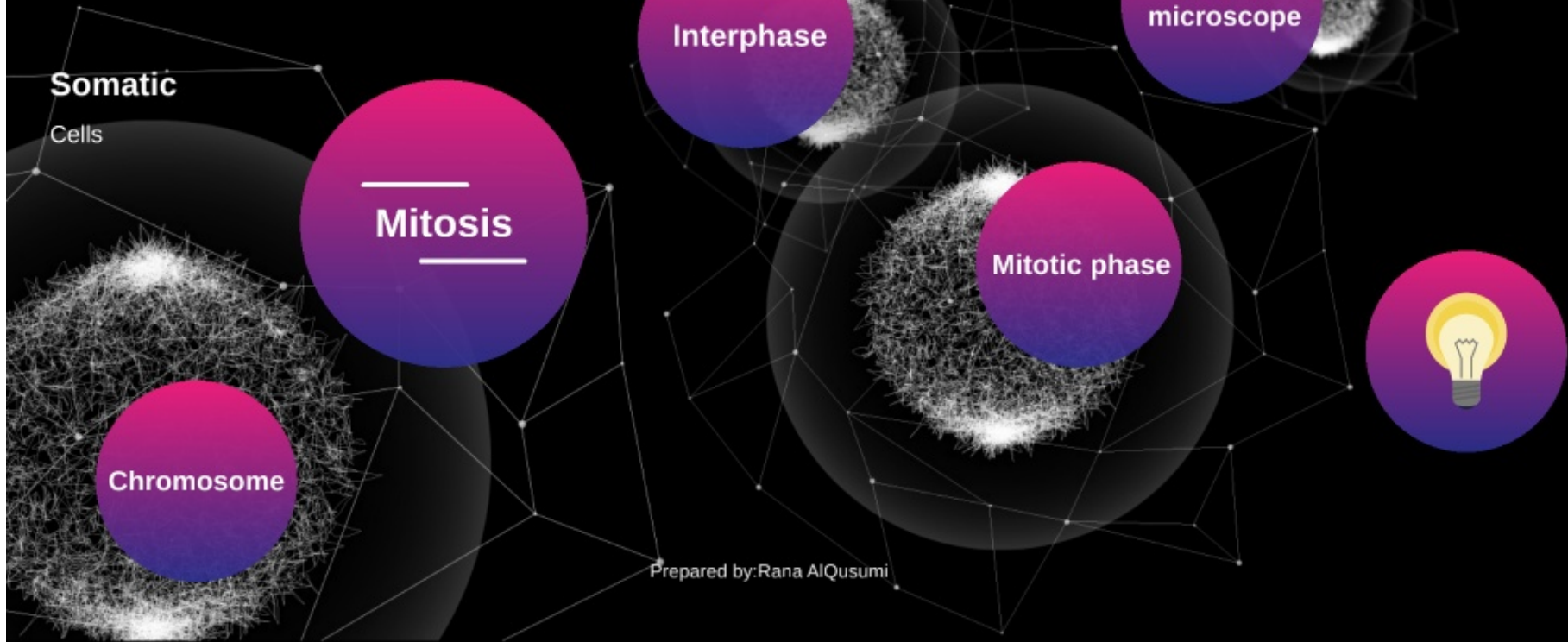




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Mitosis



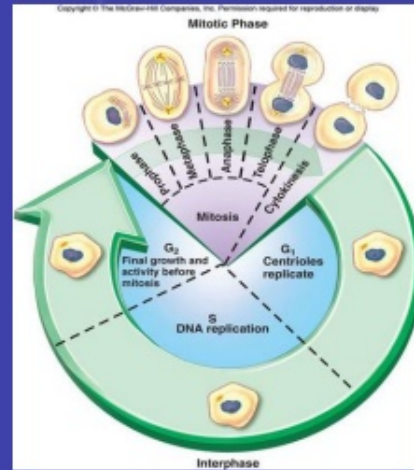
Mitosis

- Occurs in somatic cells
- The result is two diploid($2n$) cells with identical genetic material
- The function of this division is :
 - 1-Produce cells for growth
 - 2-Repair

