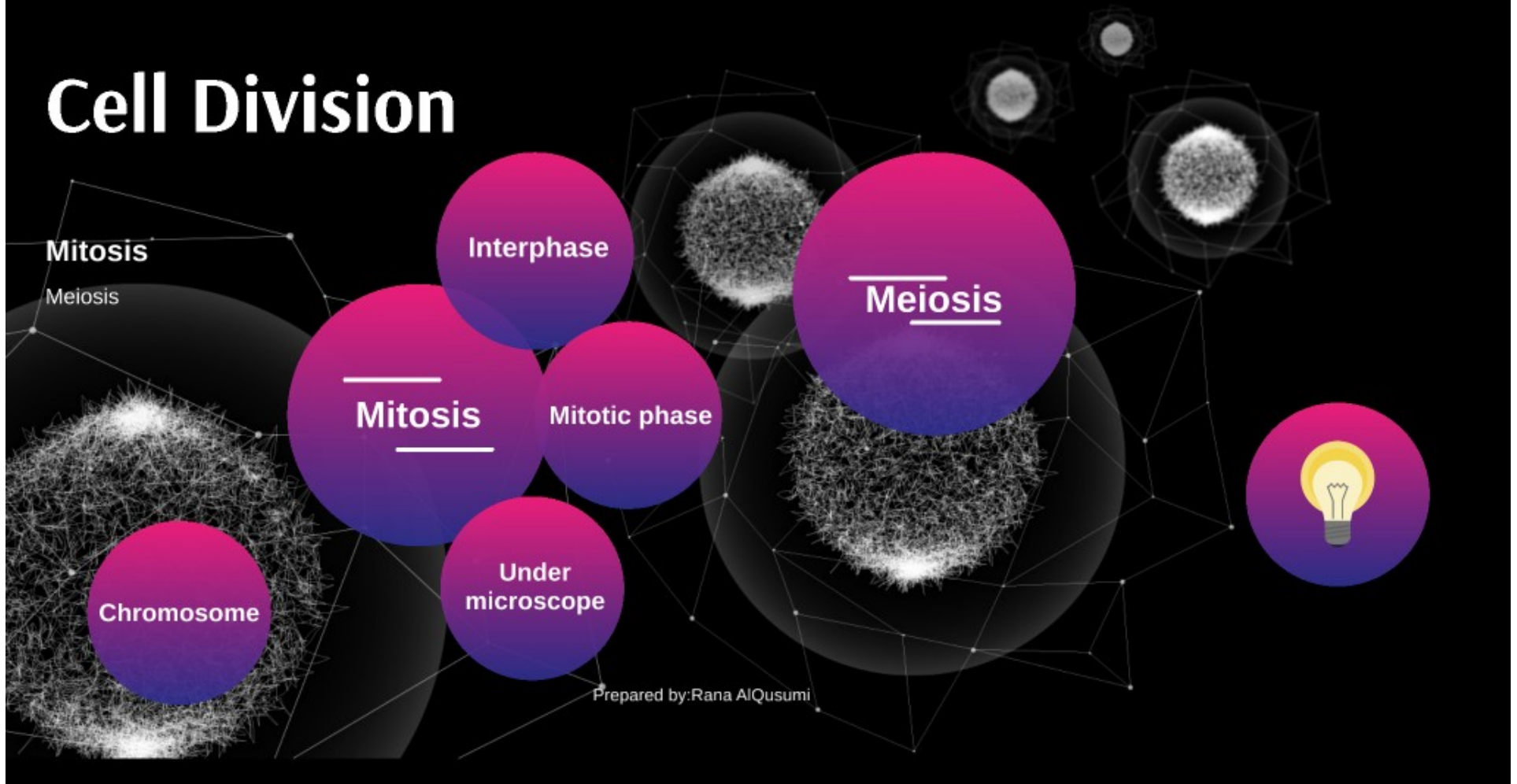
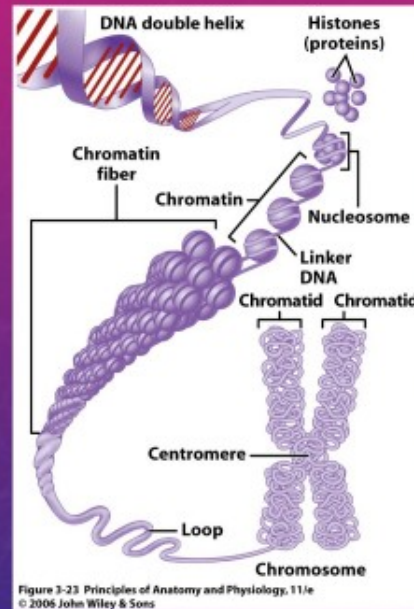


