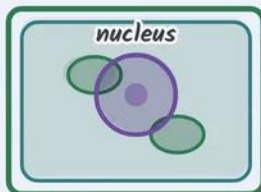


the cell's parts and their jobs, and the techniques that now edit what a cell does



The cell, and the two great divisions

- the cell theory : all living things are made of cells, the cell is the basic unit of life , and every cell arises from a pre-existing cell
- a prokaryotic cell has no true nucleus and no membrane bound organelles. Bacteria are the example
- a eukaryotic cell has a true nucleus enclosed in a membrane, and organelles each with their own membrane
- the nucleus holds the DNA and directs everything the cell does
- plant and animal cells are both eukaryotic , differing in a few parts rather than in kind
- the cell membrane is selectively permeable , letting some substances through and holding others back



cell wall + plastids

a plant cell in section: a rigid wall outside the membrane, plastids scattered in the cytoplasm, a large vacuole taking up much of the middle, and the nucleus set to one side by it