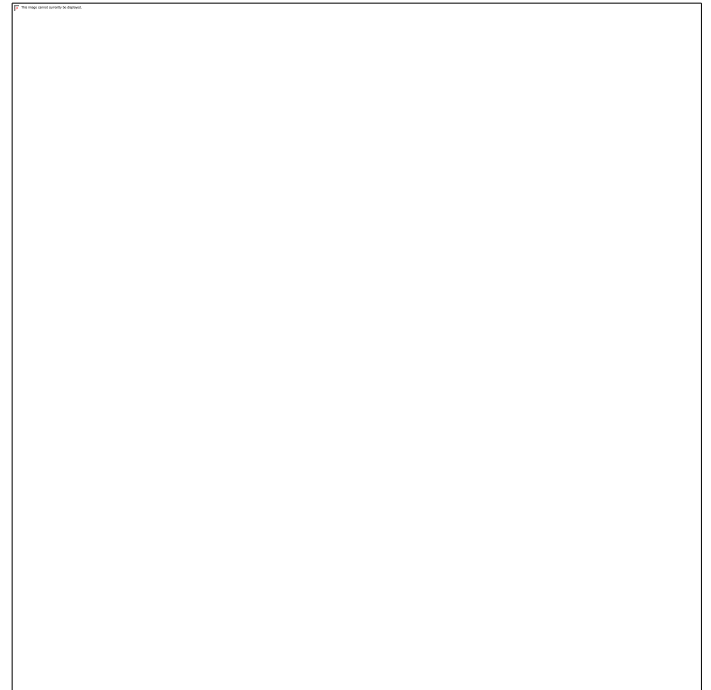


Cell Specialization

Jazzmin Oate
Ridge Road MS

Brain Pop! Cell Specialization

- ▶ <http://www.brainpop.com/health/geneticsgrowthanddevelopment/cellspecialization/>



Video Questions (Page 123)

Leave space to answer

1. What kinds of things do complicated creatures (people, cats, dogs) do that simple-one celled organisms can't do? What things are similar?
2. Describe a sponge.
3. What is tissue?
4. What forms an organ?
5. Name the organs of the human digestive system.



Cells, Tissues, Organs, Organ Systems

▶ Organization of Life

- ▶ <http://app.discoveryeducation.com/mycontent#mode=MyContent&view=Favorites&guid=c9453417-9b06-4cb7-9799-ffada4fefec5>

▶ Cell Specialization

- ▶ <http://app.discoveryeducation.com/mycontent#mode=MyContent&view=Favorites&guid=c9453417-9b06-4cb7-9799-ffada4fefec5>



The organization of Organisms (Page 120)

▶ Cell



▶ Tissue



▶ Organ



▶ System



▶ Organism



Cells (Cornell Style, Page 122)

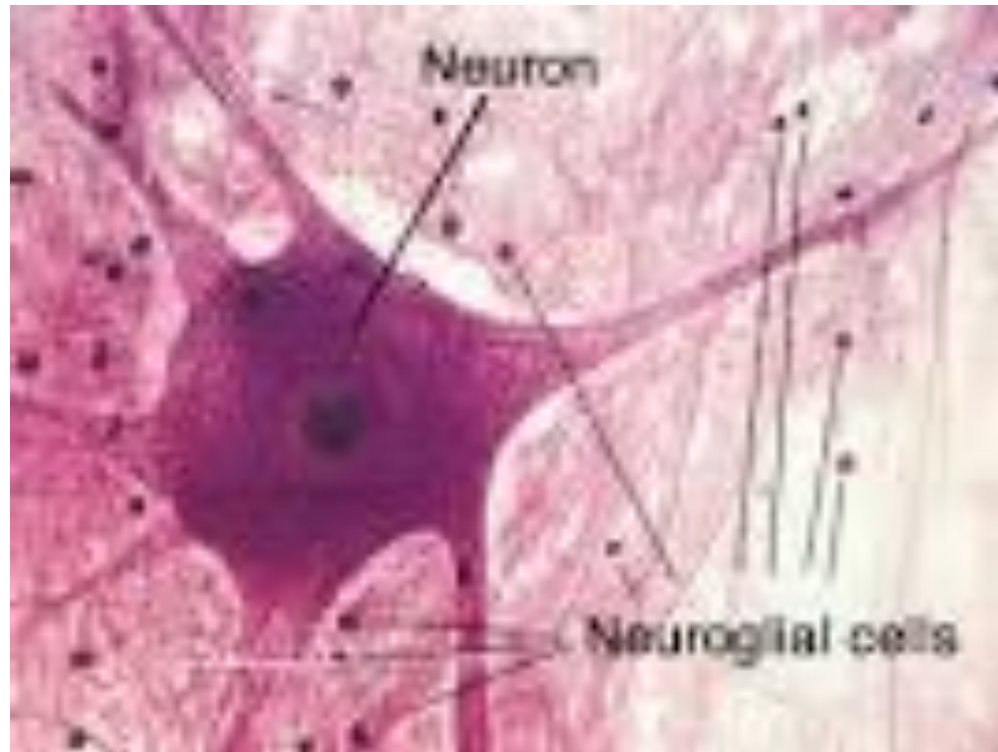
- ▶ You all know what a cell is by now!
- ▶ **A Cell is the smallest unit of life!!!**
 - ▶ In some cases it can exist on its own, in other cases it needs to live with other cells
 - ▶ Analogy: If CMS were an organism, each classroom at RMMS would be a cell)....Just like during Club Cell!!!