Cell Division

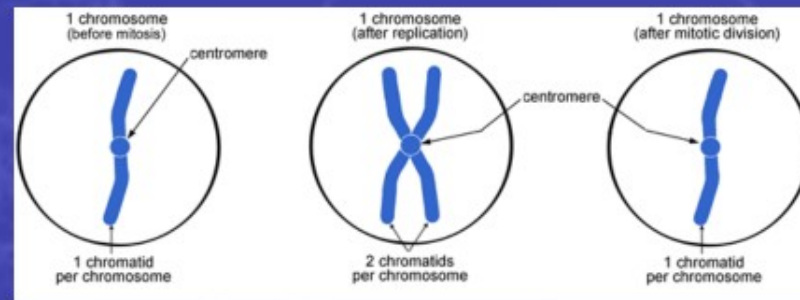


Chromosome structure



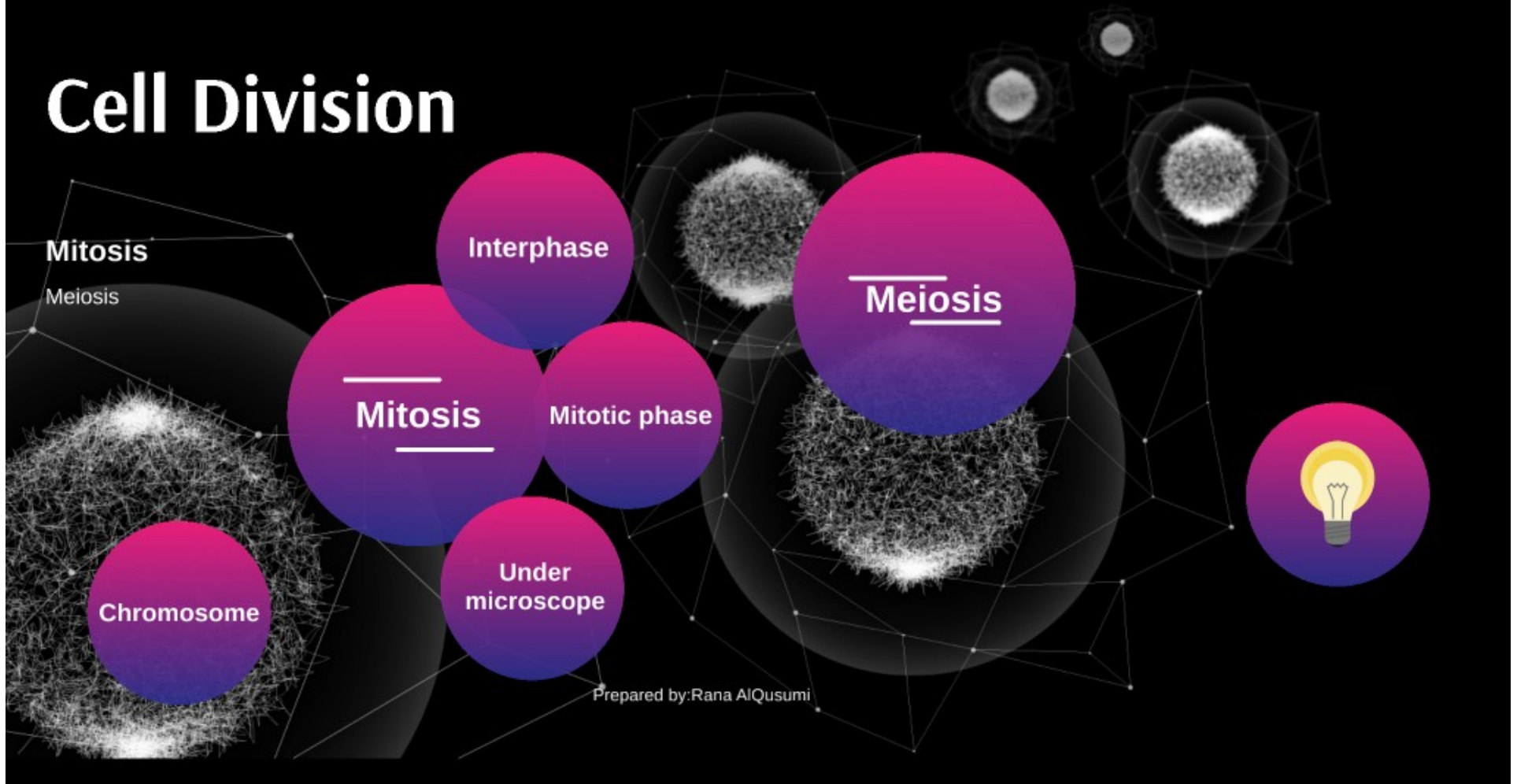
Chromatid

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Cell Division



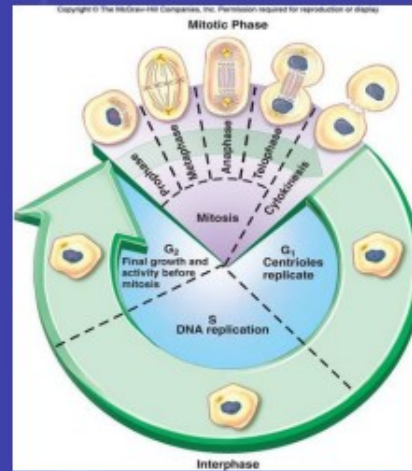
Mitosis

- Occurs in somatic(body) 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

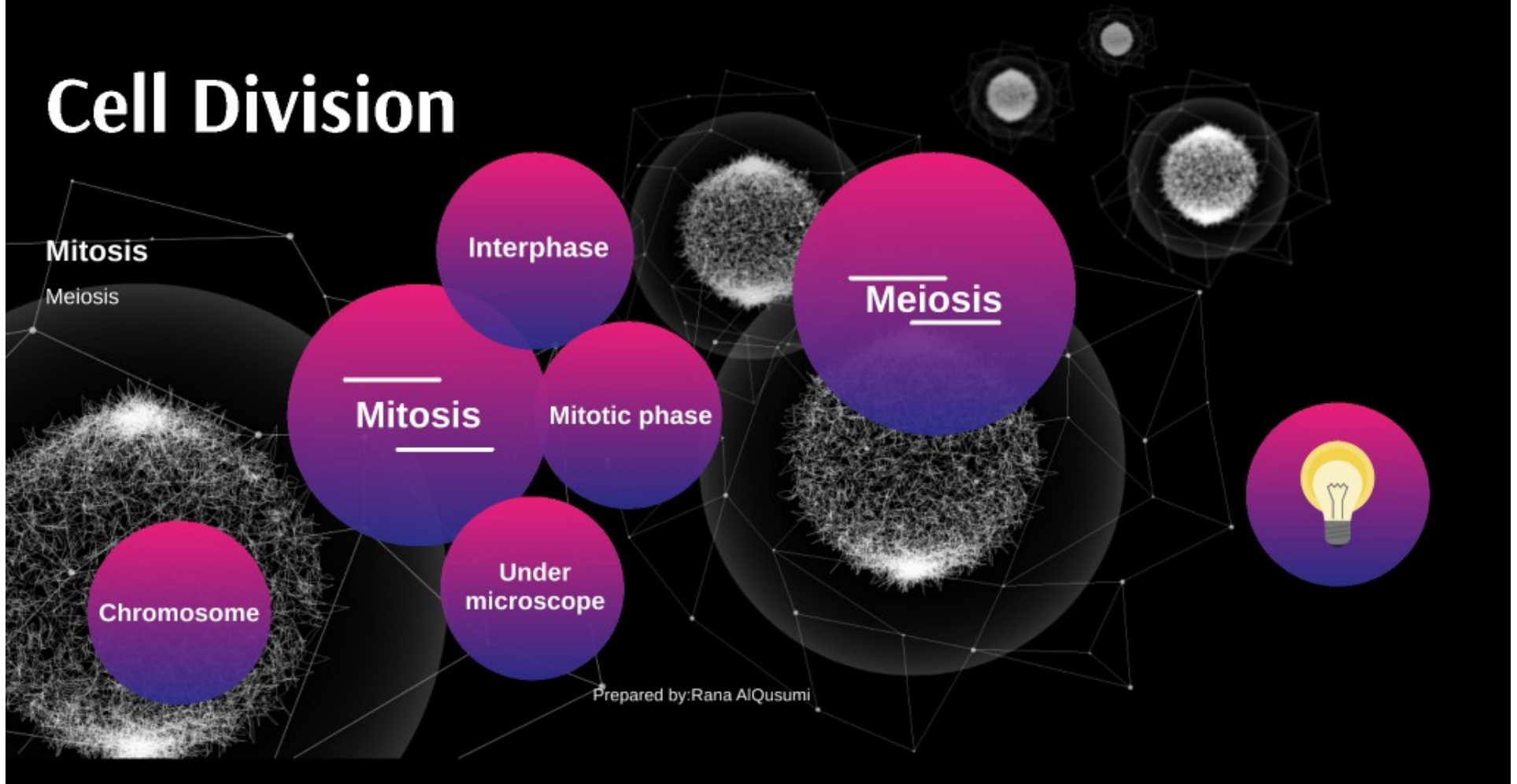
