


Aim: SWBAT understand what a bone is made of and how it is formed.

Do Now: Label the bones on the worksheet. (Do Not Color)



Copy the following questions to answer during the movie.

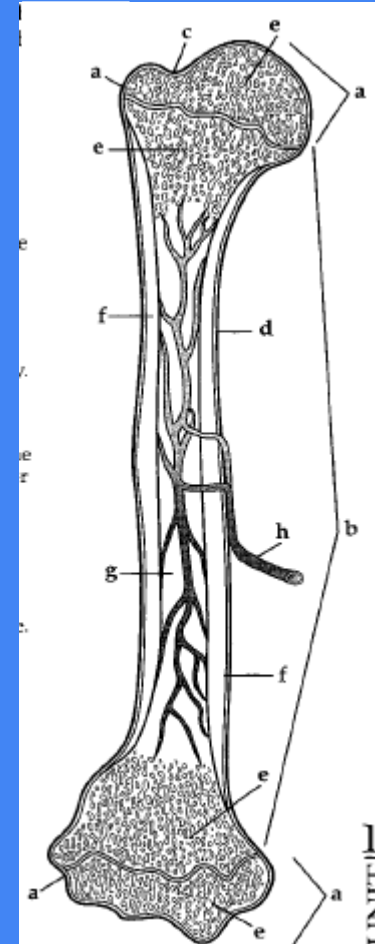
1. How often do we get a “new skeleton?”
2. What are the three types of bones?
3. What are the two types of marrow? What do they do?
4. What are osteons?
5. Define Osteocytes, osteoblast and osteoclasts?
6. When does cartilage stop turning to bone?
7. Does exercise increase or decrease bone strength?

<https://www.youtube.com/watch?v=rDGqkMHPDqE>



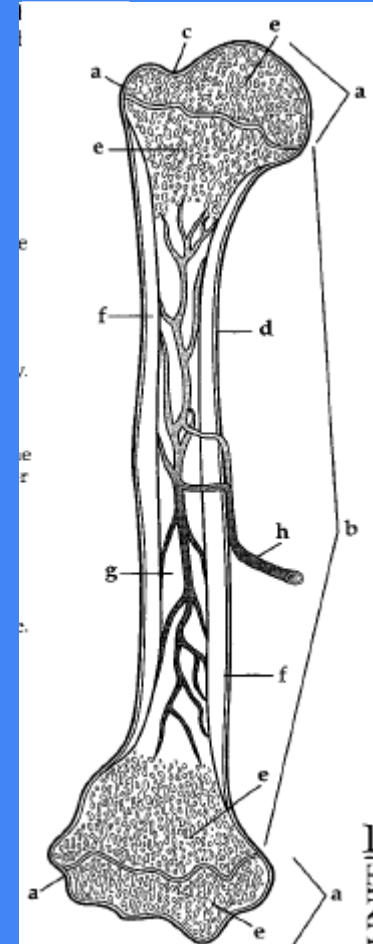
A-Epiphysis

- Externally compact bone
- Internally- Cancellous
- Main producer of blood cells
- Helps transfer weight