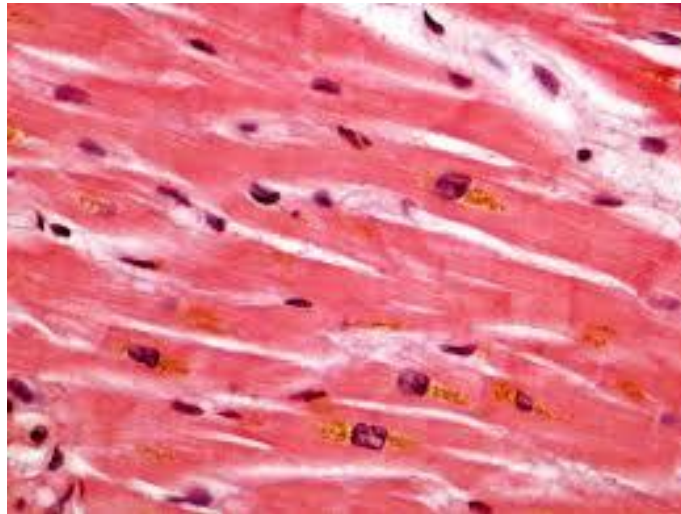
Tissue (Cornell Style, Page 122)

- ▶ **Tissue** – a group of cells that are structurally similar and perform the same function
 - ▶ Ex. muscle, nerve, blood
 - ▶ Analogy: Each of the Pirates' classrooms together would make up tissue if RRMS was an organism.





blood



Muscle tissue



Types of tissue (Cornell Style, Page 122)

- ▶ **Epithelial tissue** – covers body surfaces and lines body cavities
- ▶ **Connective tissue** – supports other body tissues and binds tissues and organs together
 - ▶ Ex. tendons, ligaments
- ▶ **Muscle Tissue** – tissues specialized for contraction
 - ▶ Ex. skeletal, smooth, cardiac



Four Types of Tissue

Four types of tissue



Connective tissue



Epithelial tissue



Muscle tissue



Nervous tissue



▶ Torn knee ligaments

<http://www.youtube.com/watch?v=92ifz2qqt8>



Organ (Cornell Style, Page 122)

- ▶ **Organ** – a group of tissues that work together to form a specific function
 - ▶ Ex. Stomach

- ▶ Analogy: If RRMS was an organism, all of the tissues (Wolfpack, Vikings, Pirates, and Wildcats' classrooms) would each be an organ.
 - ▶ Eighth grade, Sixth grade, and electives would all be organs as well



ORGANS

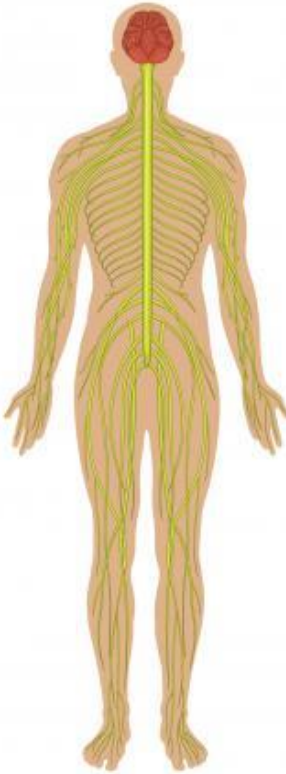


Organ System (Cornell Style, Page 122)

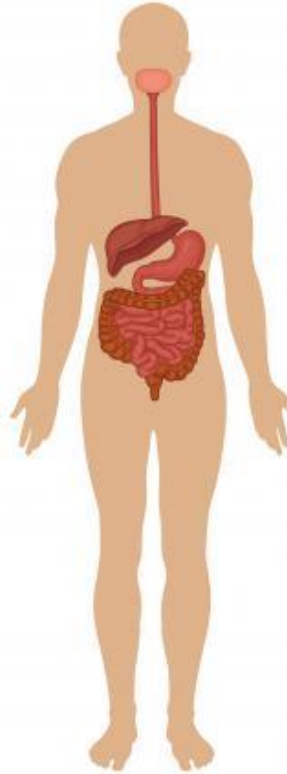
- ▶ **Organ System** – group of organs that work together to perform a specific function
 - ▶ Ex. digestive system
 - ▶ Analogy: The entire building of RRMS would be an organ system.



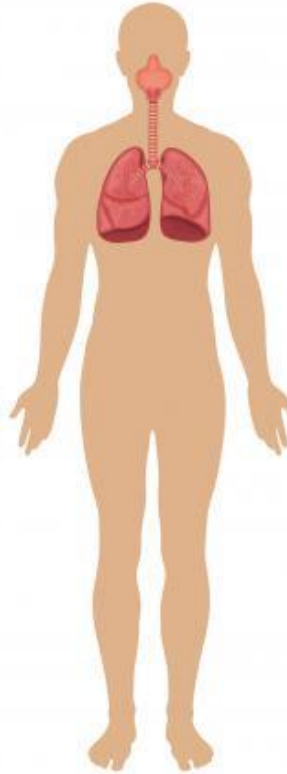
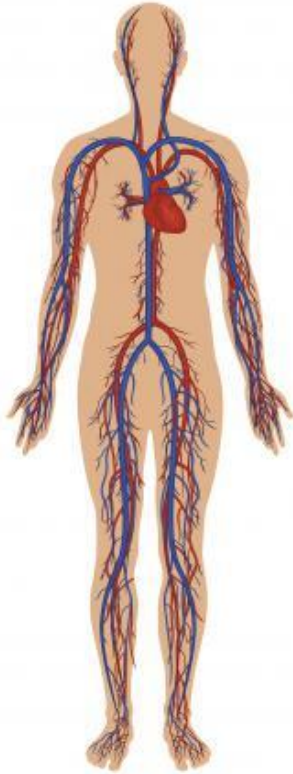
Nervous System



Digestive System



Muscular System



Circulatory System

Respiratory System

Skeletal System

wiseGEEK