Cell Cycle

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Cell Cycle

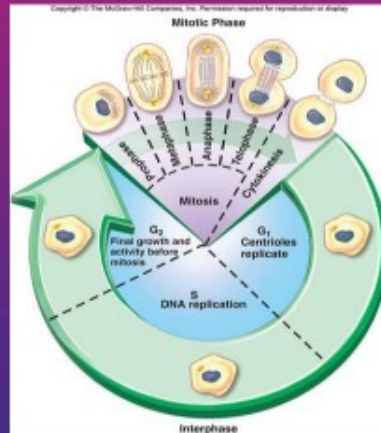


Cell Division



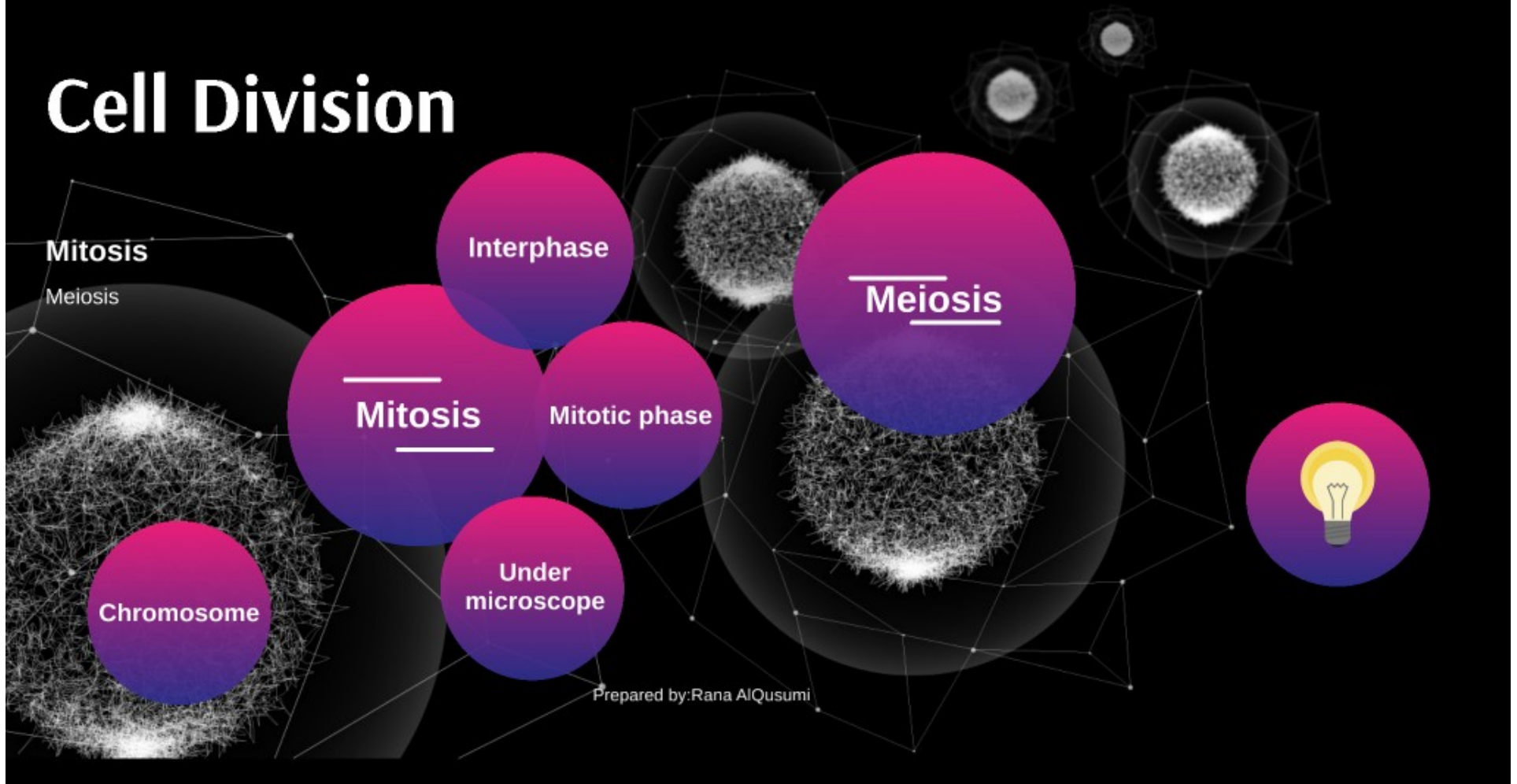
Interphase:

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



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Cell Division



Mitotic phase

composed of several stages:

- Prophase
- Metaphase
- Anaphase
- Telophase

Prophase

Metaphase

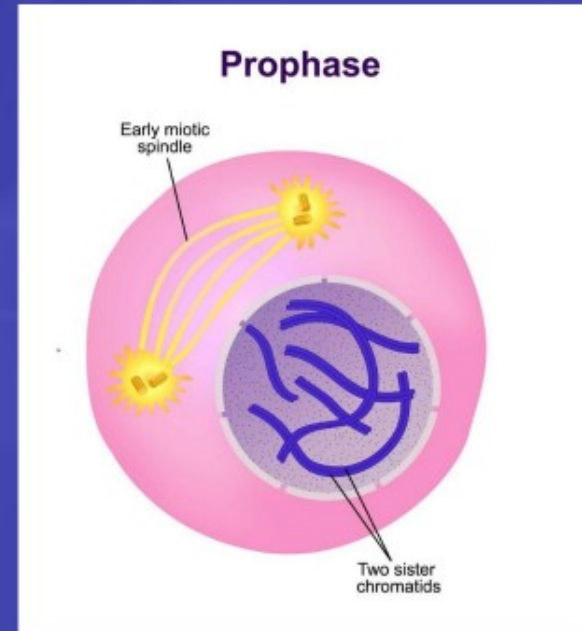
Anaphase

Telophase

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Prophase

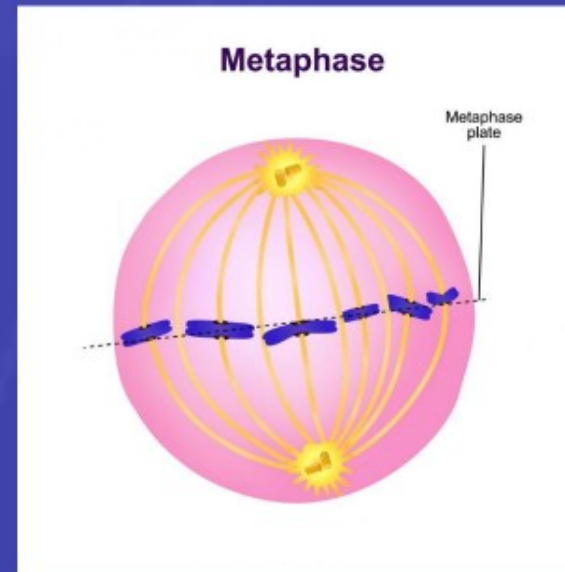
- The chromatin condenses into discrete chromosomes.
- The nuclear envelope breaks down.
- Spindles form at opposite "poles" of the cell.



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Metaphase

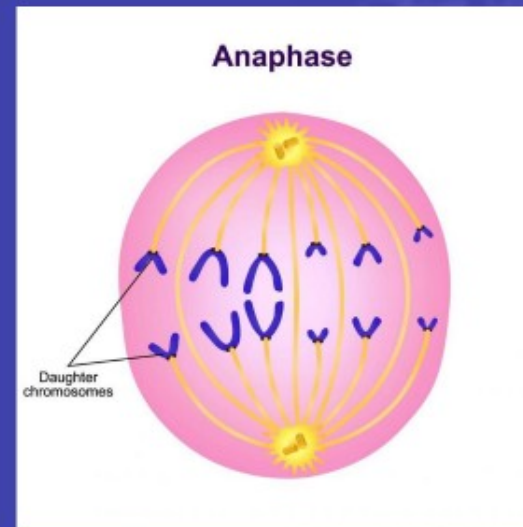
The chromosomes are aligned at the metaphase plate (a plate that is equally distant from the two spindle poles).



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Anaphase

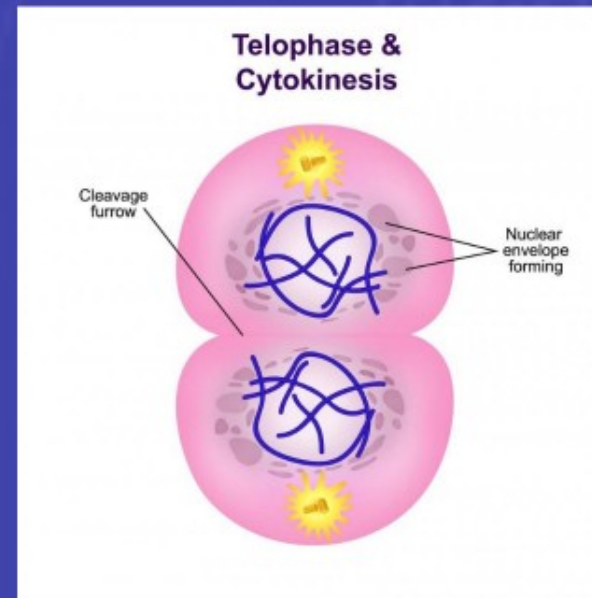
The chromosomes (sister chromatids) move to opposite ends of the cell.



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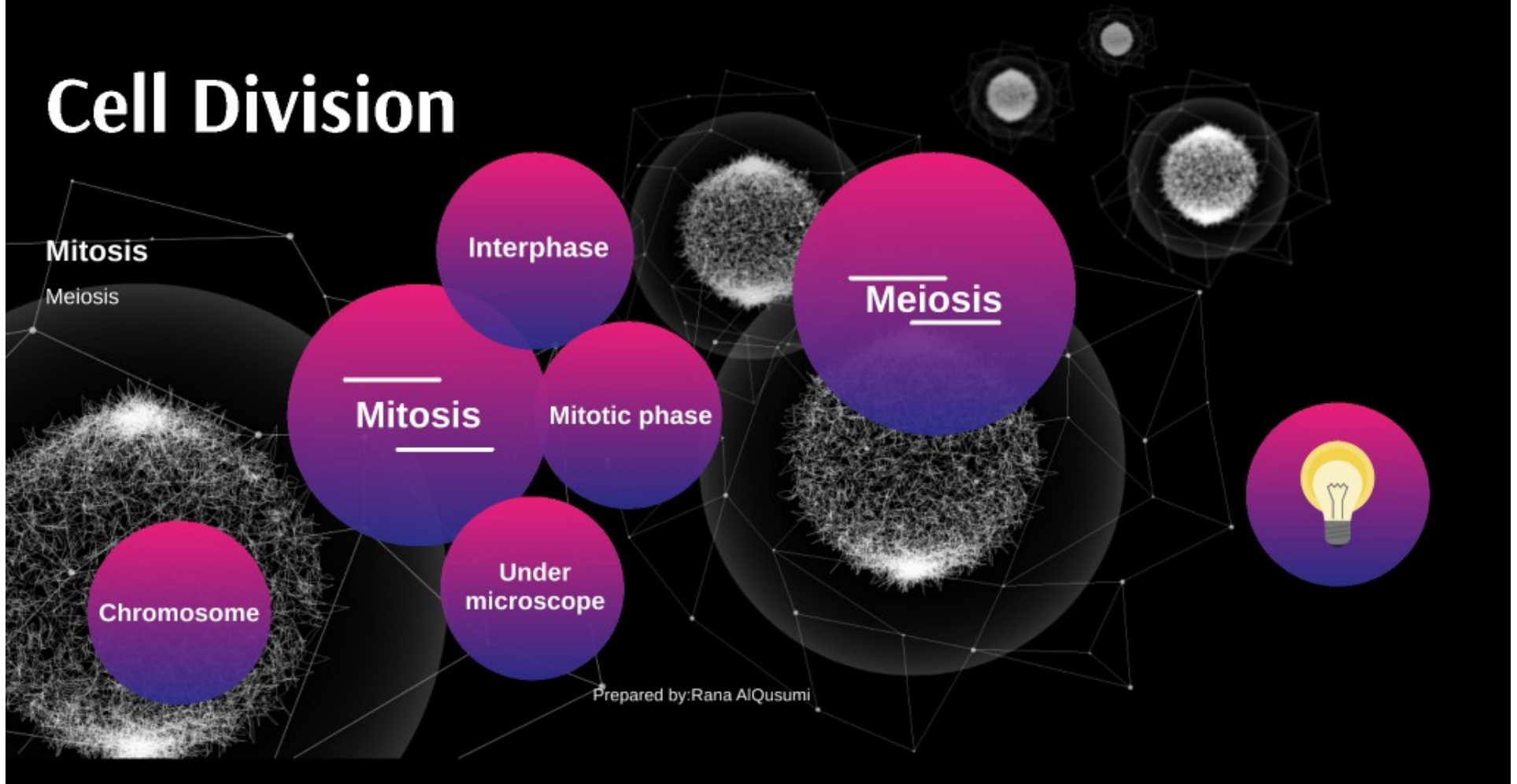
Telophase