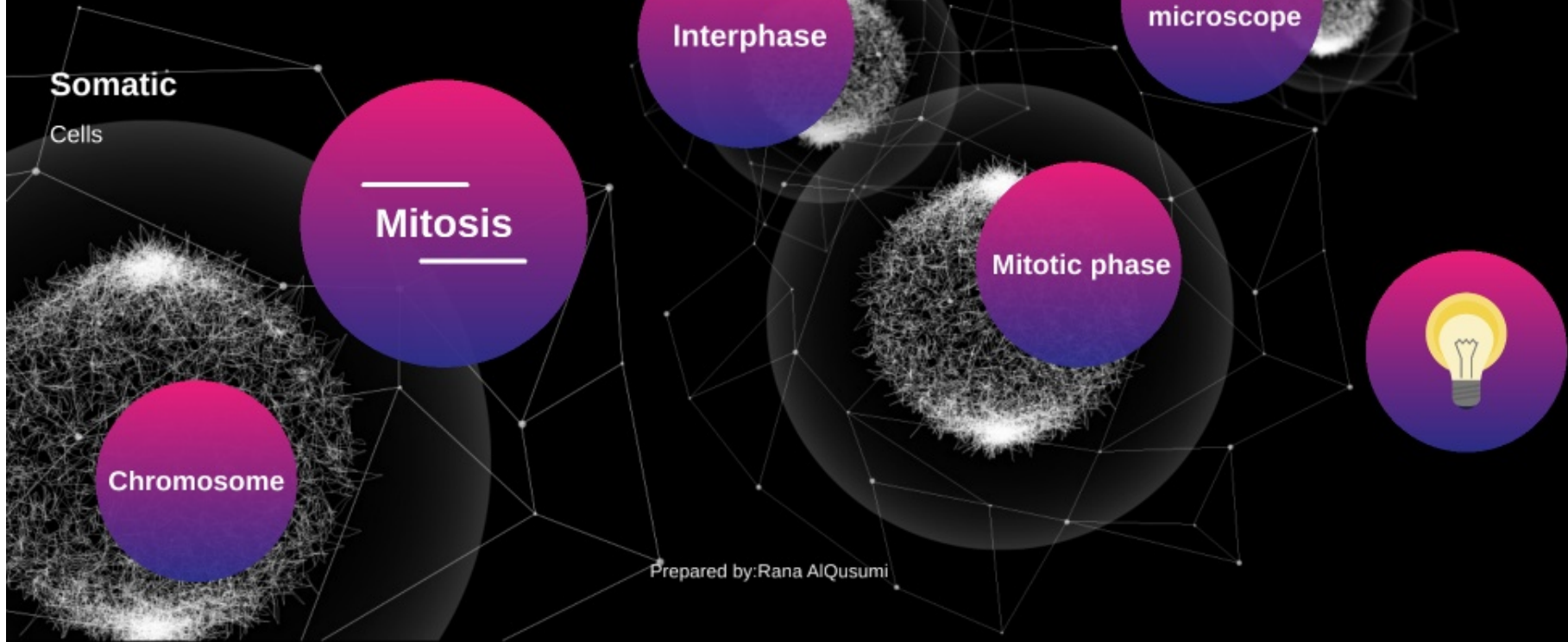
Cell Cycle

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Cell Cycle



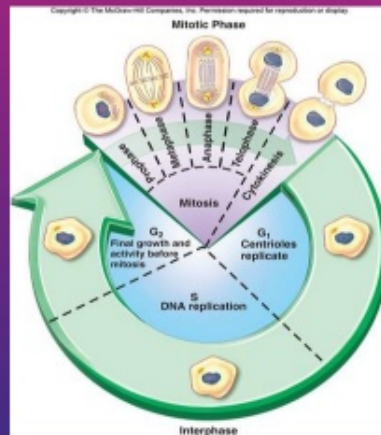
Mitosis



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Interphase:

- The cell replicates its genetic material and organelles in preparation for division.



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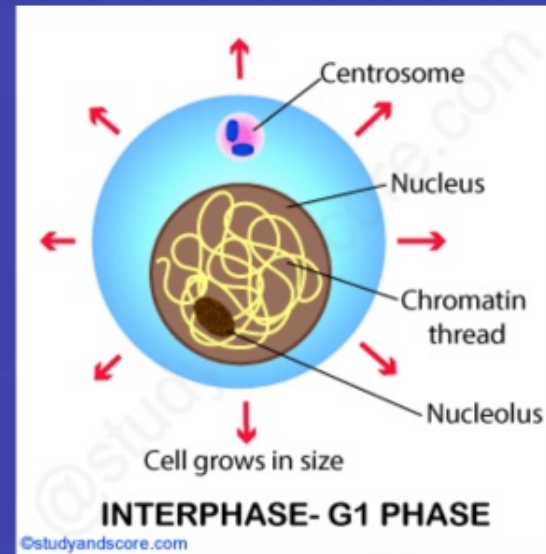
G1 phase

