**Cell Parts 2**

Today in Science class, Mr. Smith taught us about more cell parts

Things I learned:

* Endoplasmic reticulum:
  + A folded membrane that moves material in the cell
  + ER is part of the internal delivery system and uses tubes for passageways.
  + ER is additionally responsible for moving proteins and other carbohydrates to the Golgi Body.
  + Location:
    - All cells except prokaryotes
  + Description:
    - Network of tubes or membranes
    - Smooth w/out ribosomes.
    - Rough with embedded ribosomes
    - Connects to nuclear envelope and cell membrane
  + Function:
    - Carries materials through cell
    - Aids in making proteins
* Golgi Body:
  + Consisting of flat, disk-shaped sacs, tubules, and vesicles
  + Stacks of sacs that package and move proteins around in the cell.
  + Locations:
    - All cells except prokaryotes
  + Description:
    - Stacks of flattened sacs
  + Function:
    - Modify proteins made by the cells
    - Package and export proteins
* The great, slowly rotating, pulsating galaxy that is the Golgi apparatus that so bored you in school. This is where the above proteins are headed to be processed, modified, marked and put into their appropriate vesicles. Delivery to any one of a multitude of destination is by kinesin express.
* Mitochondria:
  + The organelle that releases energy in the cell.
  + Mitochondria produce ATP using energy stored in food molecules.
  + Location:
    - All cells except prokaryotes
  + Description:
    - Peanut shaped
    - Double membrane
    - Outer membrane smooth
    - Inner membrane folded into cristae
  + Function:
    - Breaks down sugar molecules to release energy.
    - Sit of aerobic cellular respiration.