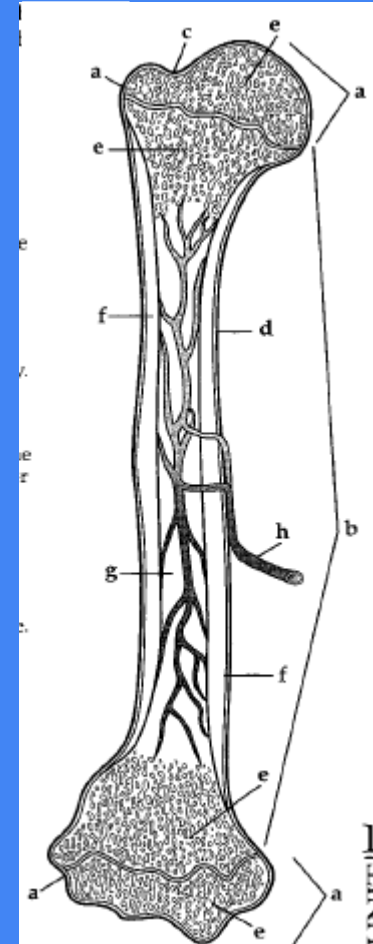
B-Diaphysis

- Middle part of the bone
- Provides Strength



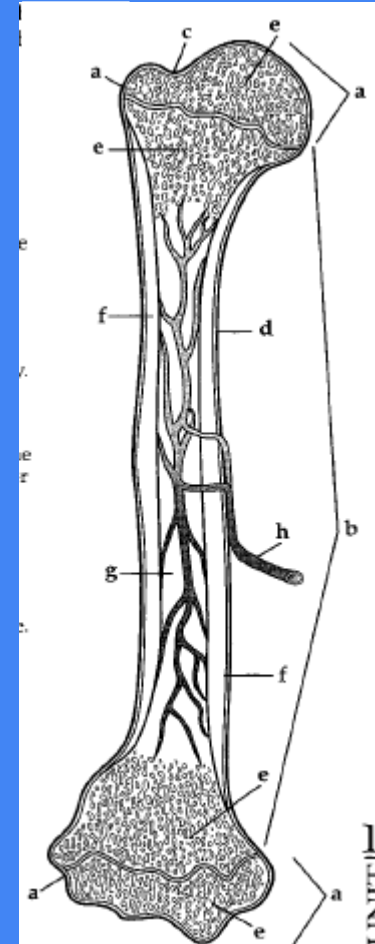
C-Articular Cartilage

- Connective tissue of joints. Its main function is to provide a smooth, lubricated surface for articulation and to facilitate the transmission of loads with a low frictional coefficient. The mechanical behavior of the tissue depends on the interaction of its fluid and solid components. The complex structure of it makes treatment and repair a significant challenge.



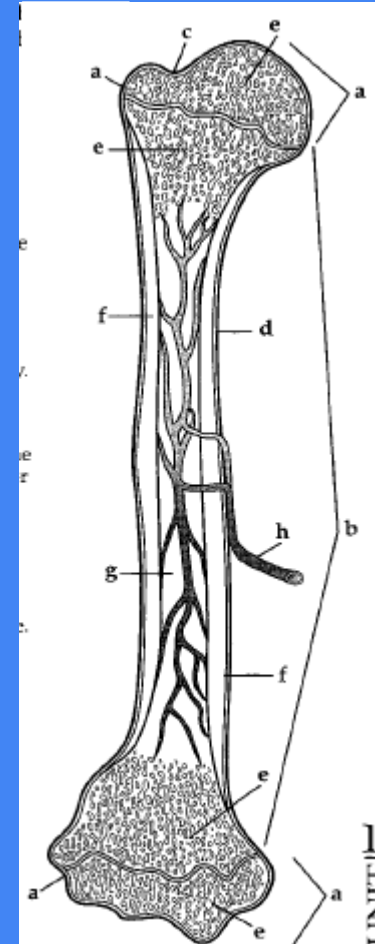
C-Articular Cartilage

- Slippery end of bone
- Helps bones move (Limited friction)
- Treatment difficult