S phase

G2 phase

G1 phase

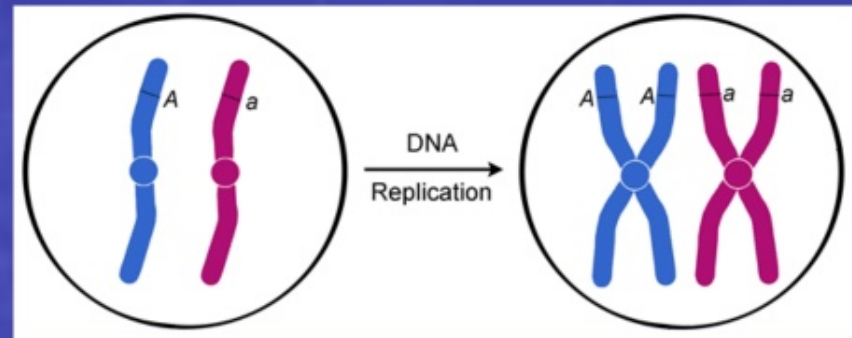
Growth and normal metabolic roles
(first growth phase)



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S phase

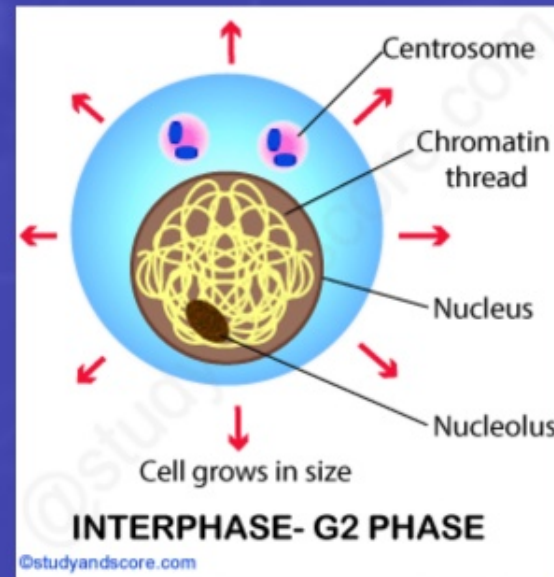
DNA replication
(synthesis phase)



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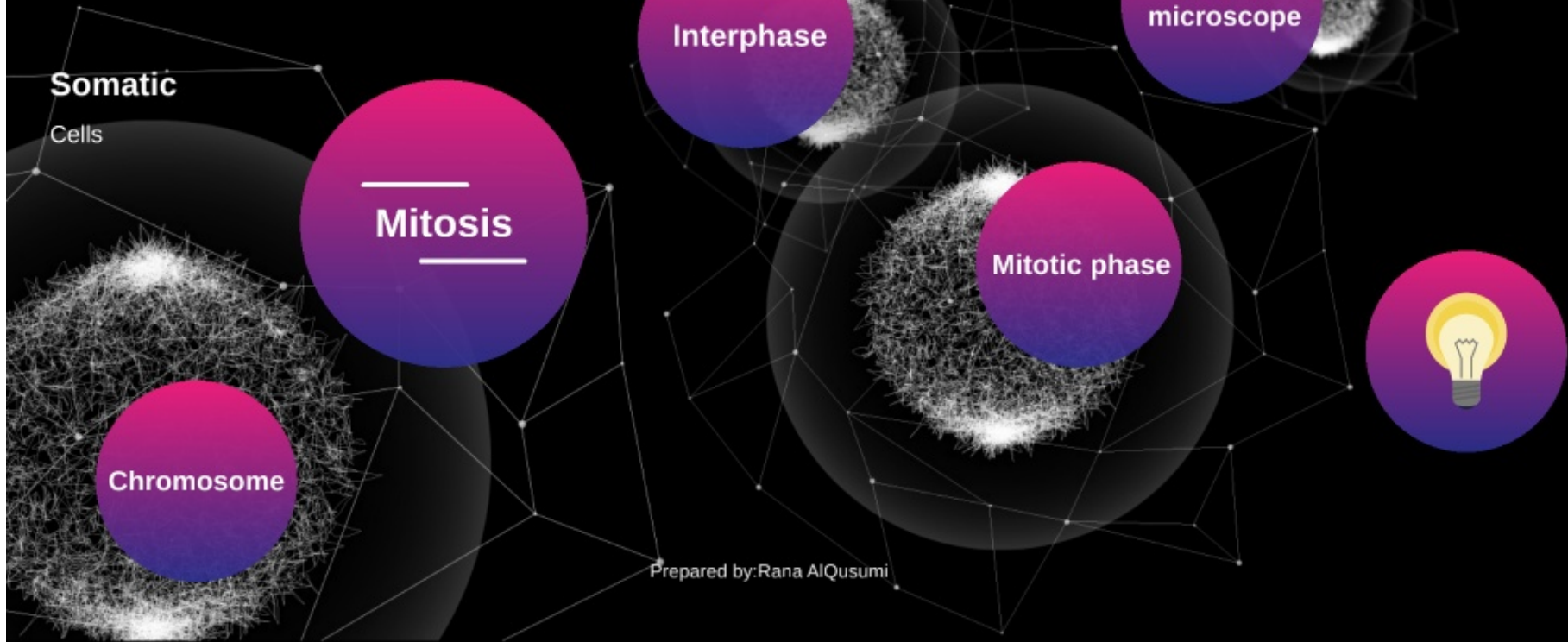
G2 phase

