

Vocabulary

oxygen part of the air needed for most plants and animals

organism a living thing that carries out basic life functions

cell the smallest unit of living matter

tissue a group of similar cells that work together

organ a group of similar tissues that work together

system a group of parts that work together

organ system a group of organs that work together

organism

word def... .

word " "

Explore Activity

Educated guess

Hypothesis: sometimes it is hard to tell if an object is living or nonliving. However, living things have certain parts in common
What might they be?

Explore Activity

Draw the onion plant.



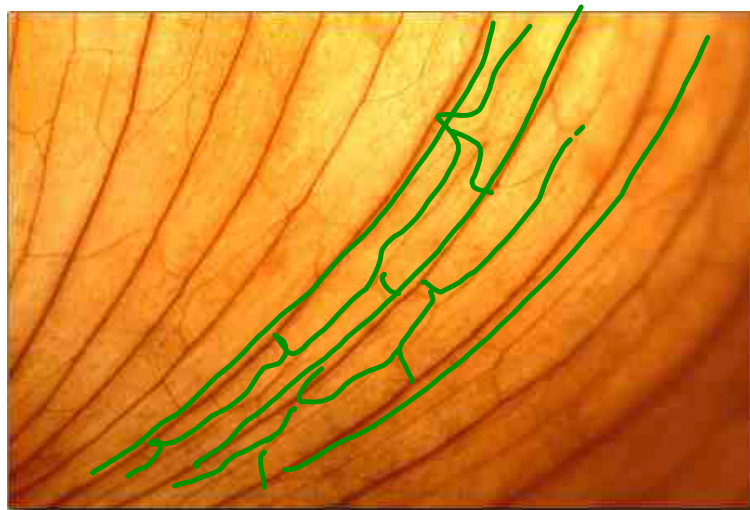
Explore Activity

Draw the open onion.



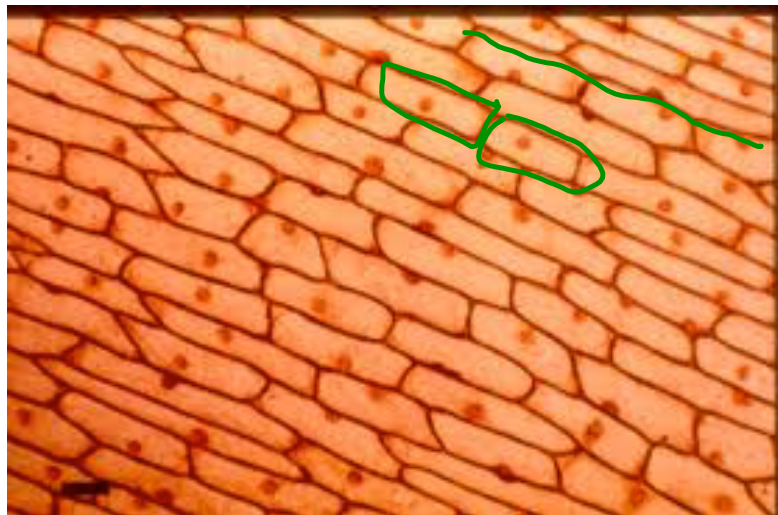
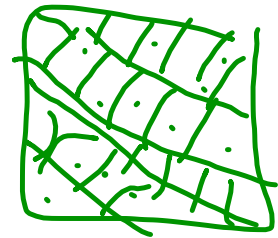
Explore Activity

Draw the onion skin



Explore Activity

Draw the cells of the onion.



Explore Activity

What do the parts of the onion plant appear to be made of?

Do you think you would see a similar picture if you viewed the plant's roots? How could you find out?