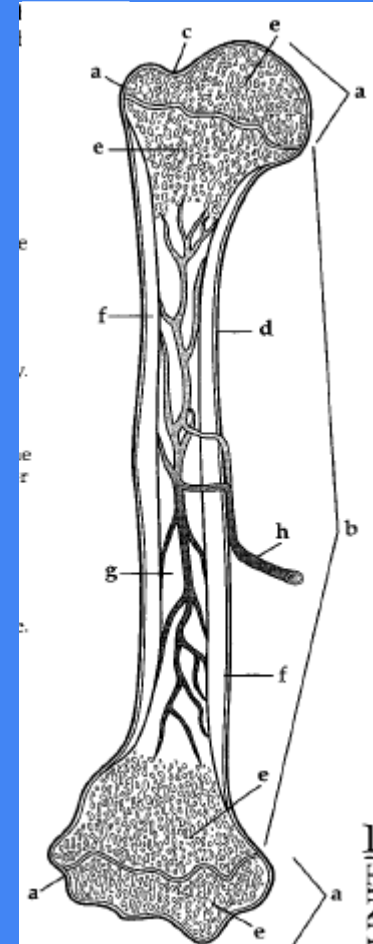
D- Periosteum

- Like the “skin” of the bone
- Helps with growth and repair



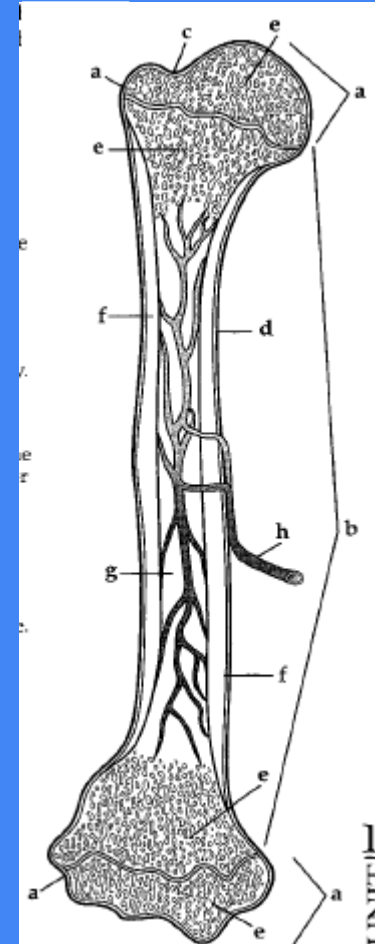
E-Cancellous Bone/ Red Marrow

- Produces red blood Cells



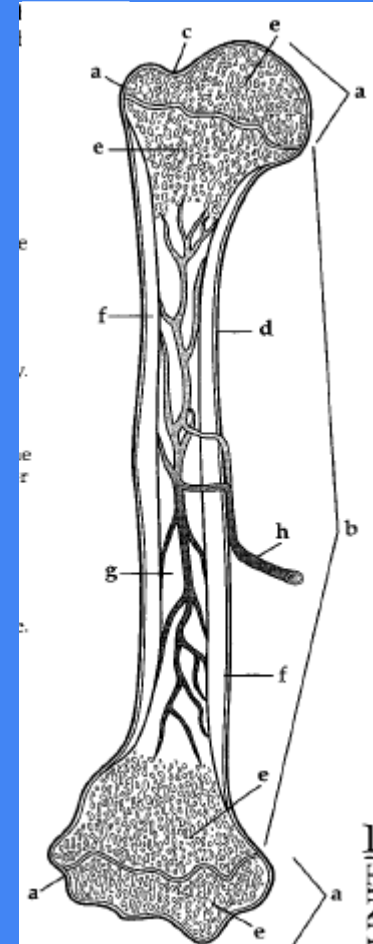
F-Compact Bone

- Rich in calcium
- Strength of bone



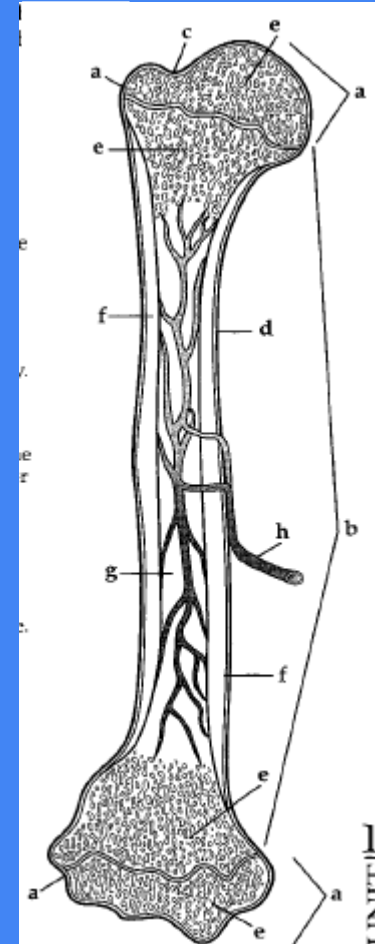
G-Medullary Cavity/ Yellow Marrow

- Middle hollow part
- Stores yellow marrow
- Major blood loss can turn to red marrow



