

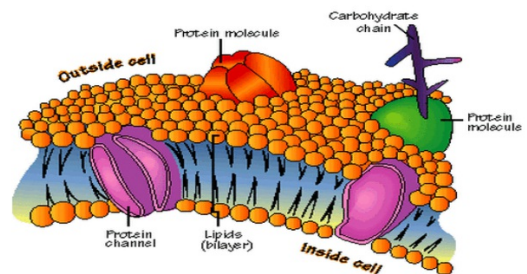
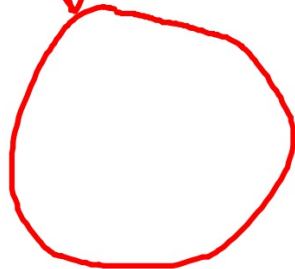
Goal 1.1.1 - Cell Organelles

Cell Membrane

Function: controls what enters and leaves the cell

Found Where? ALL cells

Sketch:



<http://www.youtube.com/watch?v=ZK6YP1Smbxk>

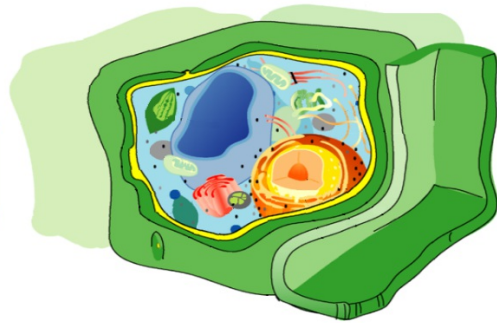
Goal 1.1.1 - Cell Organelles

Cell Wall

Function: supports and protects the cell

Found Where? PLANTS and BACTERIA

Sketch:



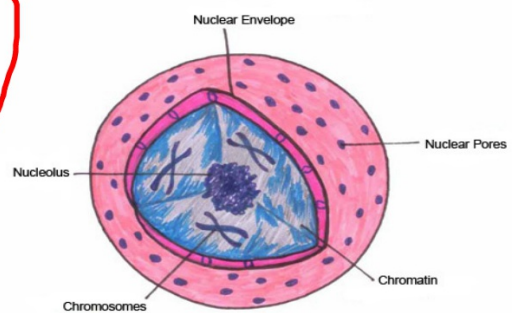
Goal 1.1.1 - Cell Organelles

Nucleus

Function: controls the cell; holds the DNA

Found Where? PLANTS AND ANIMALS

Sketch:



Cell Nucleus Diagram

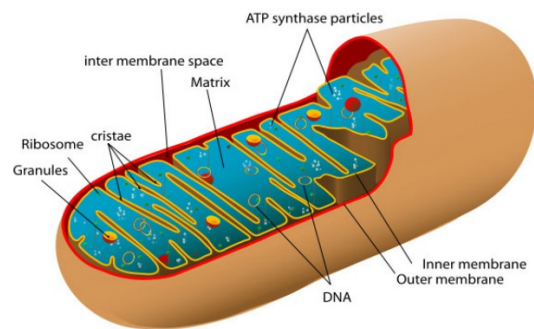
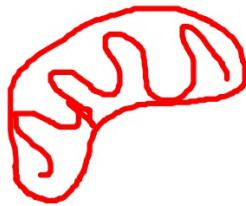
Goal 1.1.1 - Cell Organelles

Mitochondria

Function: powerhouse of the cell;
makes ATP (energy)

Found Where? PLANTS and
ANIMALS

Sketch:



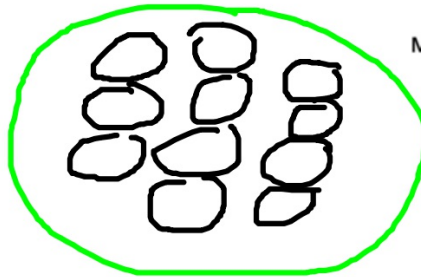
Goal 1.1.1 - Cell Organelles

Chloroplast

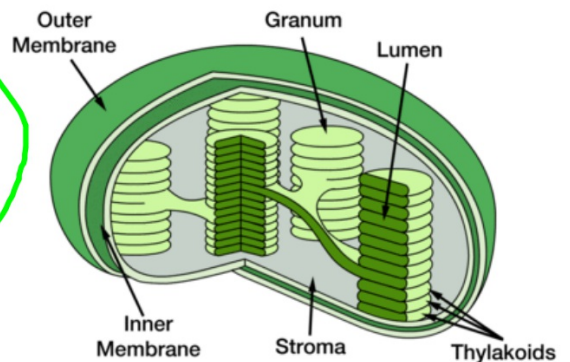
Function: site of photosynthesis

Found Where? PLANTS only

Sketch:



Chloroplast



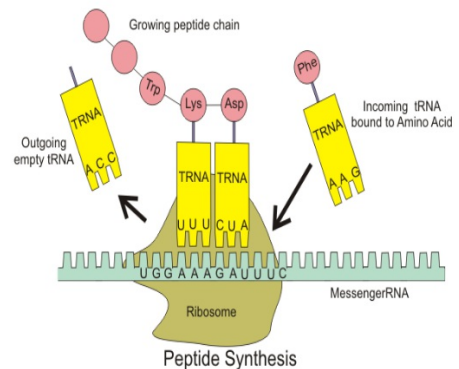
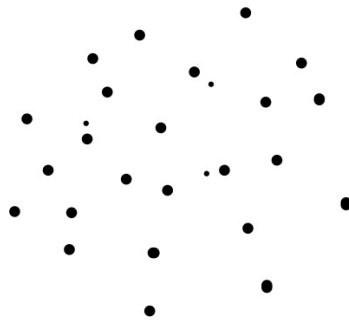
Goal 1.1.1 - Cell Organelles

Ribosome

Function: make proteins
(protein synthesis)

Found Where? ALL cells

Sketch:



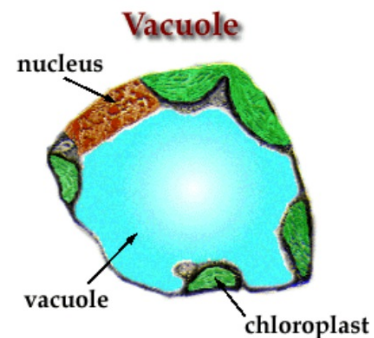
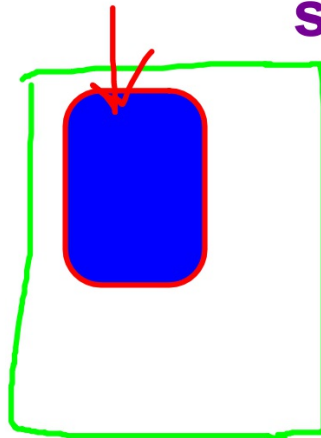
Goal 1.1.1 - Cell Organelles

Vacuole

Function: stores water and nutrients

Found Where? large in PLANTS and small in ANIMALS

Sketch:



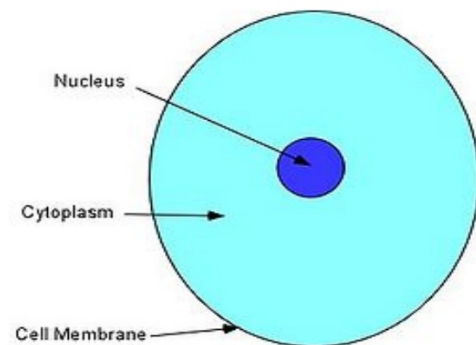
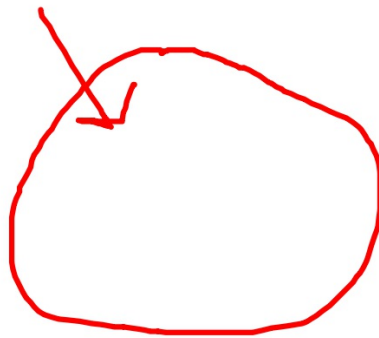
Goal 1.1.1 - Cell Organelles

Cytoplasm

Function: fluid filled space; site of all activities

Found Where? ALL cells

Sketch:



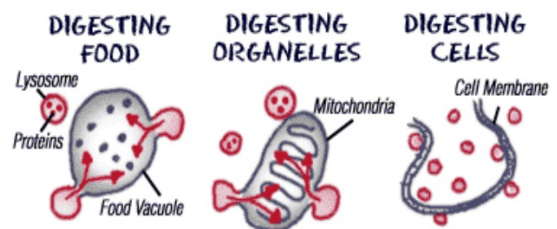
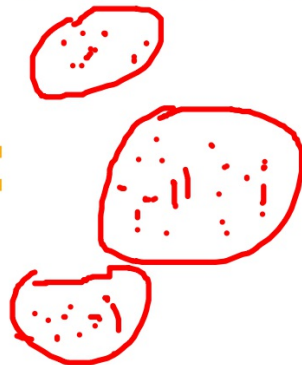
Goal 1.1.1 - Cell Organelles

Lysosome

Function: contain digestive enzymes to break down food and old cell parts

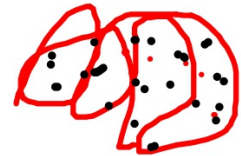
Found Where? ANIMALS and PLANTS

Sketch:



Endoplasmic Reticulum (ER)

-transports proteins



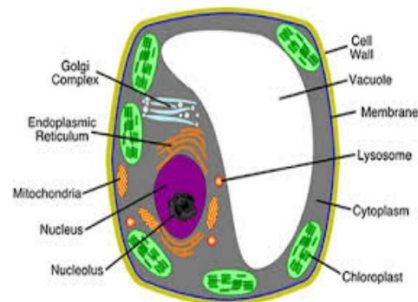
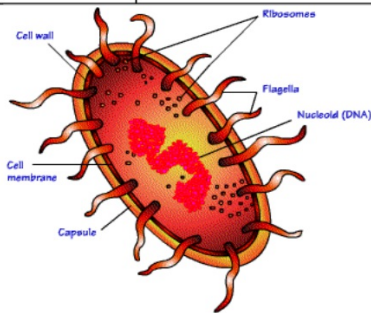
Golgi - packages proteins



Goal 1.1.1 - Cell Organelles

<http://www.youtube.com/watch?v=ZK6YP1Smbxk>

Structures Found in ALL Cells	
Organelle	Function
DNA	Organized as chromosomes ; DNA directs the cell activities
Cytoplasm	The fluid of the cell and is made up of 90% water ; water provides the necessary environment for all the chemical reactions the cell needs
Ribosomes	Organelles that are the site of protein synthesis; proteins are essential for enzymes , structure, and communication
Cell Membrane	aka: the plasma membrane; composed of a phospholipid bilayer; it is selectively permeable (regulates what enters and leaves the cell); helps maintain homeostasis



<http://www.youtube.com/watch?v=-zafJKbMPA8>
Goal 1.1.1 - Cell Organelles

Structures Found in Eukaryotic Cells		
Organelle	Function	Draw It
Nucleus	Contains the <u>DNA</u>	
Mitochondria	Site of <u>cellular</u> <u>respiration</u> ; produces <u>ATP</u> (for energy); contains folded membranes which INCREASE <u>SURFACE AREA</u>	
Vacuole	Stores <u>food</u> and <u>water</u>	
Lysosomes	Contains digestive <u>enzymes</u> which digest food contained in vacuoles as well as damaged cell parts	
Endoplasmic Reticulum (ER)	A series of folded membranes that modify <u>proteins</u> , detox alcohols, and function in <u>communication</u>	
Golgi Apparatus	<u>packages</u> materials for export from cells	
Chloroplasts	Found only in <u>PLANT</u> cells; full of chlorophyll; site of <u>photosynthesis</u>	
Cell Wall	Found only in <u>PLANT</u> cells; provides <u>support</u> , protection, and <u>shape</u> for the cell; found <u>outside</u> of the cell membrane; made of <u>cellulose</u>	
Centrioles	Found only in <u>ANIMAL</u> cells; help with cell <u>division</u>	