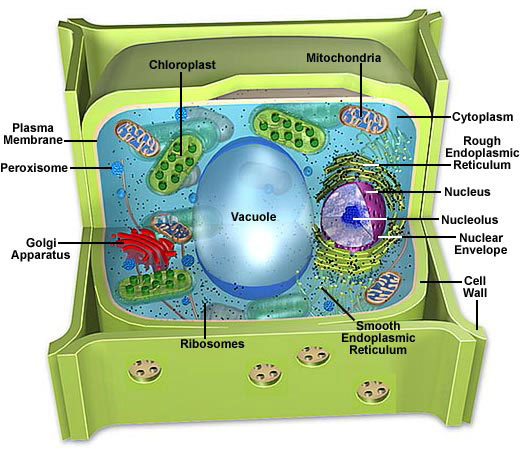
**Organelles**

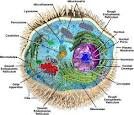
Today in Science class, Mr. Smith taught us about organelles.

Things I learned:

* ER stands for Endoplasmic Reticulum.
* The Cell Membrane acts as the cell’s gatekeeper.
* The Nucleus acts as the cell’s computer.
* The Mitochondrion acts as the cell’s power plant.
* The Endoplasmic Reticulum acts as the cell’s construction team and storage area.
* The Golgi Apparatus acts as the cell’s packing department.
* When you are sunburned, your capillaries are injured and blood leaks out of them.
* Cell Membrane:
  + Is the protective layer that covers the cell’s surface.
  + It acts like the fence around a yard. It is like the skin on your body. It keeps some things out and lets some things in.
  + Location:
    - Found in all cells
  + Description:
    - Plant – Inside cell wall
    - Animal – outer layer; cholesterol
    - Double layer of phospholipids with proteins
    - Selectively permeable
  + Function:
    - Support
    - Protection
    - Controls movement of materials in/out of cell
    - Barrier between cell and its environment
    - Maintains homeostasis
* Cell Wall:
  + Gives support to the cell
  + Is a second layer or “fence” like the cell membrane.
  + Location:
    - Plant, Fungi, and Bacteria, but not animal cells
  + Description:
    - Outer layer
    - Rigid and strong
    - Made of cellulose
  + Function
    - Support (grow tall)
    - Protection
    - Allows H2O, O2,, CO2 to diffuse in and out of cell
* Nucleus:
  + An Organelle inside of the cell that directs the activity in the cell.
  + It holds the DNA (Deoxyribonucleic acid)
  + This is the blue print material (directions) for the cell.
  + It tells how to reproduce and perform all of the cell jobs.
  + Location:
    - All cells except prokaryotes
  + Description:
    - Large, oval
    - May contain 1 or more nucleoli
    - Holds DNA
  + Function
    - Controls cell activities
    - Contains the hereditary material

Plant Cell



Animal Cell