What makes something alive?

matter

Food

Water

Environment

Body

cells

Energy

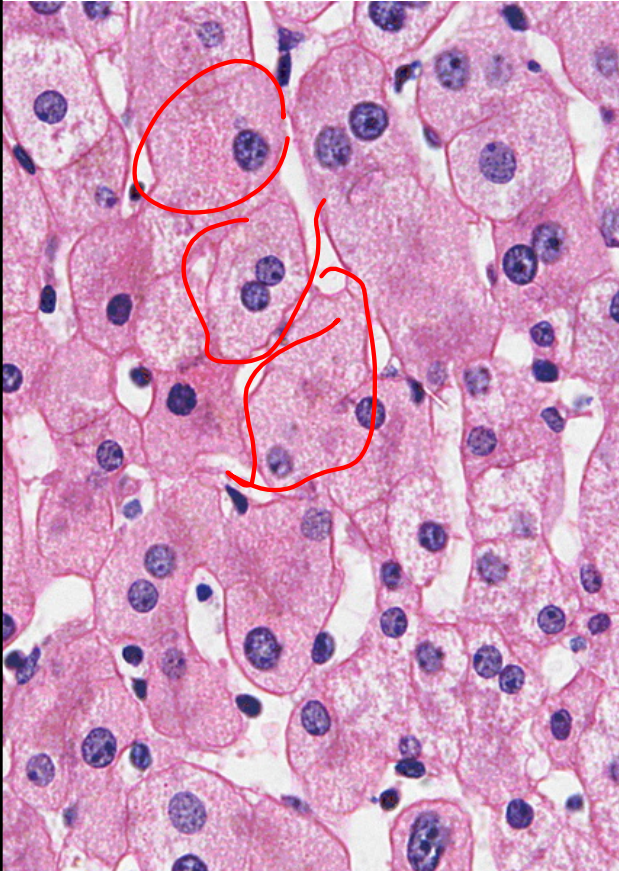
sun

oxygen

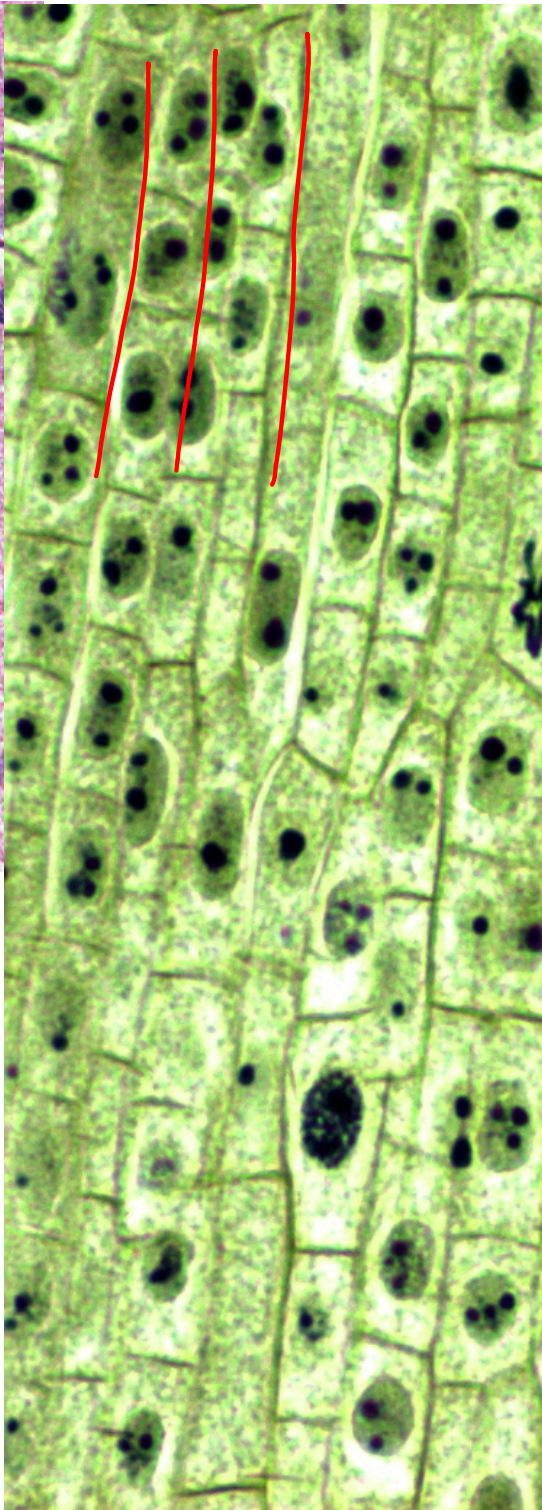
What are living things?

