1. Cell membrane
   1. It has a phospholipid bylayer made of proteins that are the gate keepers of the cell
      1. Decides what material is allowed in and out of the cell
   2. Cell support
   3. Protects the cell
2. Nucleus
   1. Also made of a phospholipid bilayer
   2. Contains all the genetic material
   3. Controls the cells activities
3. Endoplasmic reticulum
   1. Has a large surface area
   2. Two parts
      1. Rough endoplasmic reticulum
         1. Ribosomes are attached here and helps produce proteins
      2. Smooth Endoplasmic Reticulum
         1. Carbohydrate and lipid synthesis
         2. It is an area that is in-between for the vesicles that transports ER products to other parts of the cells.
         3. Produces enzymes that detoxes certain compounds
4. Cytoplasm
   1. Supports and protects the cell and its organelles
5. Ribosomes
   1. Attached to the rough endoplasmic reticulum and help in producing proteins
6. Mitochondrion
   1. Breaks down sugars for energy
   2. Aerobic cellular respiration occurs here
7. Vacuole
   1. Stores food, water and wastes
8. Lysosomes
   1. Large food molecules are broken down here into smaller molecules
   2. Old cell parts are digested here
9. Nucleolus
   1. Makes the ribosomes to go on to the rough endoplasmic reticulum
10. Golgi Apparatus
    1. Takes the proteins from the cell and modifies them for different jobs
11. Centrioles
    1. Separates chromosomes pairs during mitosis
12. Cytoskeleton
    1. Helps the cell maintain its shape and strength
    2. Moves organelles in the cell