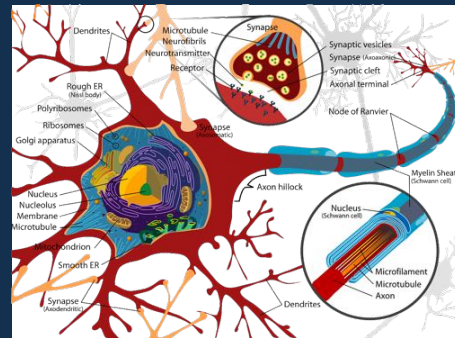
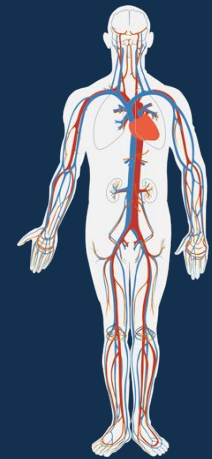


Cell Organization - Cells, Tissues, Organs and Systems

- Cells
- Cities vs. Living things
 - What do they have in common?
- Cellular Organization
- Specialized Cells
 - ✓ Muscle Cells
 - ✓ Nerve Cells
- Tissues
- Organs
- Organ Systems



TeachWithFergy

Preview File

Please enjoy this preview of your Student Version of the lesson. I've created this PDF for ease of viewing and to decrease the file size but of course, your lesson will be in PowerPoint format.

- Some slides appear blank because they have been removed.
- Student versions have portions of the text removed which is given in the teacher version and appear as _____
- Other slides may have on them, this represents writing that has been removed.

Cells

Recall:

- Cells make up all living things from simple bacteria or complex humans and plants
- _____

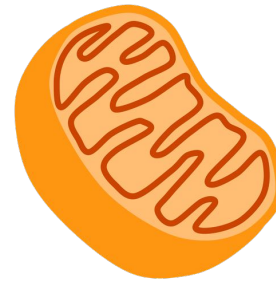


What do these two things have in common?



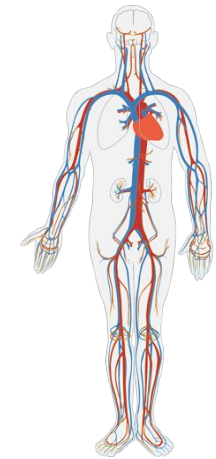
Both Require ...

- Energy



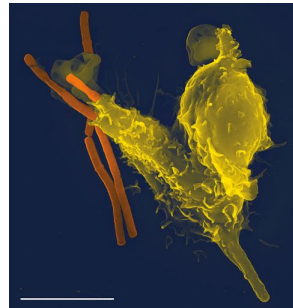
Power Plants

- A Transportation System



- _____

- A Police Force

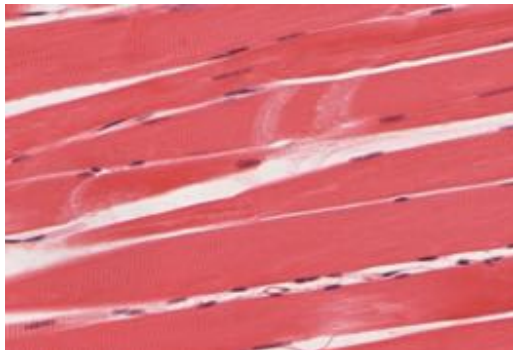


WBC eating a Bacteria

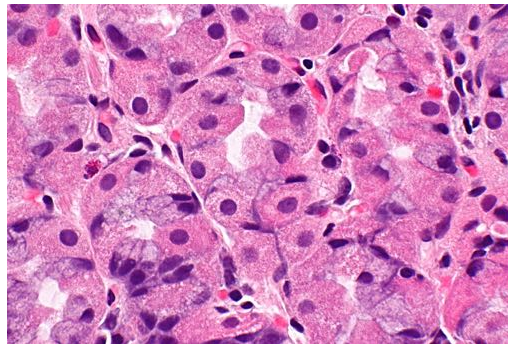


Cell Organization

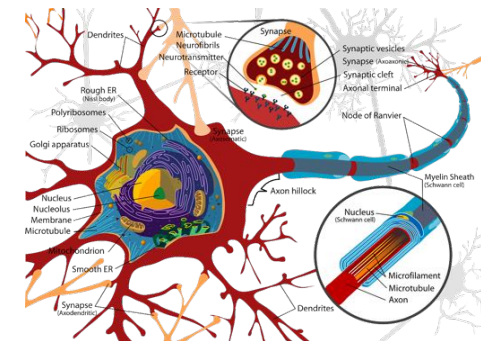
- Since multicellular organisms so complex, we need to have cells that just do certain things