- 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.



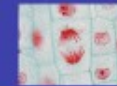
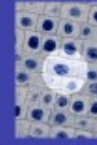
Prepared by: Rana AlQusumi

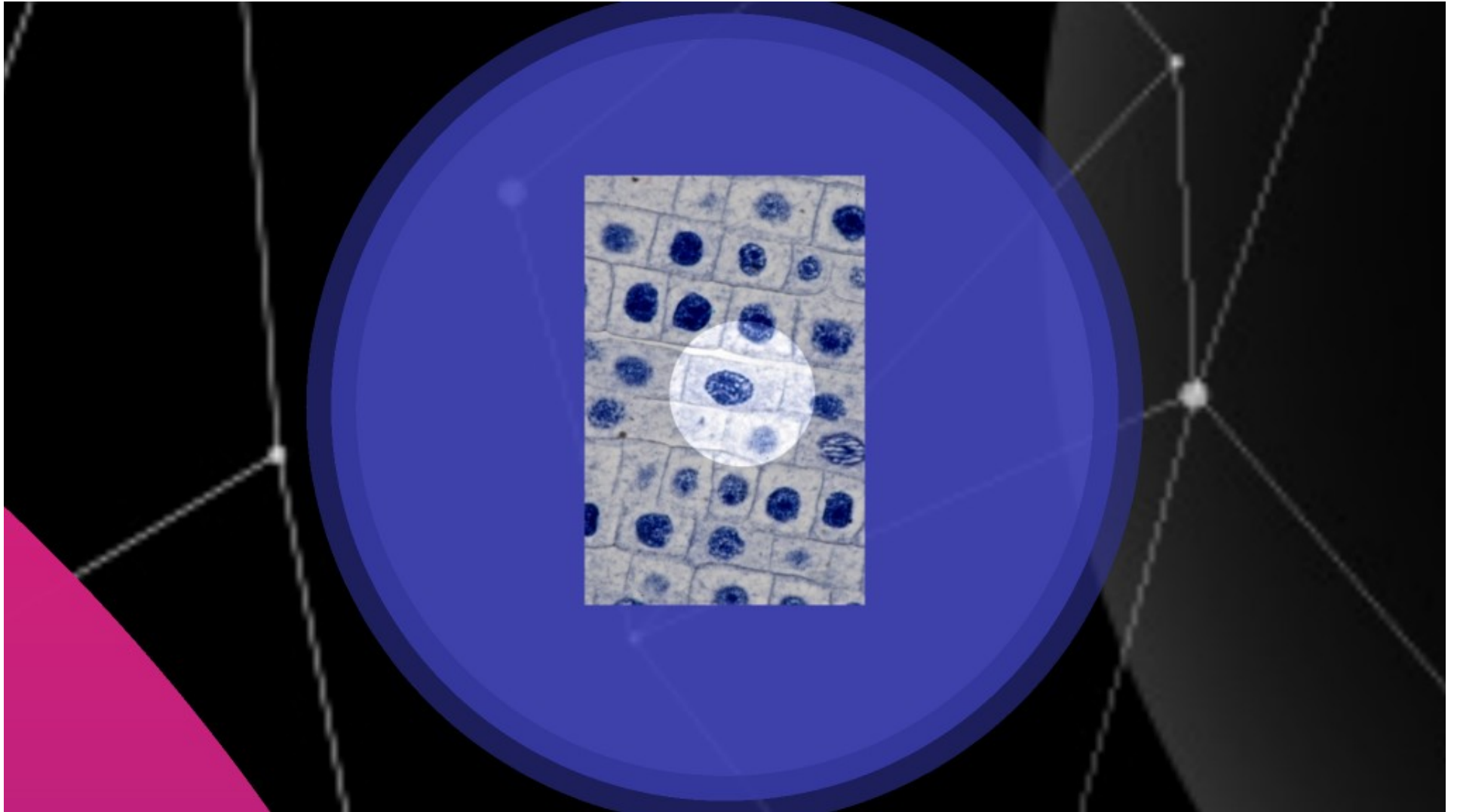