- 1 Living things grow and develop
- 2 Living things use energy and get energy from food.
3. Living things reproduce.
4. Living things respond to their environment.
5. Living things make waste.

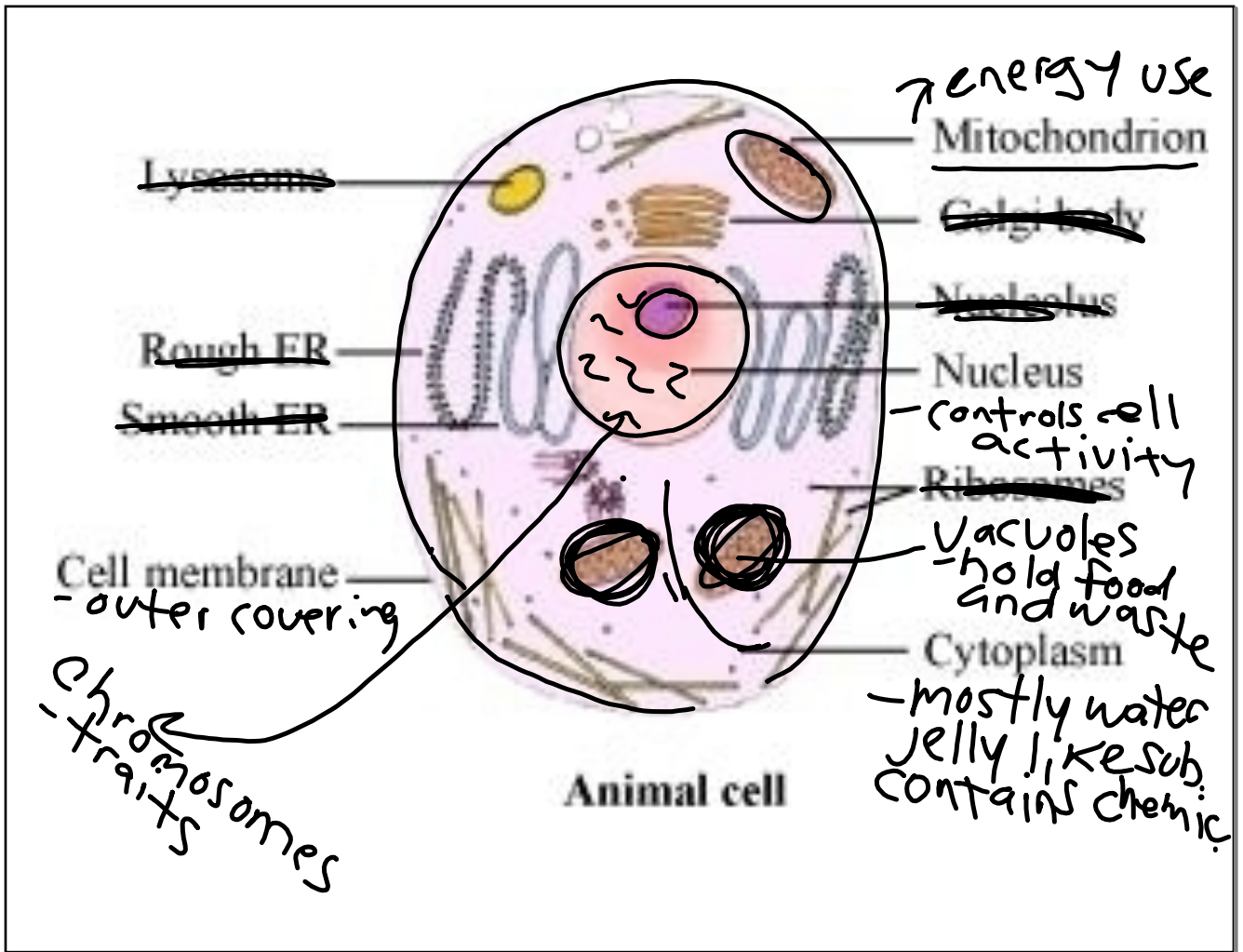
Animal Cells

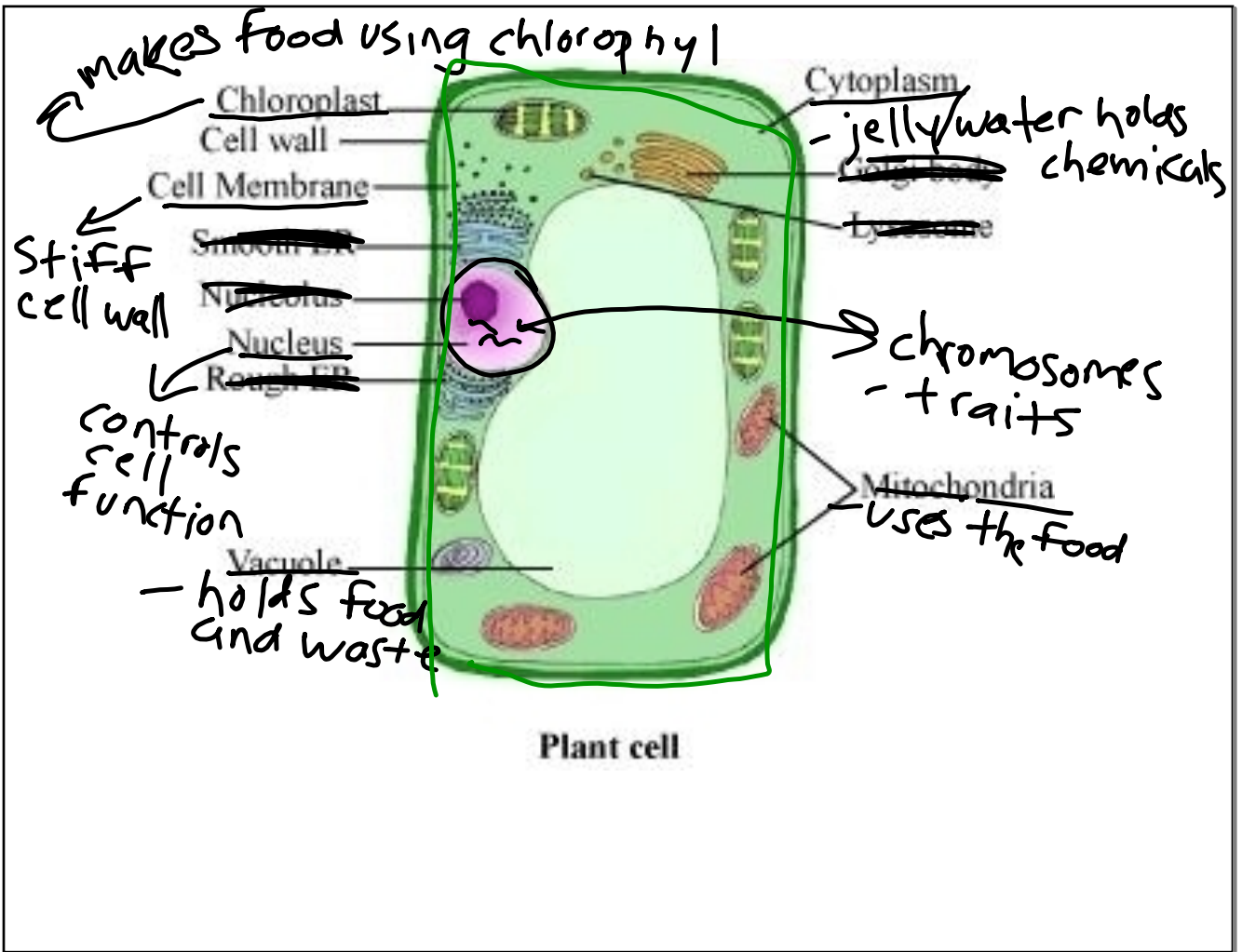


Plant Cells



What are two differences between animal and plant cells?