Growth and preparation for mitosis



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Mitosis



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Mitotic phase

Composed of several stages:

- Prophase
- Metaphase
- Anaphase
- Telophase

Prophase

Metaphase

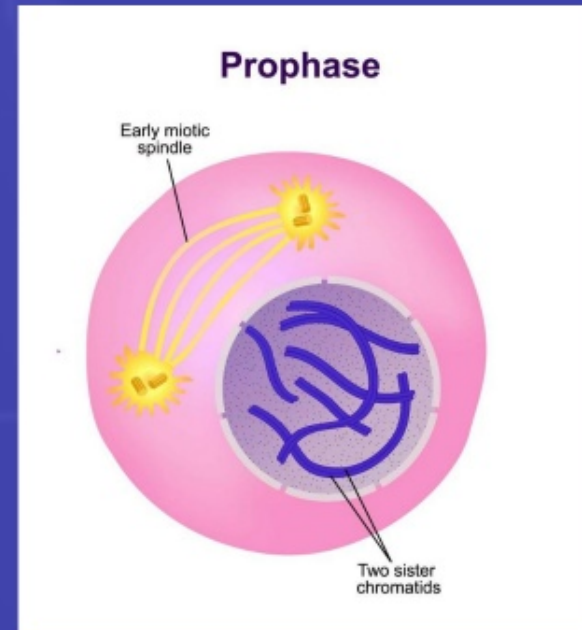
Anaphase

Telophase

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Prophase

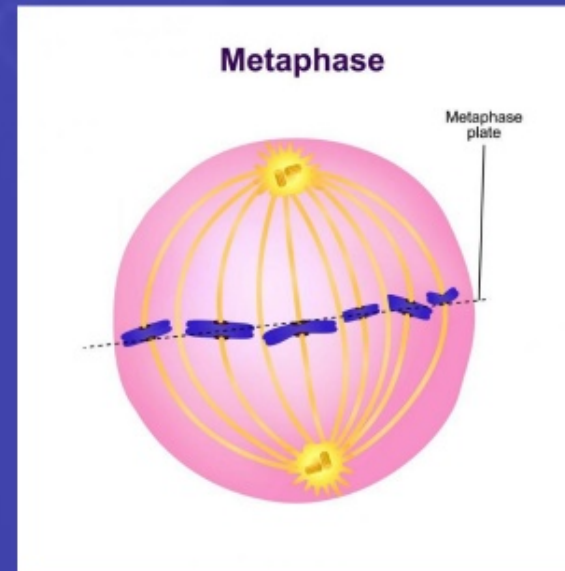
- The chromatin condenses into discrete chromosomes.
- The nuclear envelope breaks down.
- Spindles form at opposite "poles" of the cell.



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Metaphase

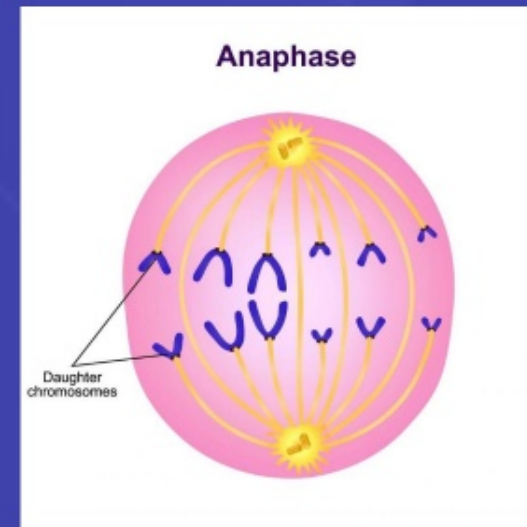
The chromosomes are aligned at the metaphase plate (a plate that is equally distant from the two spindle poles).



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Anaphase

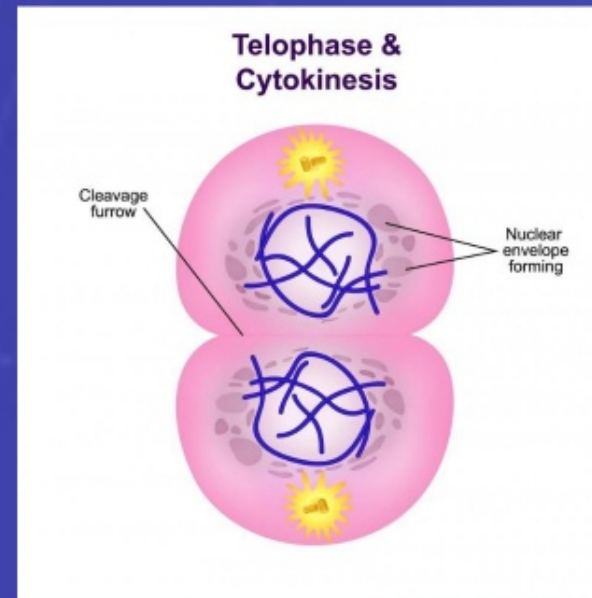
The chromosomes (sister chromatids) move to opposite ends of the cell.



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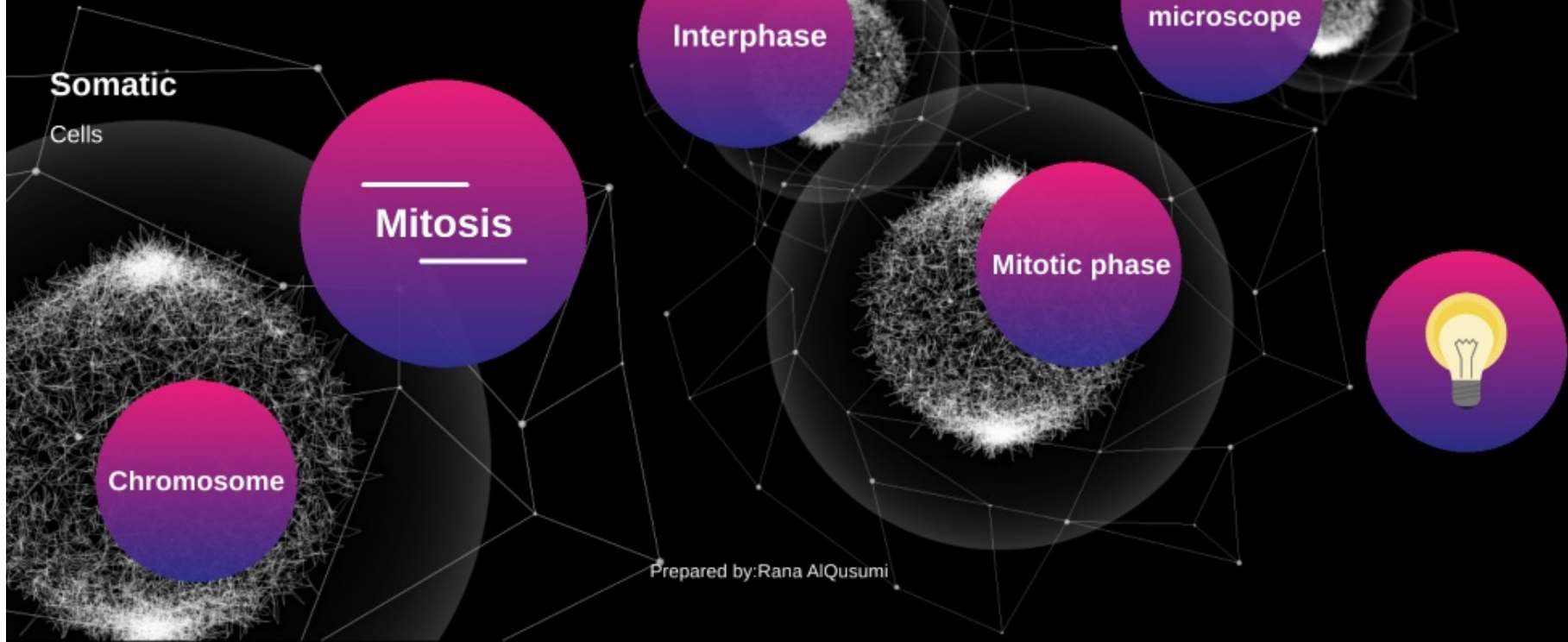
Telophase

- The nuclear envelope is reforming
- Two daughter nuclei form in the cell
- The chromosomes are cordoned off
- Cytokinesis occurring at this time by cell plate.