Cell Division

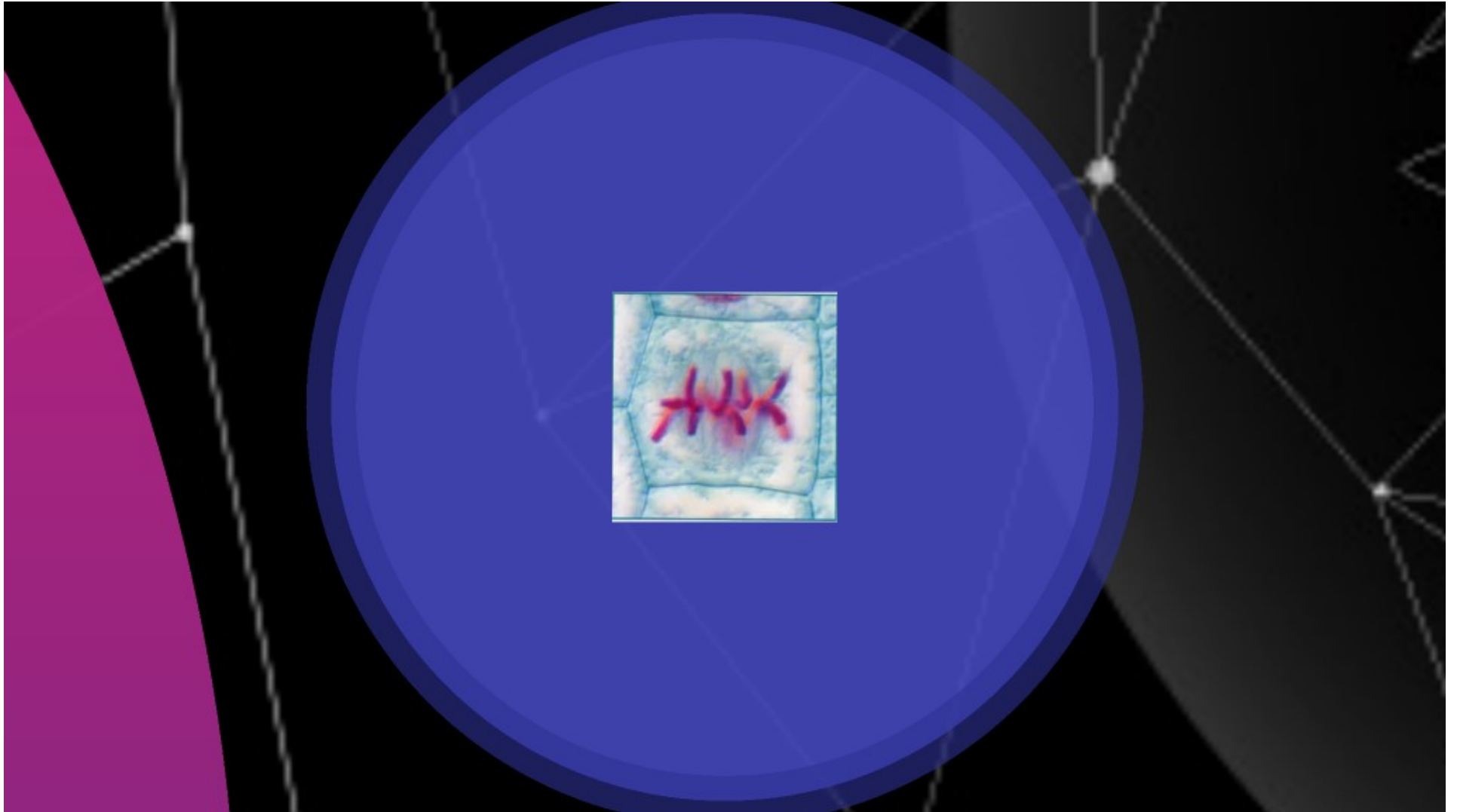


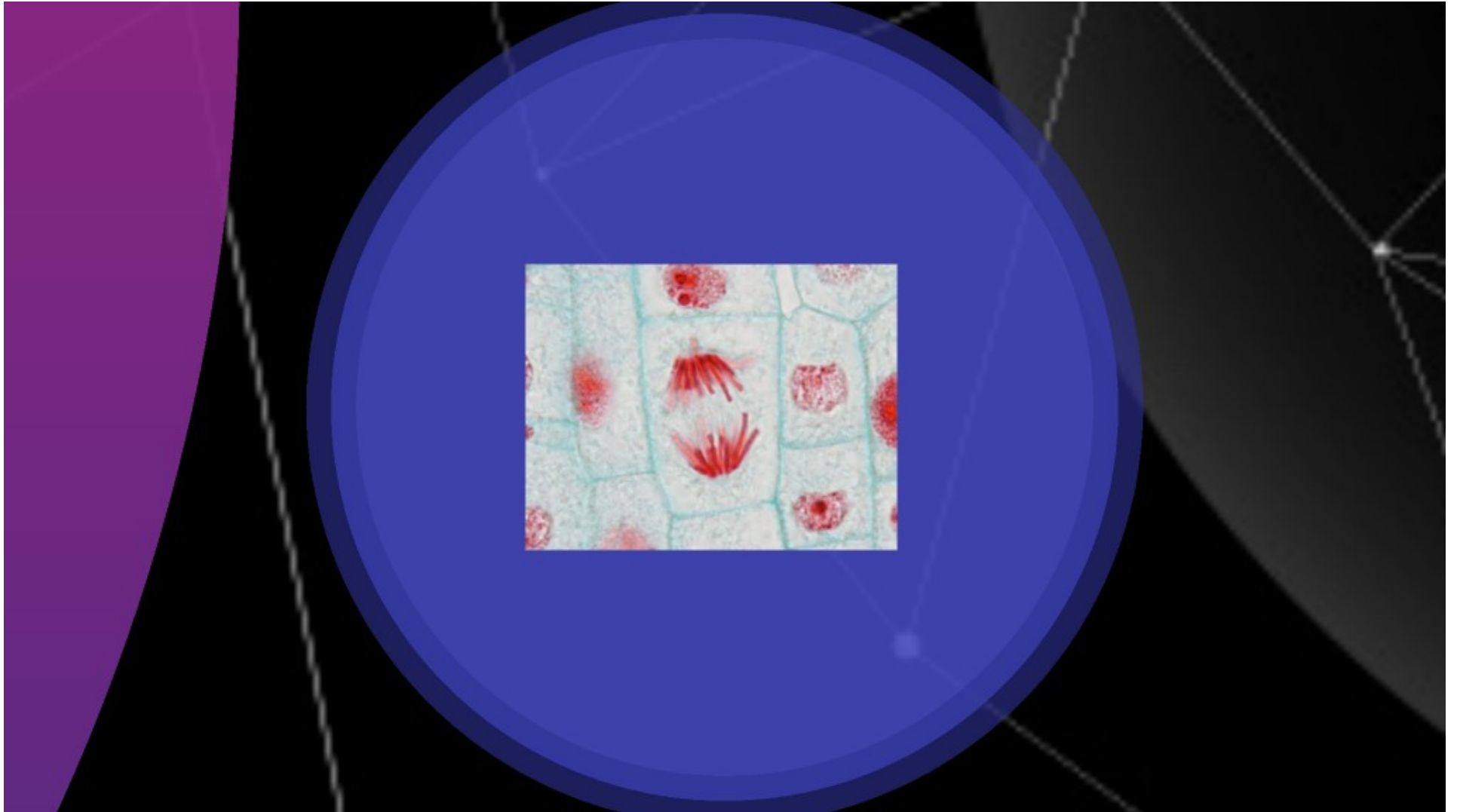
Under the microscope

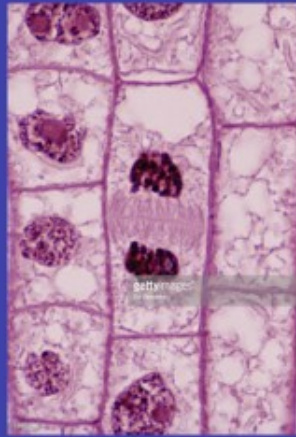
Prepared by: Rana AlQusumi



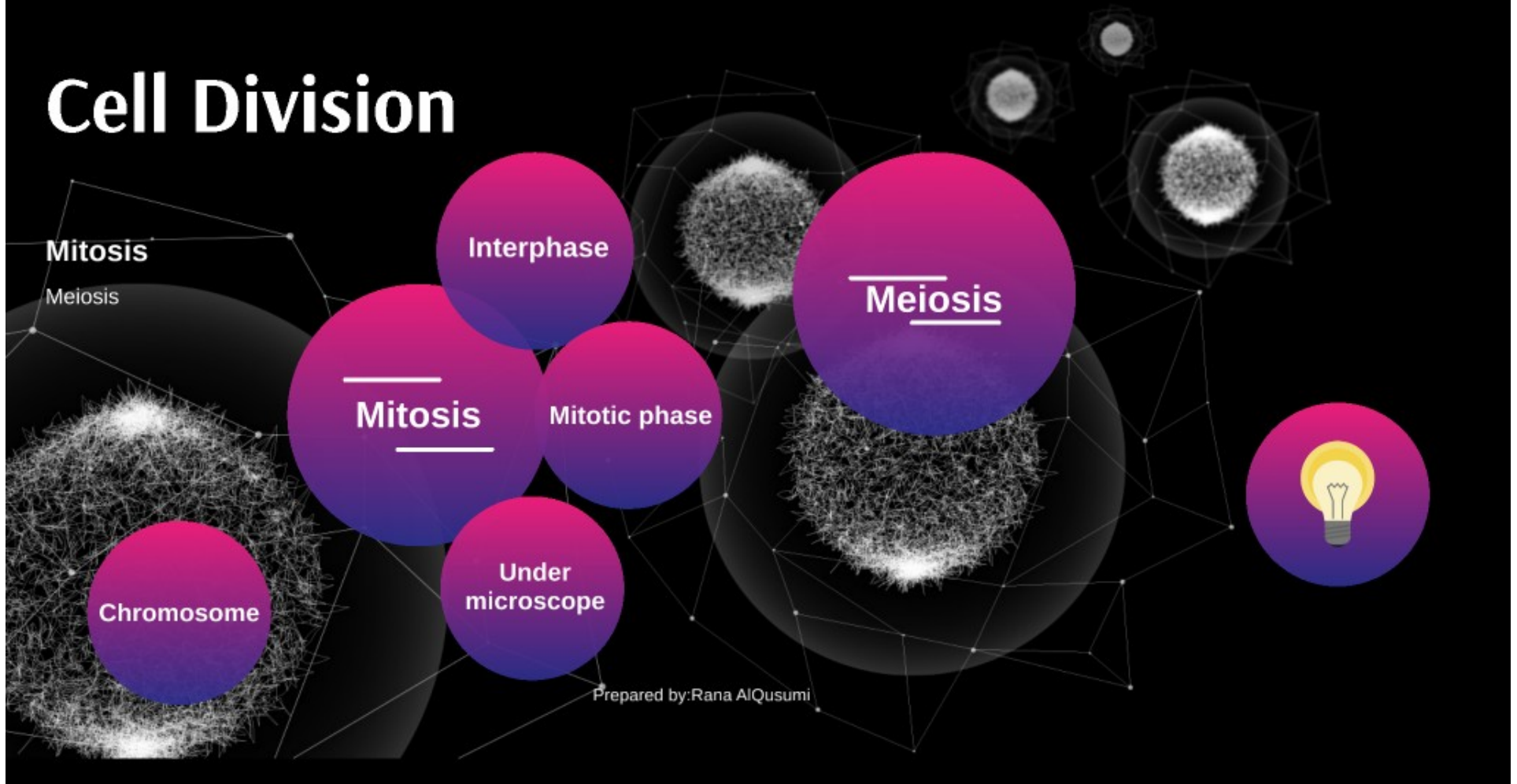