Plant vs Animal Cells

Covering plants have thick wall, animals have thin membrane

Color plant cells = green
animal cells = variety

Shape plant = box like
animal = circular

What two parts does a plant cell have that an animal cell doesn't?

Why can plants make their own food but animals can't?

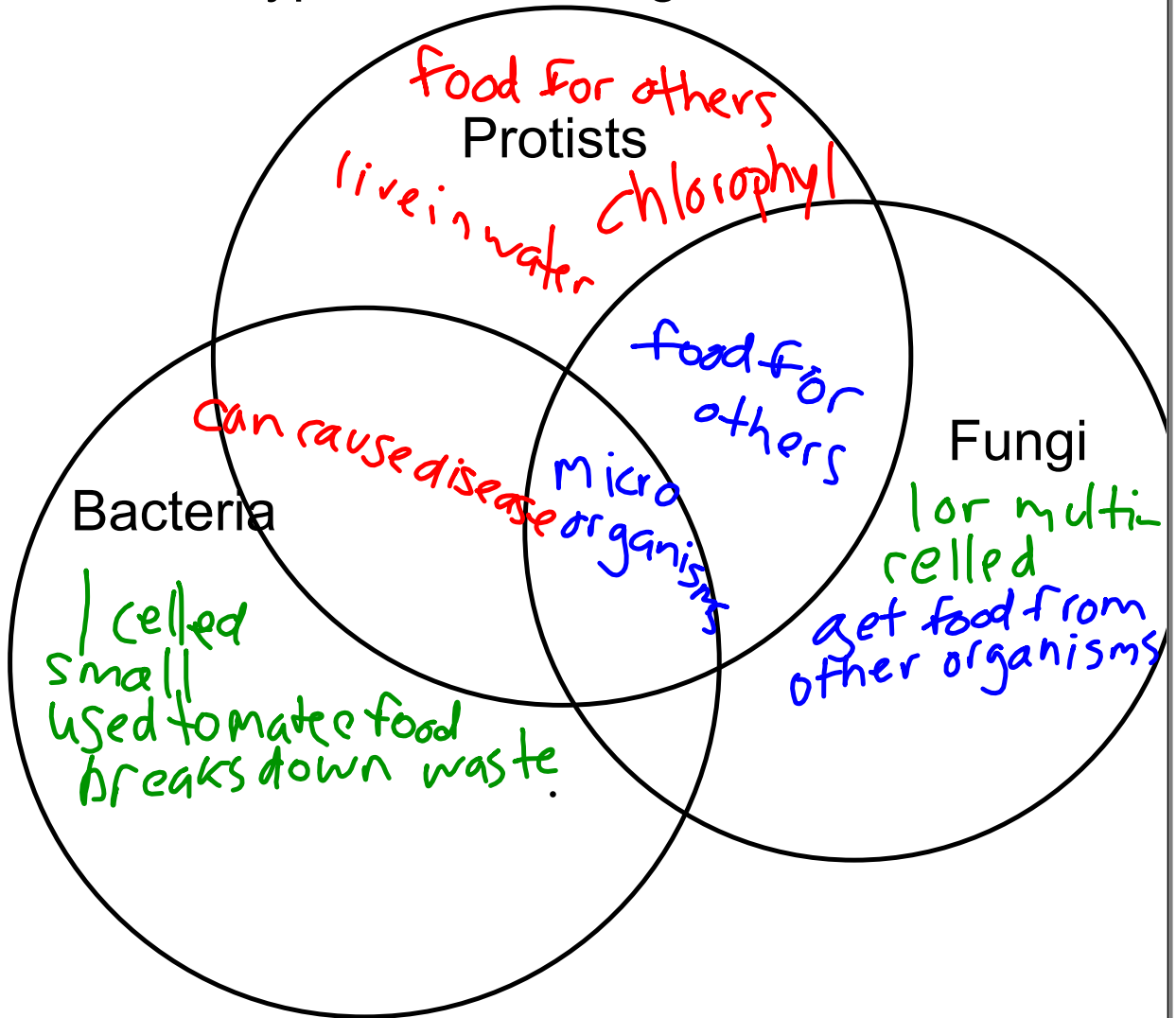
Microorganisms

A **microorganism** or microbe is **an organism** that is **so small** that it is microscopic (**invisible to the naked eye**). **Microorganisms** are often illustrated using **single-celled**, or unicellular organisms; however, some unicellular protists are visible to the naked eye, and some multicellular species are microscopic.