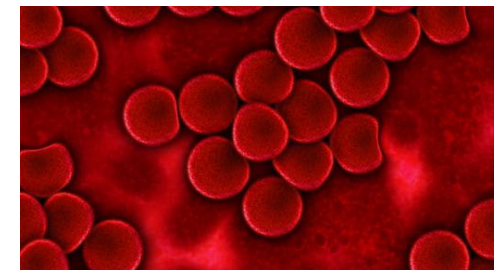
A group of muscle cells



Stomach cell



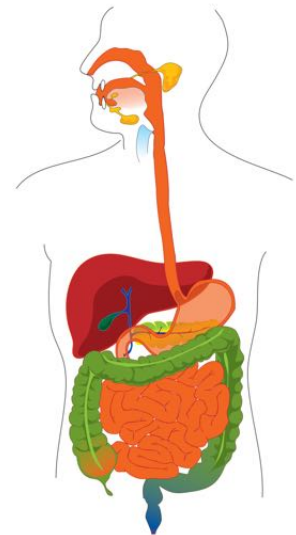
Nerve cell



Red Blood cells

Cell Organization: Least to Most Complex

- Cell – Basic unit that performs a certain function (e.g. skin cell)
- _____
- Organ – One or more different tissue types working together (e.g. stomach)
- Organ System – A group of organs working together (e.g. digestive system)
- Organism – Many different organ systems working together (e.g. a person)



Specialized Cells

- Each cell type in your body is meant to do a certain thing really well
- The combination of all these cells working together, produce a living organism

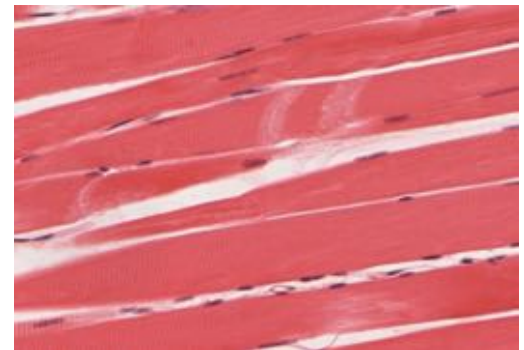
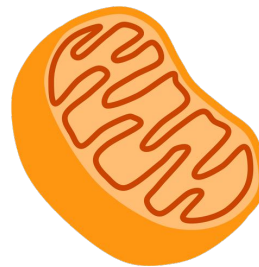


**IN SLIDESHOW MODE,
CLICK THE IMAGE TO SEE
HOW VIDEOS ARE
EMBEDDED INTO YOUR
LESSONS**

Muscle Cells

- Muscle cells use a lot of energy
- To make this energy, they contain a lot of mitochondria

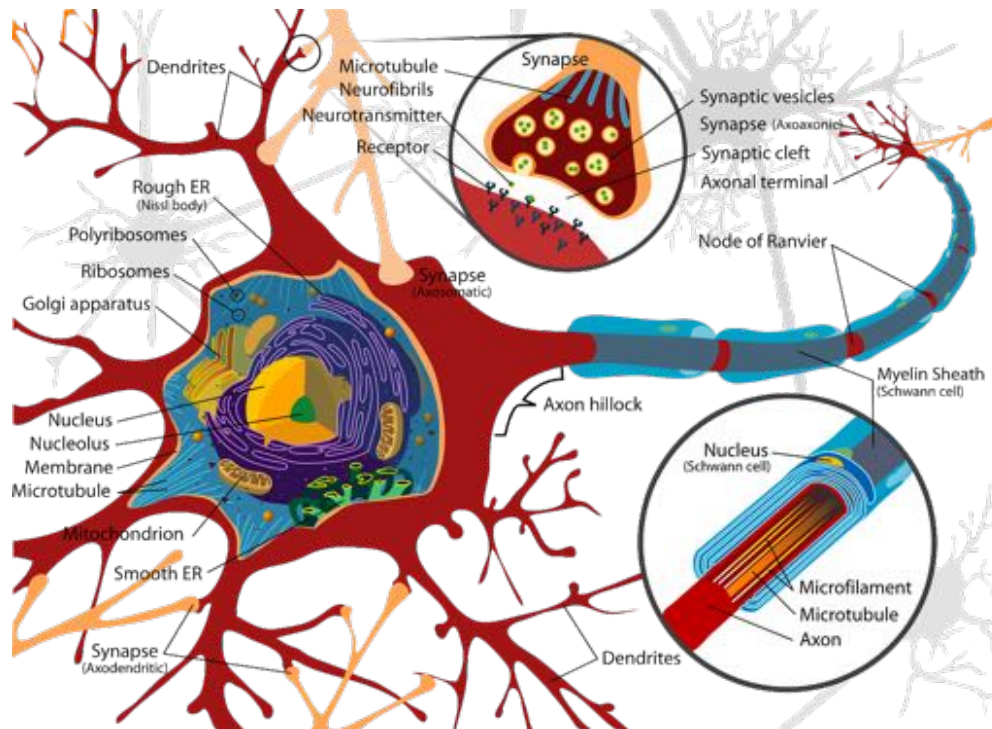
—



A group of muscle cells

Nerve Cells

- Nerve cells or neurons are used to send signals around the body using electricity
- The way they are formed, allows them to do this