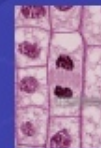
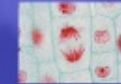
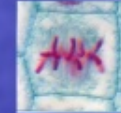
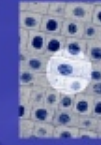
Prepared by: Rana AlQusumi

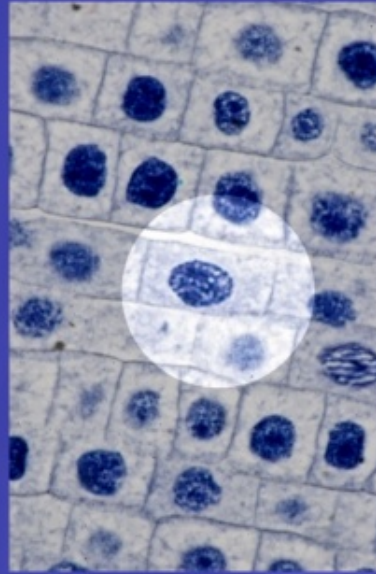
Mitosis

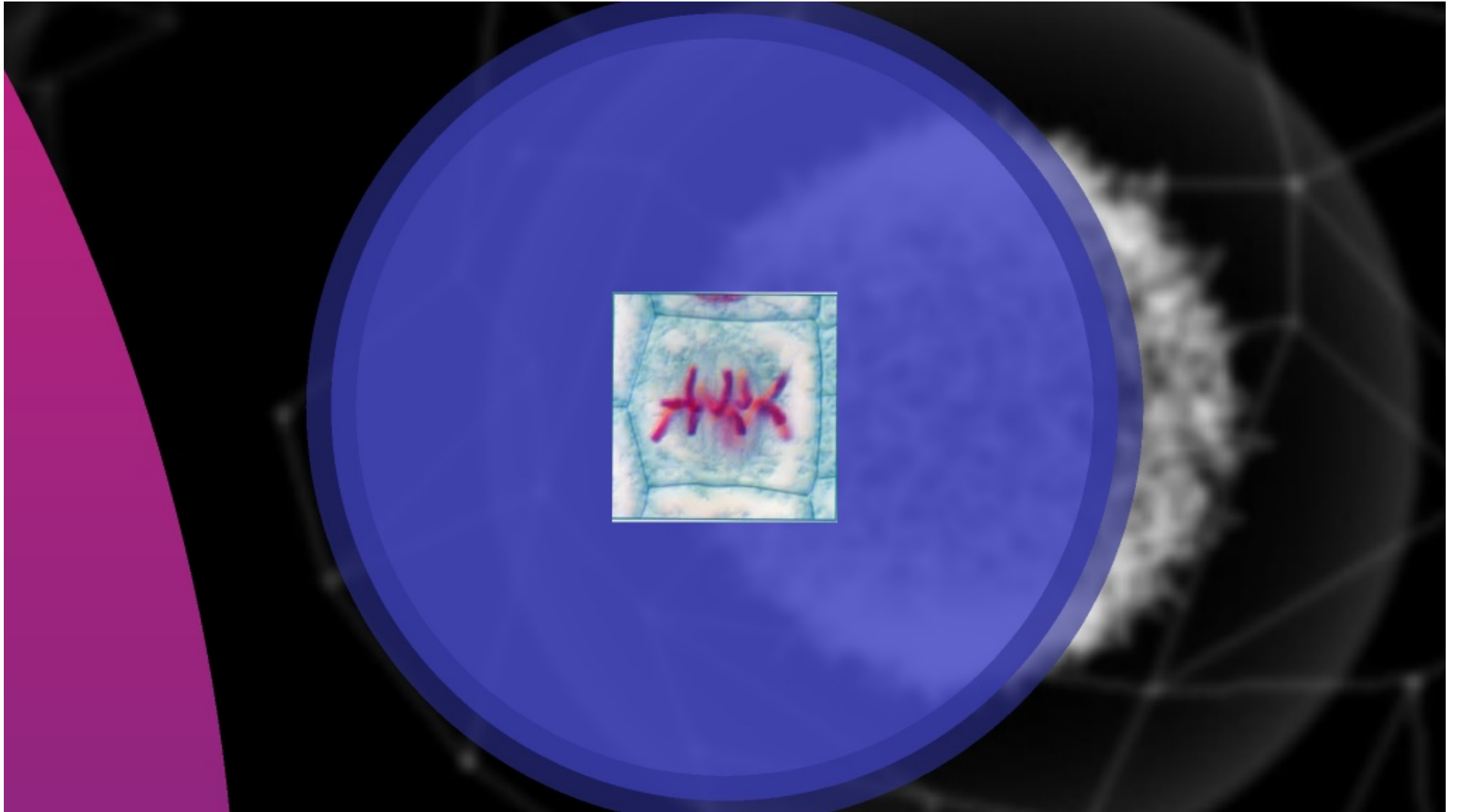


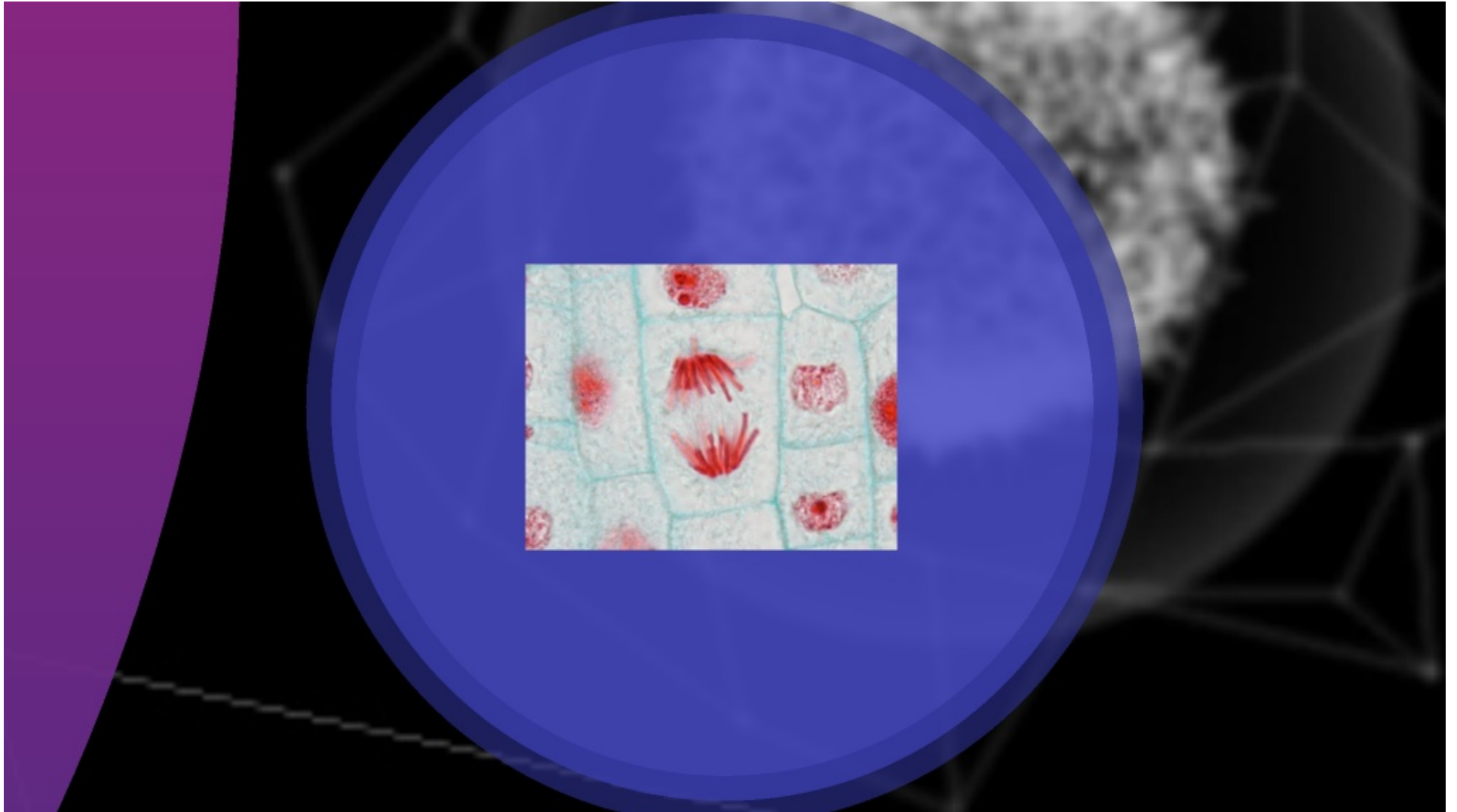
Under the microscope

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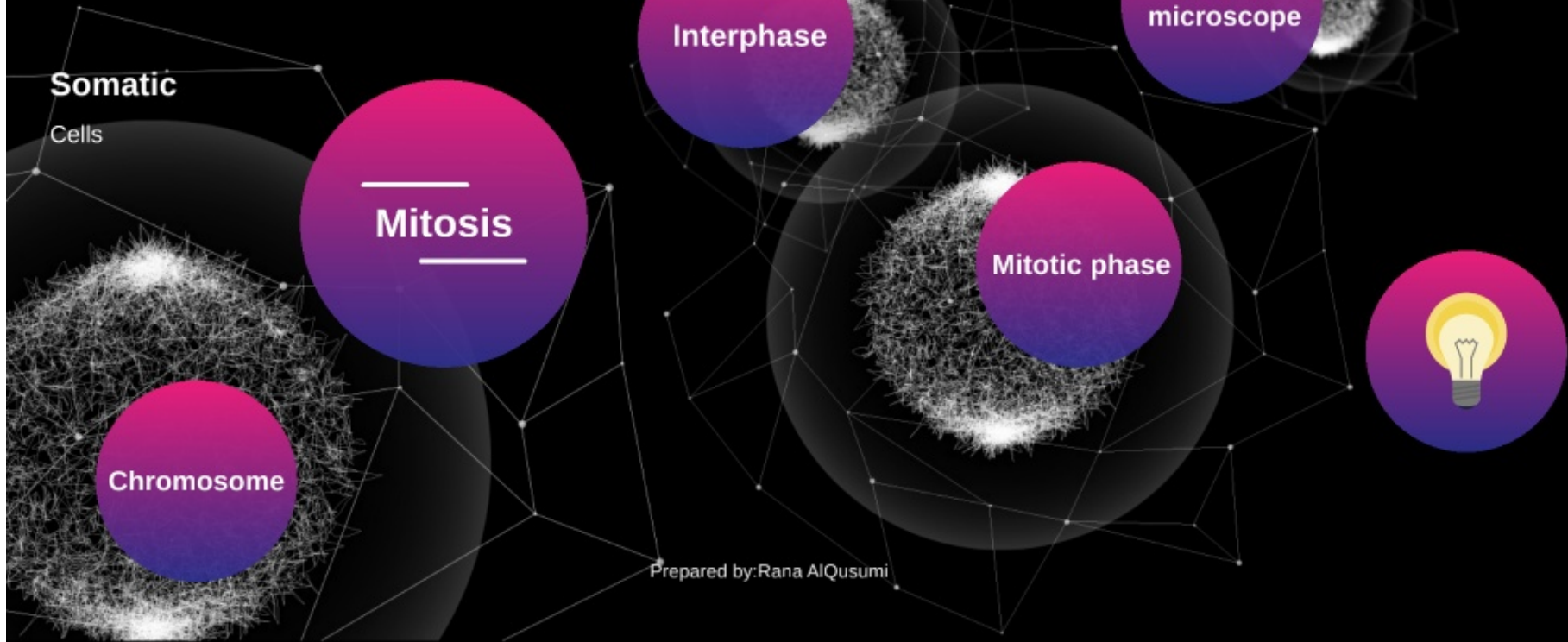








Mitosis



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