microorg.- single celled, too small to see

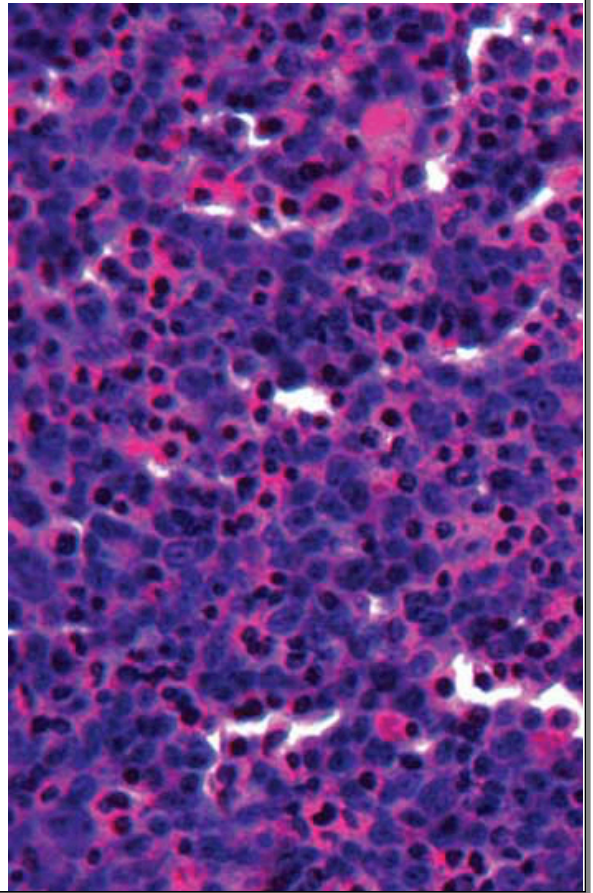


Types of Microorganisms



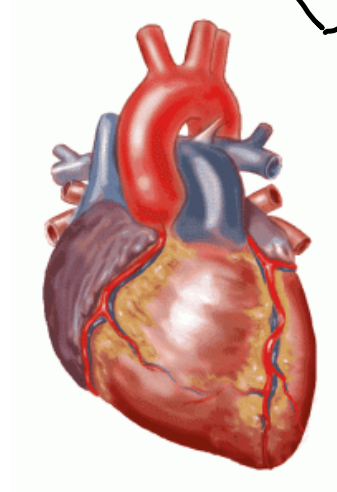
Tissues

- cells work in groups
- tissue is a group of cells carrying out a similar job



Organs

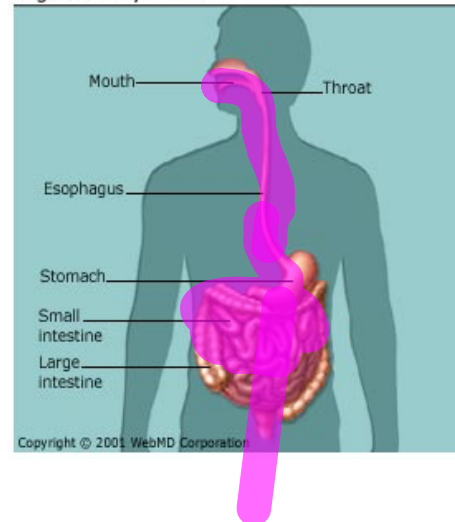
- groups of tissues
- work to do a job

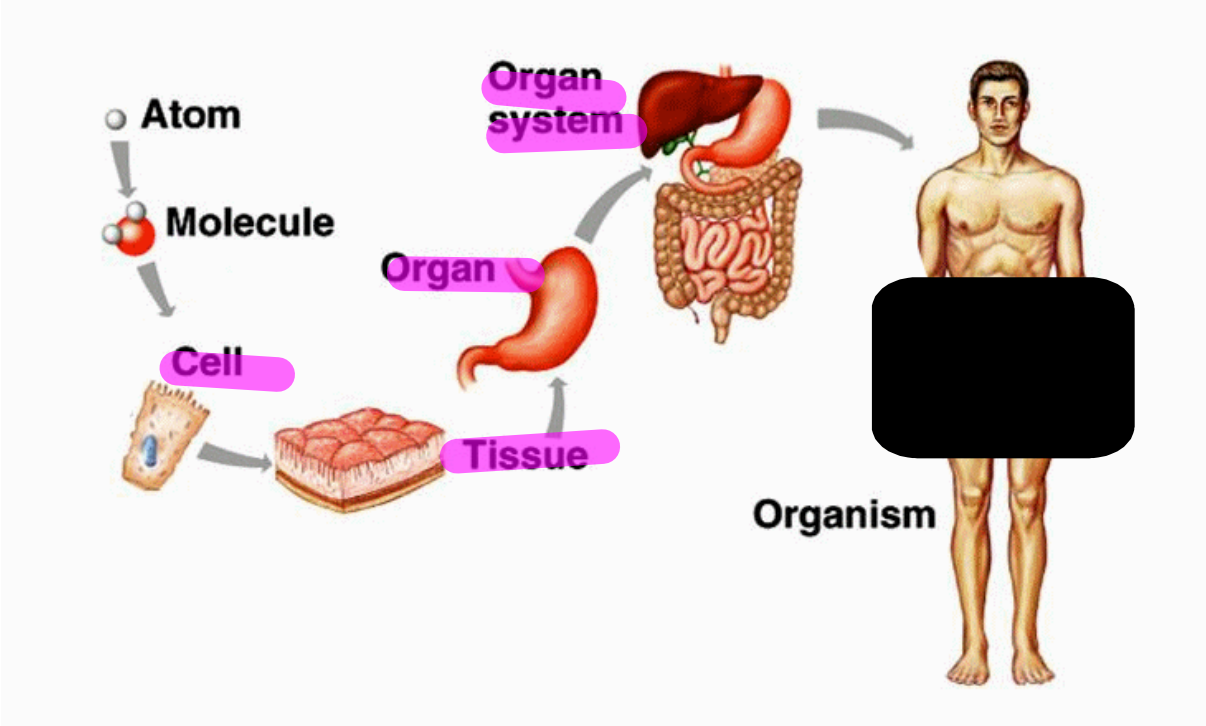


Organ System

- groups of organs
- work to perform a life function

Digestive System





Viruses

- viruses are smaller than cells
- not a cell
- not living
- does not make or use food
- only reproduces



What are tissues, organs and organ systems?

Is a virus living or nonliving?

1. Name any two living things. How do you know they are living?
2. The word organism and organ system both contain the word organ. Why?
3. What are some different kinds of microorganisms?
4. How would a model of a plant cell be different than a model of an animal cell?
5. Do you think viruses are a kind of microorganism? Explain

