


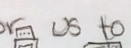


Nucleus - The mom and dad because they are in charge of everybody. 

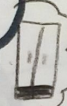
Cell wall - the walls because they are providing support for the house and privacy.


Cell Membrane - the doors because they allow you to walk in and out of a room. 


Mitochondria - the furnace because it is using energy to heat the house. 


Chloroplast - the oven and microwave because they bake the food for us to eat. 


Cytoplasm - the boards that hold the house together.

Vacuole - the cabinet and fridge because they store our food. 

Endoplasmic Reticulum (ER) - the people because they all make their beds. 

Lysosome - the bathroom because that's where all the waste goes. 

Ribosomes - the blender because you can make protein shakes with it. 

Golgi Body - the mail room because that is where you get your mail and ship mail from. 

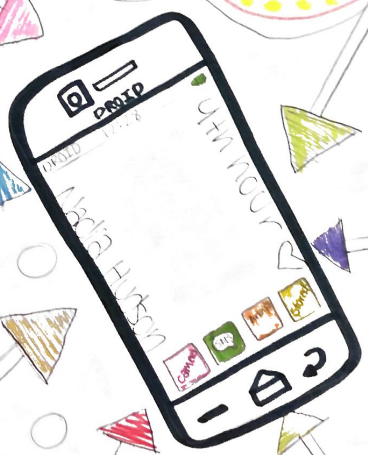


PHONE CELL analogy - DROID

cytoplasm: holds everything together.
 golgi body: packages - ships molecules to move around the cell.
 cell wall: provides support for plant cells.
Nucleus: Controls the functions of the organelles contains genetic material.
 Mitochondria: make energy for the cell.
 cell membrane: allows things in and out of a cell.
 ER: rough or smooth proteins - ribosomes - smooth or makes lipids.
 Lysosome: breaks down materials and digests cell waste.
 Vacuole: stores food, water, waste for a cell.
 Ribosomes: make proteins.
 Chloroplast: uses sun to make food. ONLY in plant cells.

DEFINITIONS

- Matching Game
- | | | | | |
|-----------------|---|----------|------------------|---------------------|
| ① cytoplasm | A | ① screws | A | ⑧ uninstalling apps |
| ② golgi body | J | ② B | Mitochondria | ⑨ folders |
| ③ cell wall | F | ③ C | texting | ⑩ trapping/slicing |
| ④ Nucleus | D | ④ D | motherboard | ⑪ K |
| ⑤ Mitochondria | B | ⑤ E | editing pictures | arby's app |
| ⑥ cell membrane | C | ⑥ F | screen | ⑦ G |
| ⑦ ER | G | ⑦ G | decorating | |
| ⑧ lysosome | H | | | |
| ⑨ vacuole | I | | | |
| ⑩ Ribosomes | E | | | |
| ⑪ chloroplast | K | | | |



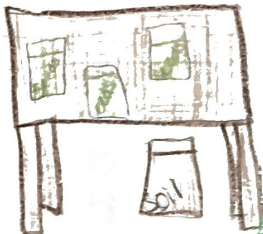
- ① **Cytoplasm: Screws** because they hold the phone together.
- ② **Golgi Body: Tapping/sliding** because your moving things.
- ③ **Cell wall: screen** because it supports the motherboard and insides of a Droid phone.
- ④ **Nucleus: motherboard** because it controls the functions of the phone.
- ⑤ **Mitochondria: phone charger** because it gives the phone extra energy.
- ⑥ **Cell membrane: Text messages** because they have your phone to some else's.
- ⑦ **ER: Decorating** because your making the phone look new and making new things.
- ⑧ **Lysosome: uninstalling Applications** making things vanish.
- ⑨ **Vacuole: folders** because they store everything for the phone.
- ⑩ **Ribosomes: editing pictures** because your making/hanging things.
- ⑪ **Chloroplast: arby's application** because this is a food application for the phone.

STEM

Fertilizer
Grow Your Garden

Yokote - the garden bin is like the yokote because it stores all of the supplies for the garden.

Garden tools



Decompose box

Yokote - The decom. box is like the lysosome because it breaks down all of the waste.

Mitochondria - the sun because it makes energy for the plants.

Chloroplast - the fertilizer is like food for plants.

Fresh lettuce



Endoplasmic Reticulum - All of the plants has photosynthesis going on in them which provides food for them.

Fresh Peppers

Enzyme bin - seeds because it provides proteins for the garden.



Nucleus - the whole garden is like the nucleus because most of the plants control their own functions.

Golgi body

The planter pots are similar to the Golgi body because the pots in a body place all the things and the pots are able to be moved around.

Flowers



The fence is also like the cytoplasm because it holds everything in together.

Yokote

The gate is like the cell membrane because it is where people go in and out of the garden.

Fence - (cell wall) - keeps animals and unwanted things from coming in the garden.
Rachael Davis

Cell Organelle Analogy: iPhone

Power button is like the cell membrane. A cell membrane lets things in and out of a cell. The power button lets things in and out of the phone.

The service is like the Endoplasmic Reticulum (ER) because there is rough ER and smooth ER. Sometimes service can be smooth (fast) or rough (slow). Lysosome breaks down materials when you drop your phone it starts breaking down. It can break down slowly or right away.

The battery acts as the Mitochondria and so does the charging cord. The mitochondria makes energy and the battery is energy for your phone.

Some phone cases have a solar plate for charging. The solar plate is like the chloroplast. The chloroplast uses the sun to make food.

A phone case is very similar to the cell wall. The cell wall is support and protection for the cells. A phone case is to protect a phone.

