7-1 Life Is Cellular





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Hooke's Drawing of Cork Cells





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The cell theory states:

- All living things are composed of cells.
- Cells are the basic units of structure and function in living things.
- New cells are produced from existing cells.

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Prokaryotes and Eukaryotes

All cells:

- are surrounded by a barrier called a cell membrane.
- at some point contain DNA.



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- classified into two categories, whether they contain a nucleus.
- •a large membrane-enclosed structure that contains the cell's genetic material in the form of DNA.



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Eukaryotes are cells that contain nuclei.

Prokaryotes are cells that do not contain nuclei.



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Prokaryotic cells have genetic material that is not contained in a nucleus.

•do not have membrane-bound organelles.

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•generally smaller and simpler than eukaryotic cells.

Ex-bacteria



Eukaryotic cells contain a nucleus in which their genetic material is separated from the rest of the cell.

•generally larger and more complex than prokaryotic cells.

•generally contain dozens of structures and internal membranes.

•Many are highly specialized.

Ex-Plants, animals, fungi, and protists are eukaryotes.



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