Cell Division



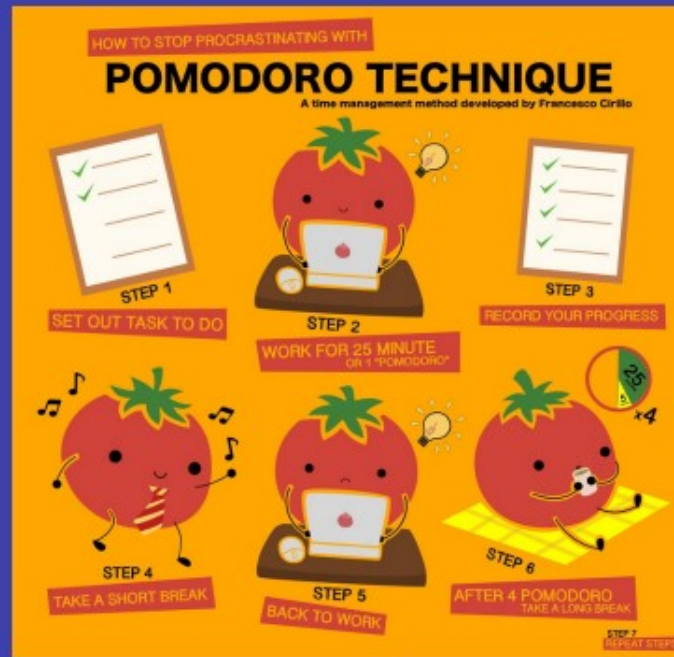
Pomodoro technique



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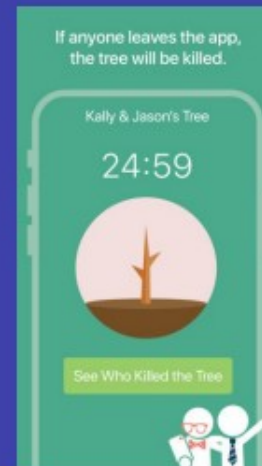
Infographic