**IN SLIDESHOW MODE,
CLICK THE IMAGE TO SEE
HOW VIDEOS ARE
EMBEDDED INTO YOUR
LESSONS**

Tissues

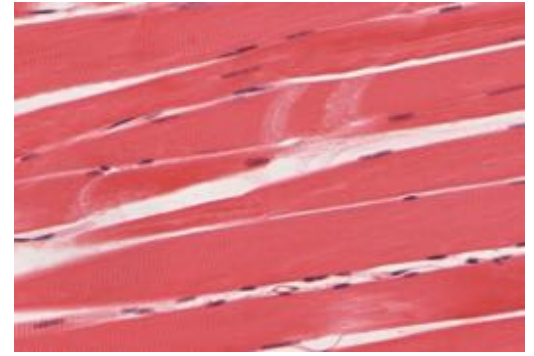
There are 4 major types of tissues

1) Epithelial Tissue – Skin, Lining of Organs

2) _____ –
Bone, Tendons, Blood

3) Muscle Tissue – Cardiac, Skeletal, Smooth

4) _____

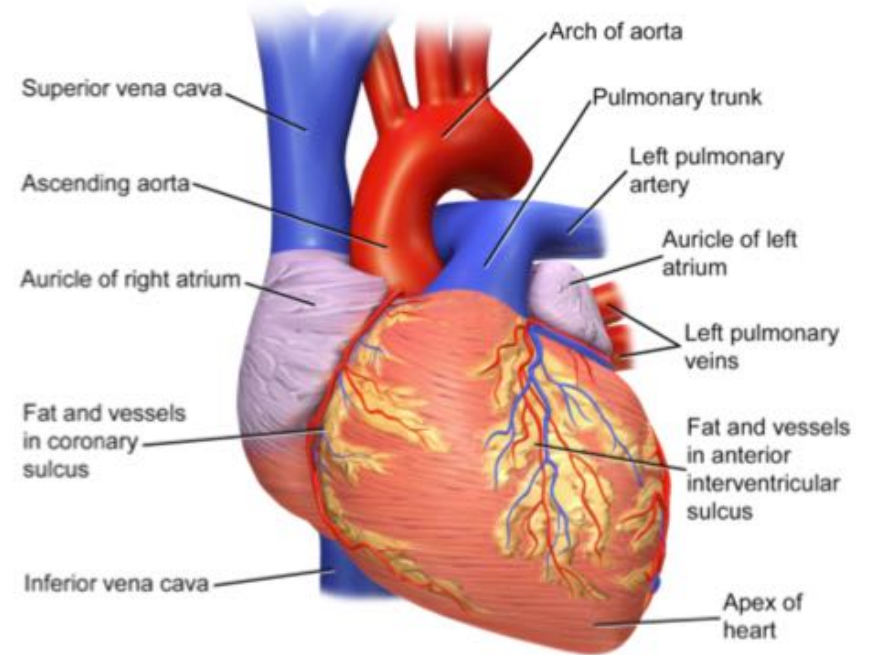


Muscle Tissue



Organs

- _____
- E.g. The heart contains muscle, nerve, epithelial and connective tissue

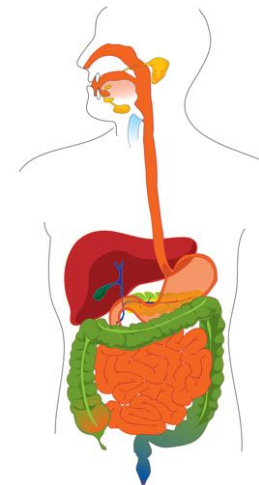
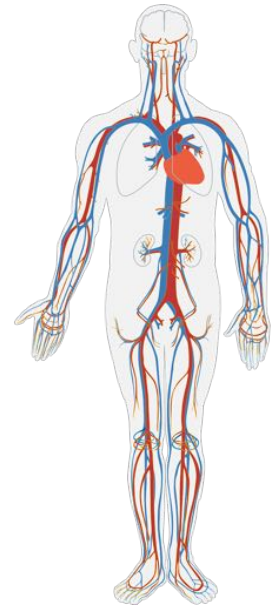


Organ Systems

- _____

Examples Include:

- Circulatory System
 - Your heart, blood vessels and blood work together to transport oxygen around your body
- Digestive System
 - Your stomach, esophagus and intestines break down (digest) food



**THIS VIDEO HAS
BEEN REMOVED**