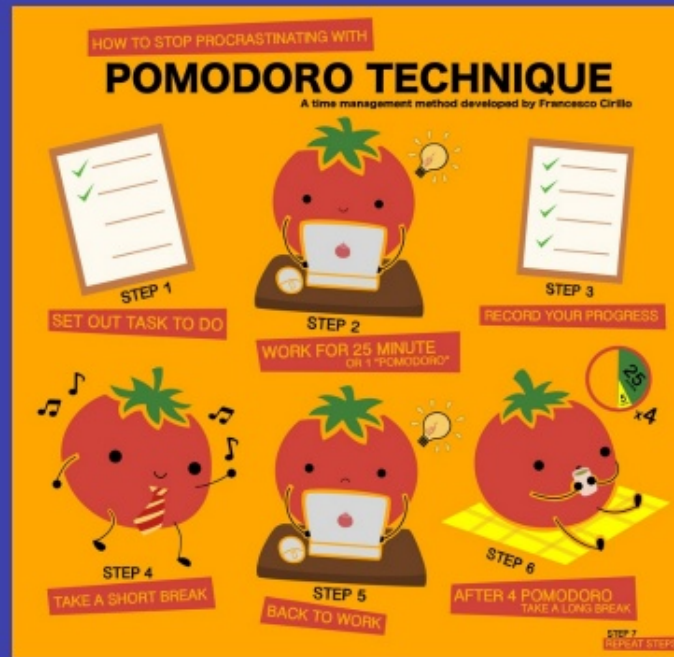
Pomodoro technique



Infographic

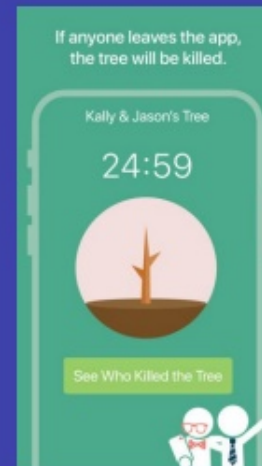


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Flora



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Mitosis