The health app is similar to Ribosomes because they make protein and the health app counts and measures it.

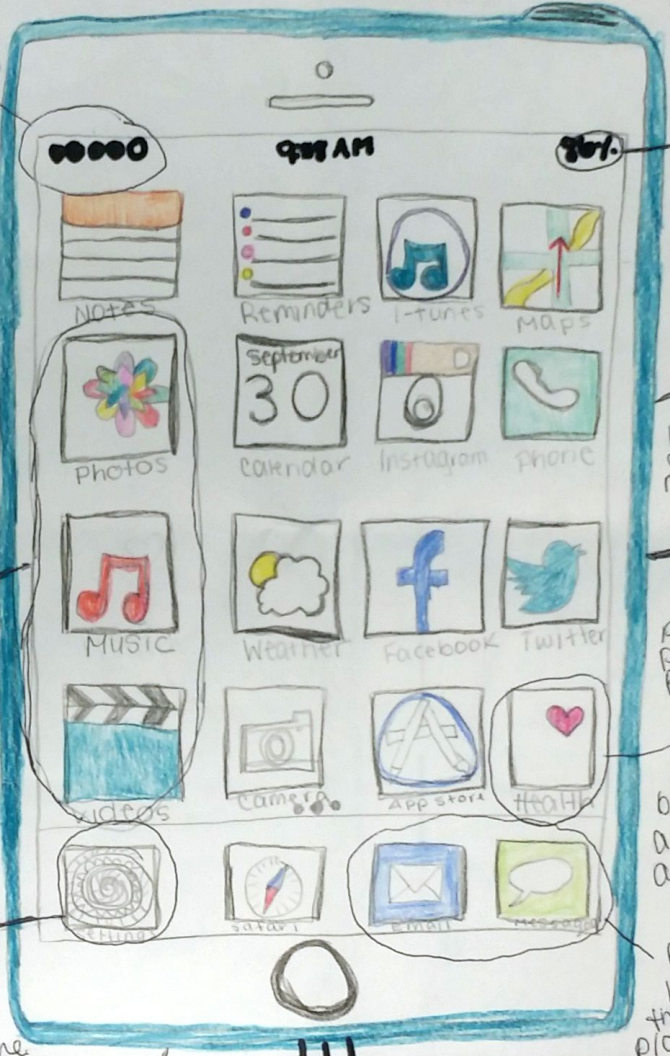
E-mail and messages is like the golgi body because the golgi body sends things places and that's what e-mail and messages does.

The videos, music, and photos resemble the vacuole because the vacuole stores things and so do these apps.

The nucleus is like settings, because the nucleus controls everything. Settings controls things in your phone.

The cytoplasm is like the plates and wires inside the phone because the cytoplasm holds everything together and so does the plates and wires.

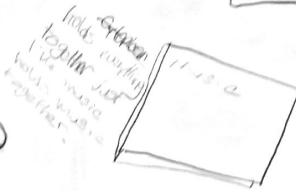
Charging cords are like Mitochondria as well as the battery percentage. (see battery percentage for explanation)



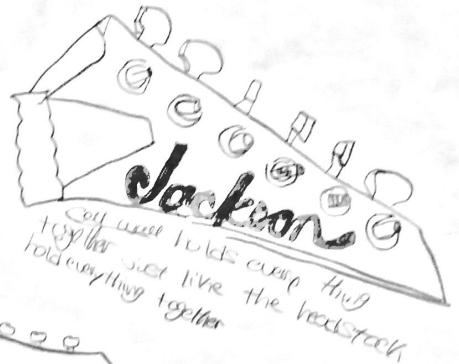
Shaun P



Lysolone breaks down material just like the fog wires of the He sweat on the guitar.



Holds everything together just like the wires in the guitar.

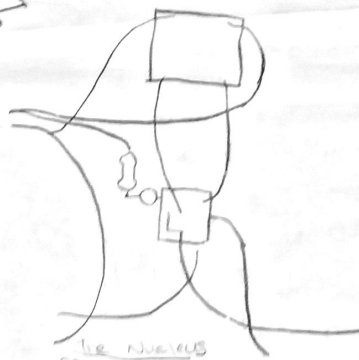


coil wire holds everything together just like the headstock

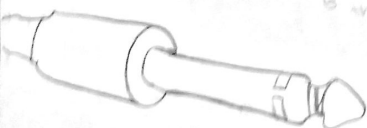


The body has a rough surface like the neck of the guitar.

The wood stores food just like the neck stores the wood.



The nucleus contains the genetic material just like you need the wires to play on an amp.



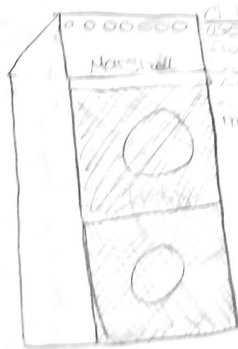
Pickups make Procters just like the pickup makes the electric.



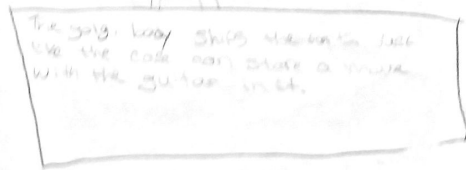
pickups make energy just like the pickup makes energy for the amp.



The coil wire brain allows things in and out just like the VHS allows things in and out of the guitar.



of the pick up the energy just like the Sun just like the energy uses energy from the atom.



The gig bag ship the guitar in just like the case can store a mouse with the guitar in it.