

Name: _____

SANFORD
RESEARCH

PROMISE

NOTES: ORGANELLES AND DISEASE

Disease: an _____ condition that prevents the body from working correctly

Diseases can be:

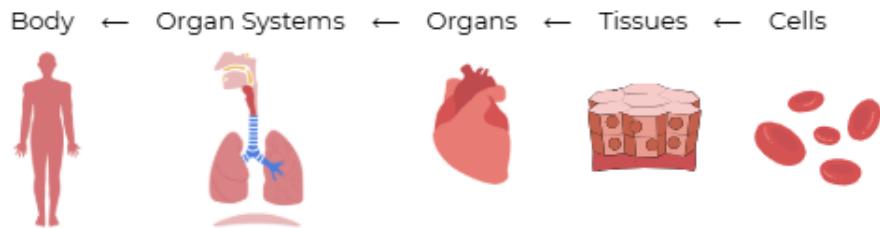
- _____ (long-term) or _____ (short-term)
- Mild or severe
- Treatable or untreatable
- _____ or _____

What are some ways we get diseases?

- _____
- _____ - contact with something not sterile or clean
- _____ - animals/organisms that carry the disease
- _____
- _____

Cell Theory

1. _____
2. _____
3. _____



Types of Organisms

- _____: multicellular organisms
 - Cells have organelles
 - Includes plants, animals, fungi, and protists
- _____: unicellular organisms
 - Cells do NOT have organelles
 - Includes bacteria and archaea

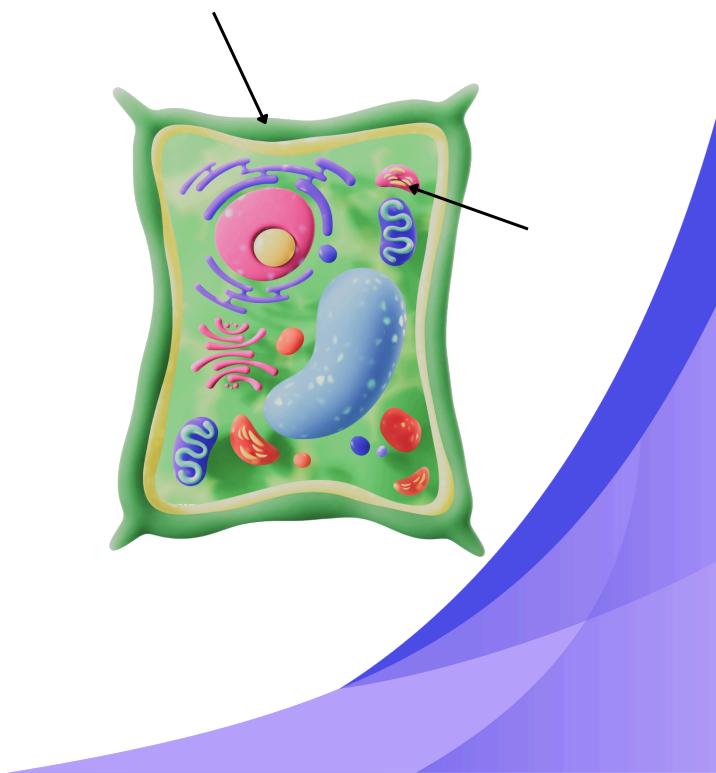
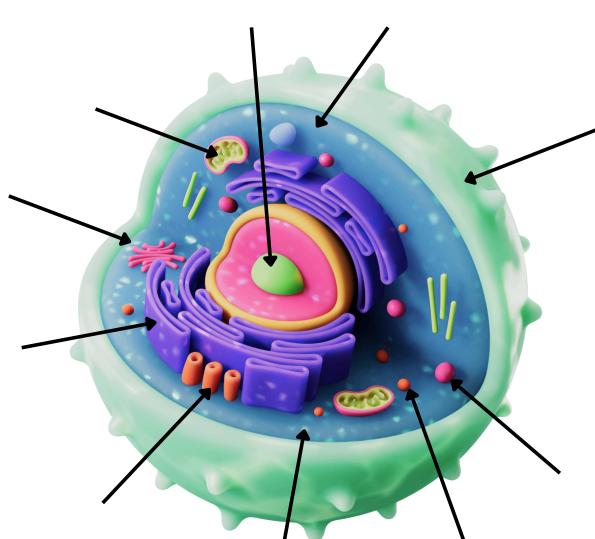
NOTES: ORGANELLES AND DISEASE

Organelles: What Makes Up a Cell?

_____ : small structure inside the cell that performs a job for the cell

- Cell membrane: _____ around the cell
- _____ : holds the DNA (genetic information)
- Mitochondria: produces _____ (energy) for the cell
- _____ : makes proteins
- Endoplasmic reticulum (ER)
 - _____ ER: makes lipids (fats)
 - _____ ER: makes proteins
- Golgi: _____ proteins for errors and _____ packages them up to be moved
- _____ : fluid inside the cell where the organelles are suspended
- _____ : “bubble-like” structures that transport materials around the cell
- _____ : degrade cell waste and harmful material
- Cilia: hair-like structure that controls movement of cells and things around cells, like in the respiratory tract
- Chloroplast: converts _____ into ATP for plants
- Cell wall: rigid outside layer that gives plants _____ and _____

Label the names of the organelles



NOTES: ORGANELLES AND DISEASE

Fill out your claim, evidence, and reasoning for which organelle is malfunctioning in each patient case.

John's Case

Claim:

Evidence:

Reasoning:

Beth's Case

Claim:

Evidence:

Reasoning: