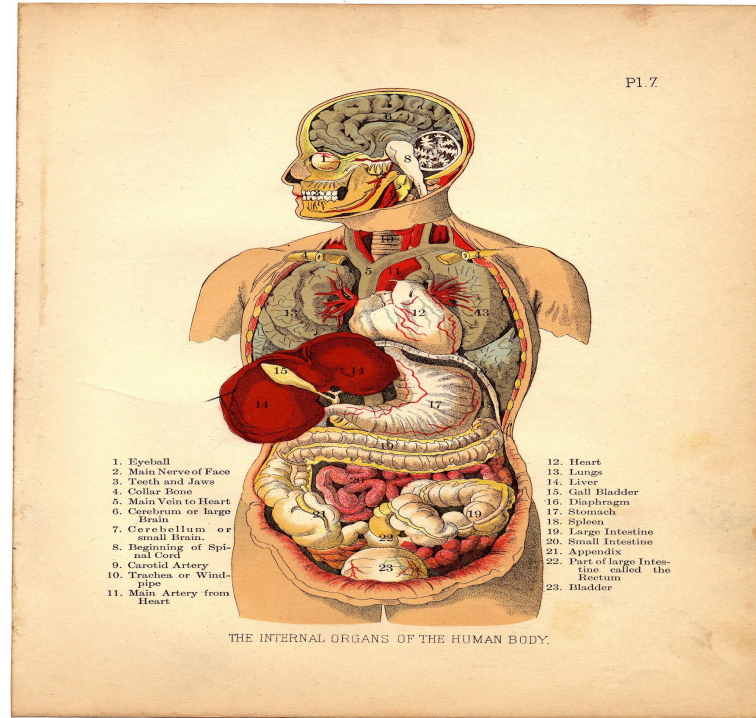




**Science, Engineering,
Technology & Math**

What are you made of?



Learning about the anatomy and physiology that makes us what and who we are

Class Structure

Week #1: cells

Week #2: blood

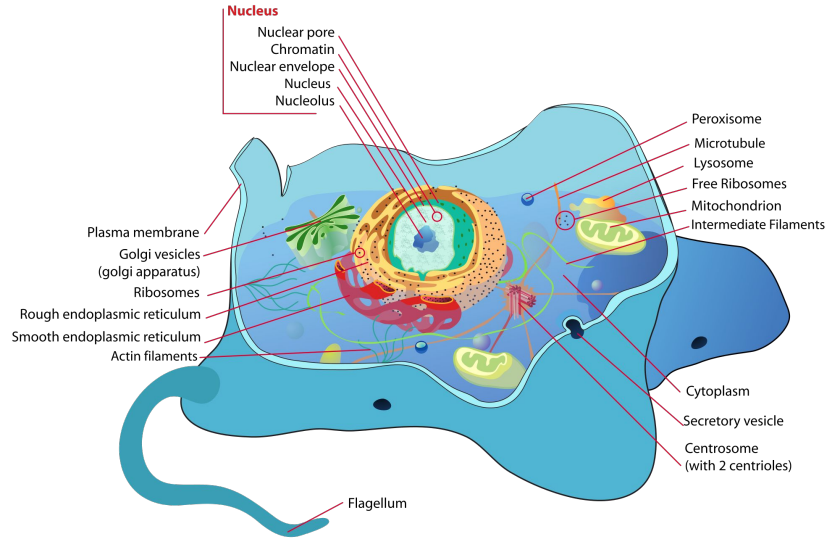
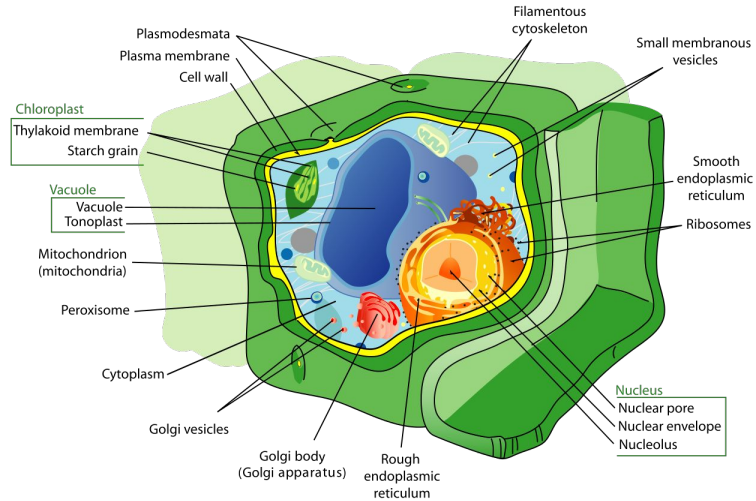
Week #3: skin

Week #4: bones

Week #5: muscles

**Week #6: Finish-up
all projects**

Week #1: Cells



Cells: the smallest structural and functional unit of an organism, typically microscopic. Cells make up all living things

Here is the video that we watched to learn about the different parts of the cell



We watched *The Magic School Bus* Season 4 episode 5 “Goes Cellular” to learn about cells and cell life. The full episode is on Netflix





Jello Cells

Supplies:

Jello
Paper bowls
Gum balls
Nerds
Jelly beans
Fruit roll ups

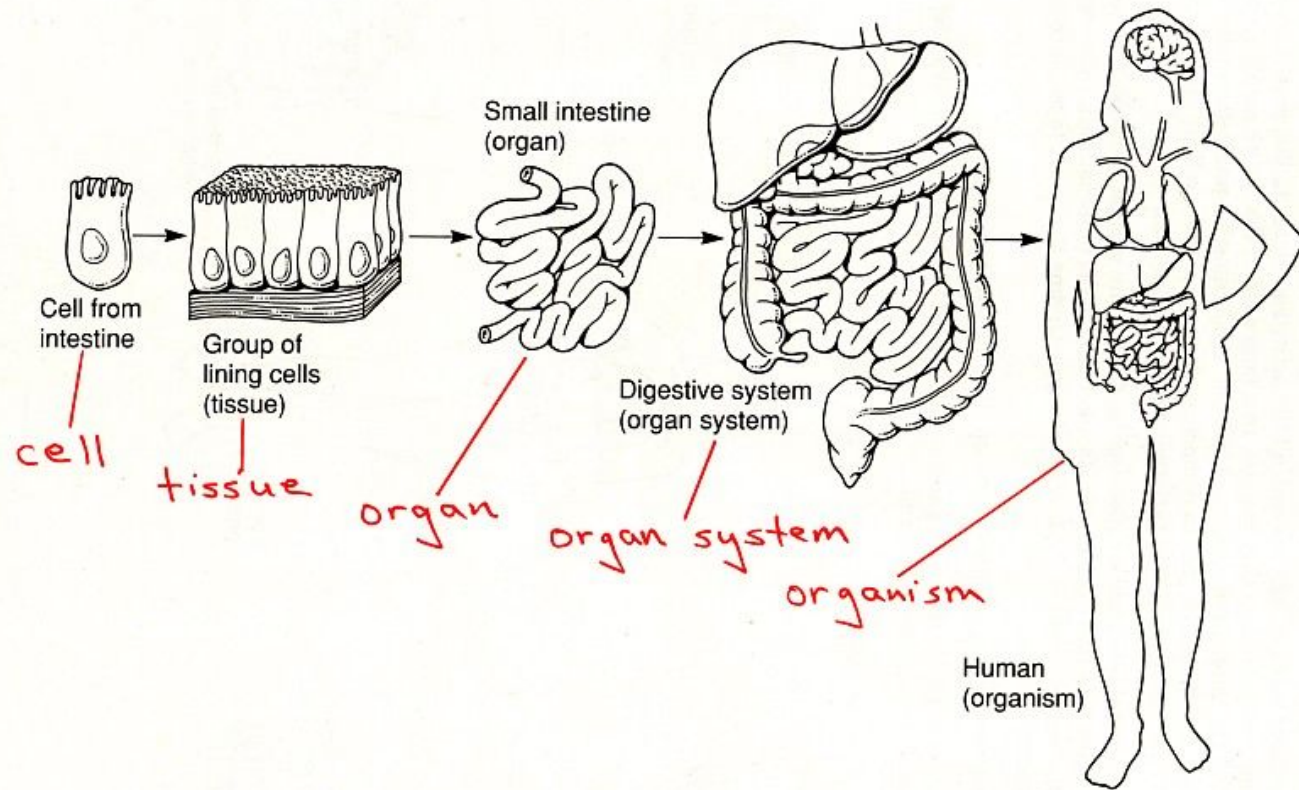
Instructions:

Make the jello and divide it into individual bowls in advance so that they jello will set up before class

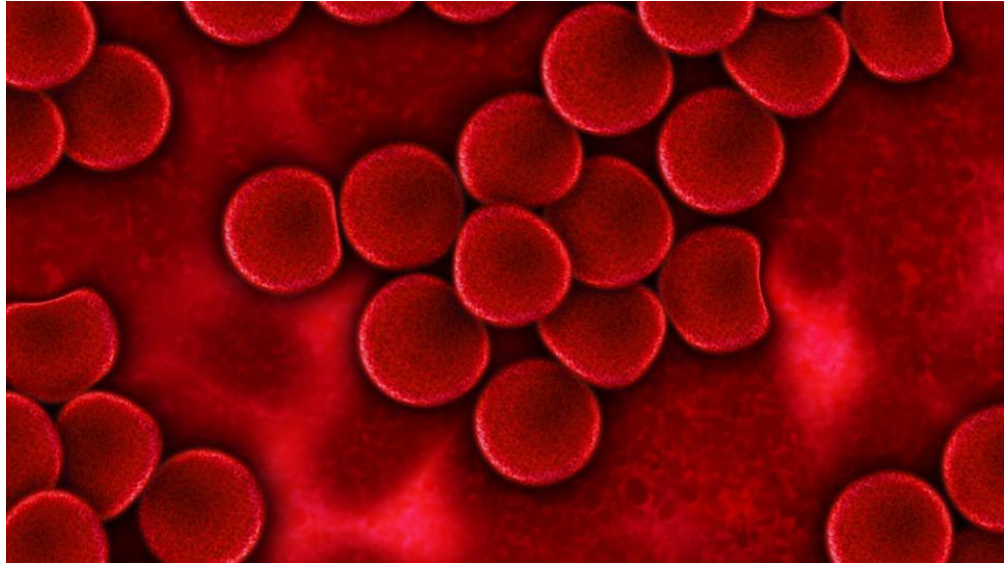
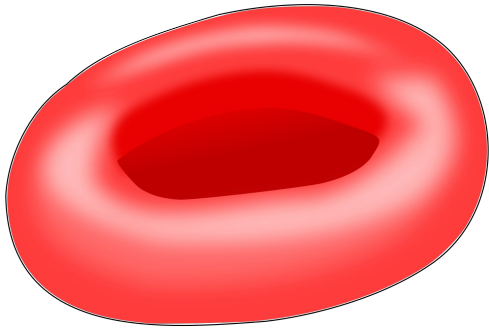
Give each child their own bowl of jello

Assign each type of candy an organelle and discuss the functions of each of the organelles

As you discuss the “organelles” place them in the cell membrane (jello)



Week #2: Blood



Blood: The red liquid that circulates in the arteries and veins of humans and other vertebrate animals, carrying oxygen to and carbon dioxide from the tissues of the body.



We Watched the Magic School Bus Season 1 Episode 3 “Inside Ralphie” to learn about blood and the functions of the different types of blood cells. Full episode on Netflix

what is blood made of?



Blood in a bag

Red water beads

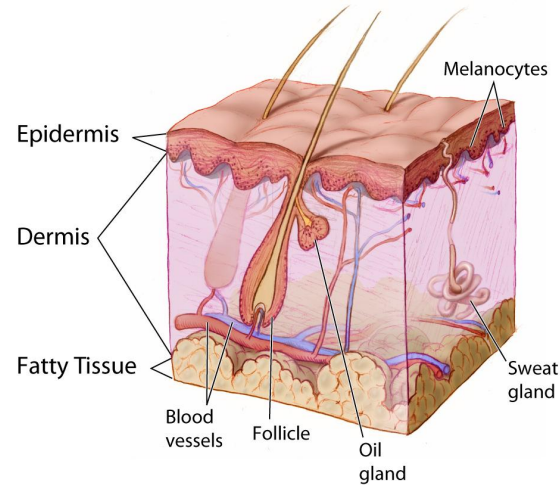
White marbles or stones

Foam sheets

Ziploc baggies

Talk about each of the different types of cells. In the baggie put red water beads (red blood cells), white marbles (white blood cells) and cut the foam sheets into strips (platelets). Add a little bit of water (plasma).

Week #3: Skin



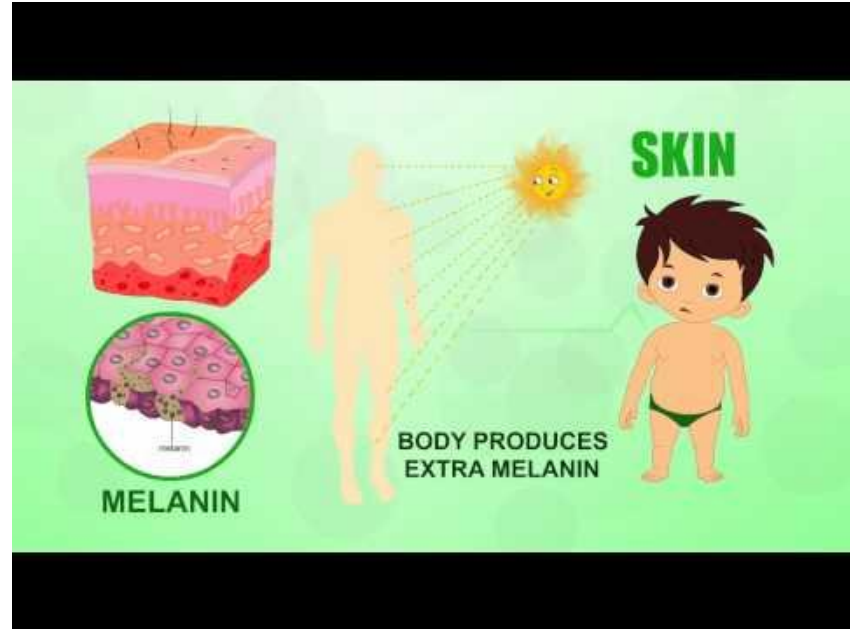
Skin: the thin layer of tissue forming the natural outer covering of the body of a person or animal. The largest organ in the body

Body Sculpture

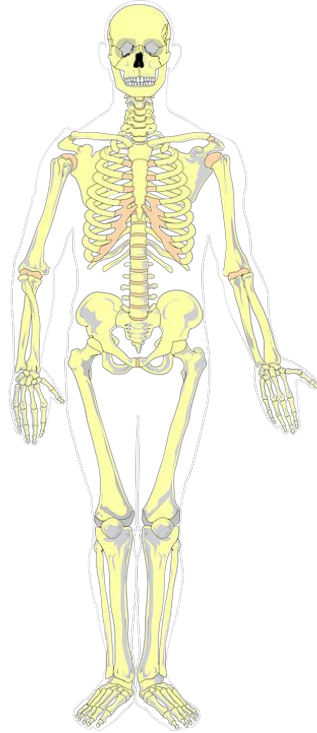
Packing tape

Select one of the kids in the class to use as the model. Wrap the tape with the sticky side facing out around the arms, legs and torso. Go back over it with the sticky side of the tape facing in, so that the two layers of tape stick together. Slide of the tape off.

***Make sure that they tape is loose when putting in on so that circulation is not cut off and so that it can be easily slid of cut off.



Week #4: Bones



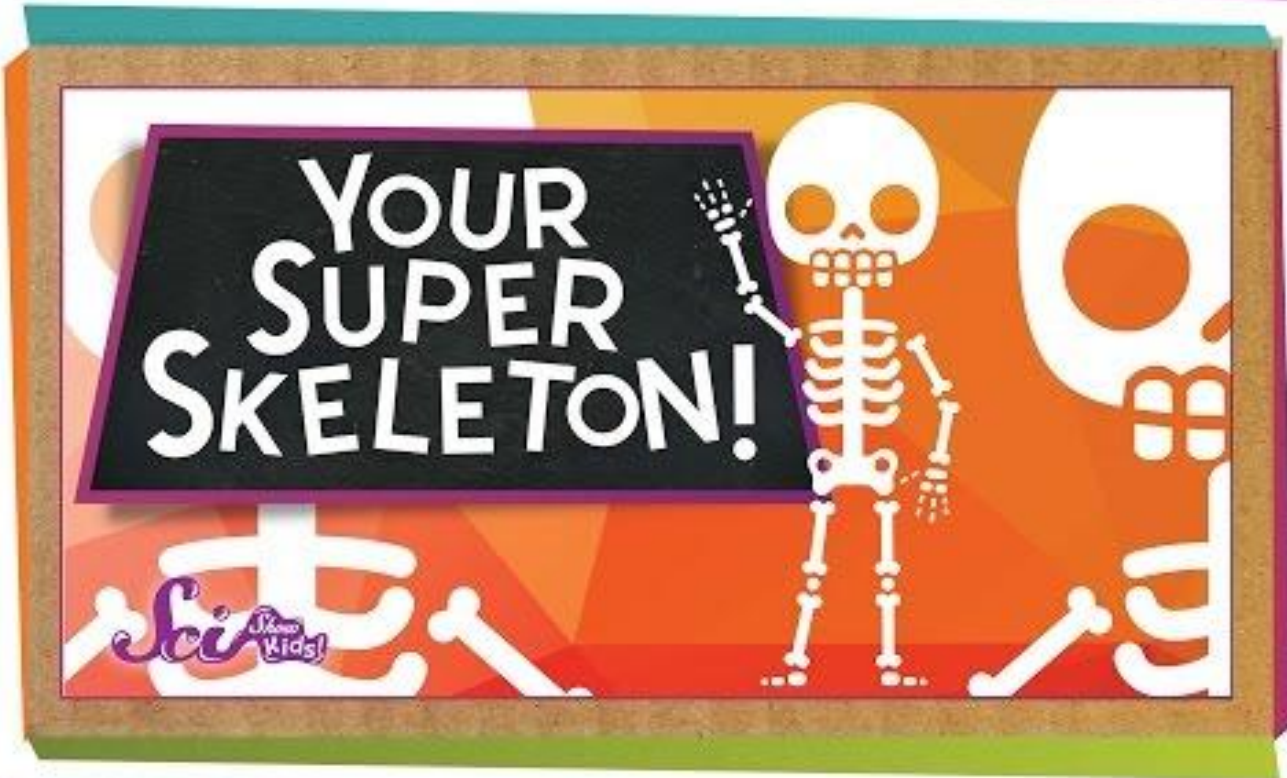
Bones: any of the pieces of hard, whitish tissue making up the skeleton in humans and other vertebrates.



BONES



We watched an introductory video about bones. Then we looked at pictures of bones and learned some of the names and locations of different bones.





Candy Spines

Supplies:

Hard life savers

Gummy life savers

String

Peel apart licorice or sour straws

Instructions:

Tie the end of the string to one of the hard life savers. Alternate between hard and gummy life savers. After every few tie the licorice. The hard candies are the vertebrae, the soft gummies are the intervertebral disks and the licorice are the peripheral nerves



The Spine

suzieshomeducationideas.blogspot.com.au

Egg carton spine

Supplies:

Egg carton

String

Pool noodle (cut into small disks)

Pipe cleaners

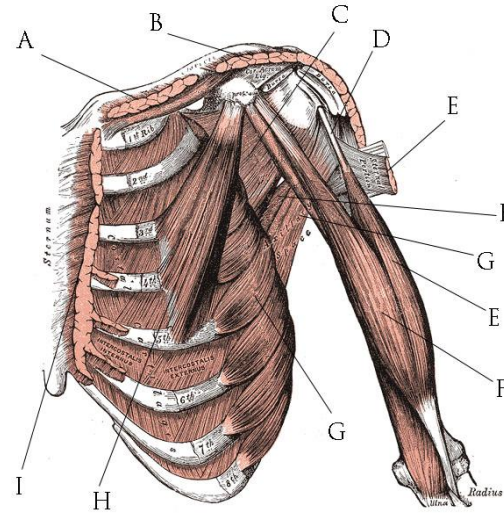
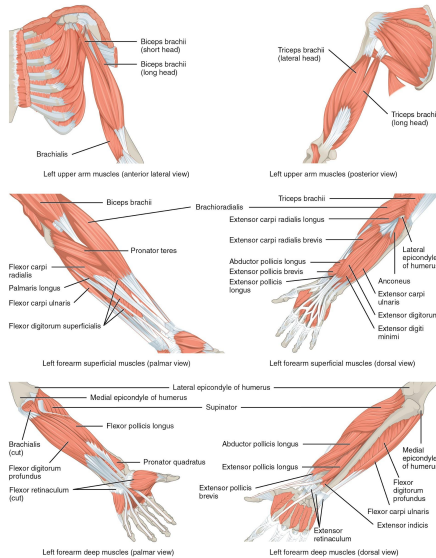
Instructions:

Cut the egg carton into individual pieces. Cut a hole in each piece and put the string through one piece and tie a knot. Alternate between pieces of egg carton and pool noodle disks. Every few tie a pipe cleaner. The egg carton is the vertebrae, the pool noodle is the intervertebral disks and the pipe cleaners are the peripheral nerves.



We Watched the Magic School Bus Season 2 Episode 2 “Flexes its muscles” to learn about bones and muscles. Full episode on Netflix

Week #5: Muscles



Muscles: a band or bundle of fibrous tissue in a human or animal body that has the ability to contract, producing movement in or maintaining the position of parts of the body.



Materials & Supplies

Candy

String

Egg cartons

Pipe cleaners

Ziploc baggies

Water beads

White marbles

Foam sheets

Jello

Paper bowls

Ipad or projector to show videos

Packing tape

Pro Tips by Jordan Greenhalgh

- *Introduce each topic and a little about the topic before watching videos*
- *After each video discuss what they learned*
- *Review the previous topics at the beginning of each new topic*
- *When make the skin sculpture make sure the tape is applied loosely*
- *Alternate between information heavy activities (ex. videos) with fun activities that demonstrate or reiterate the information (ex. Candy models)*