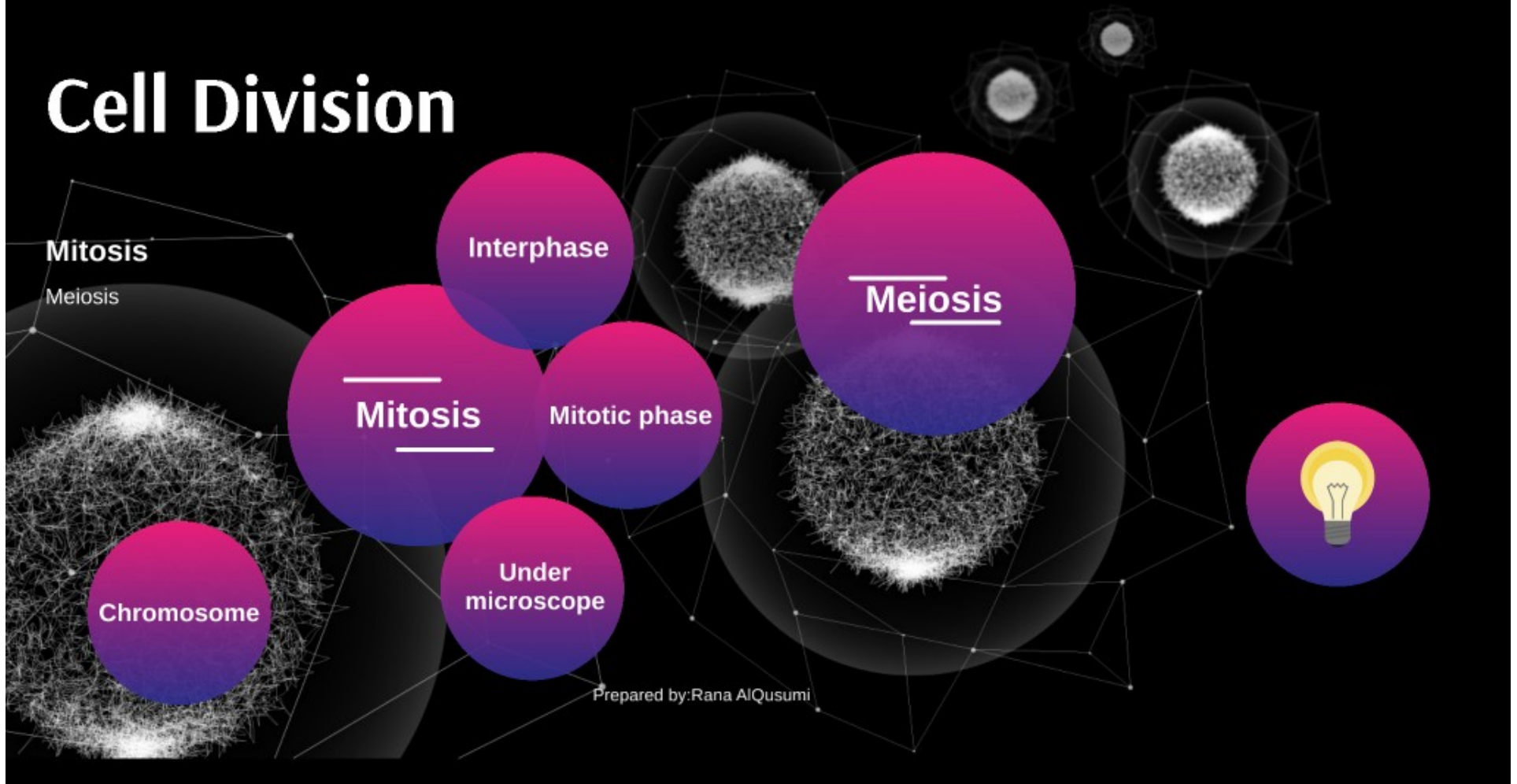
Prepared by:Rana AlQusumi

Flora



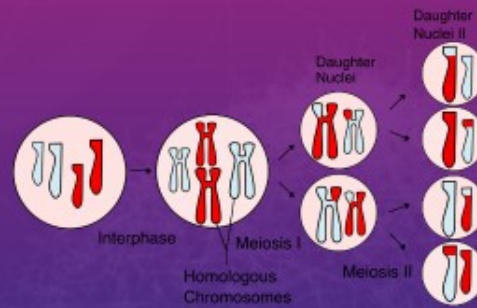
Prepared by: Rana AIQusumi

Cell Division



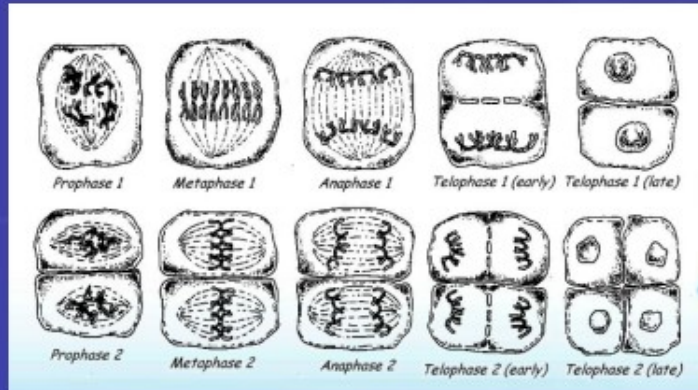
Meiosis

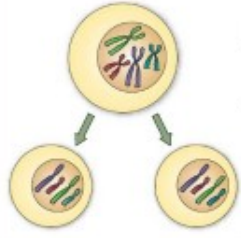
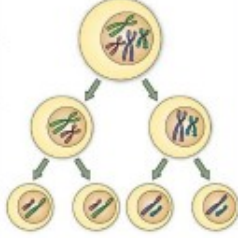
Occurs in sex cells
The result is four haploid(n) cells
The function of this division is :
1-Produce gametes



Meiosis

Mitosis
and
Meiosis



MITOSIS		MEIOSIS	
	Produces genetically identical cells	Produces genetically unique cells	
	Results in diploid cells	Results in haploid cells	
	Takes place throughout an organism's lifetime	Takes place only at certain times in an organism's life cycle	
	Involved in asexual reproduction	Involved in sexual reproduction	

Cell Division