H-Nutrient Artery

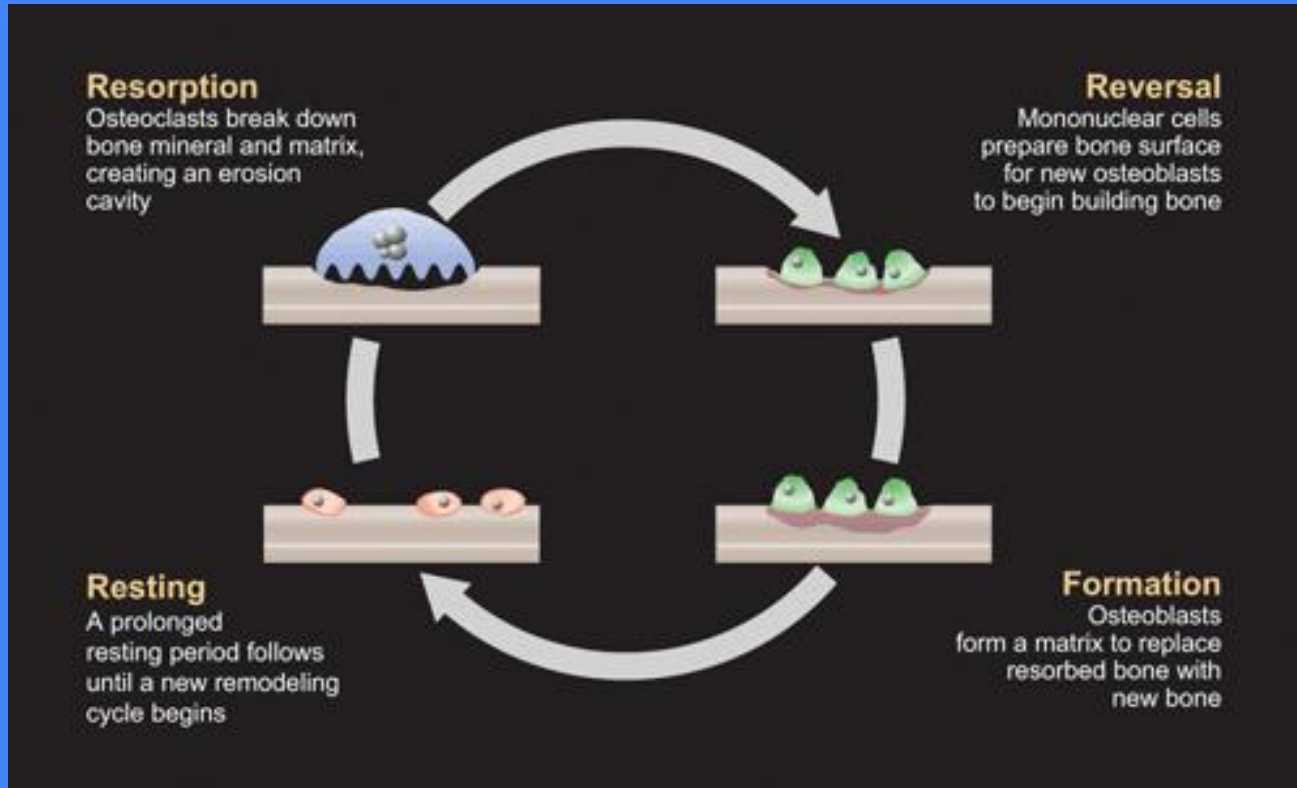
- Brings nutrients (Blood) into bone.
- Bones are alive



Complete the bone
remodeling Activity.



Bone Remodeling



Long Bones-

- Look like dog bones.
- Supports weight.
- Helps movement

Flat Bones-

- Protect organs

Short Bones

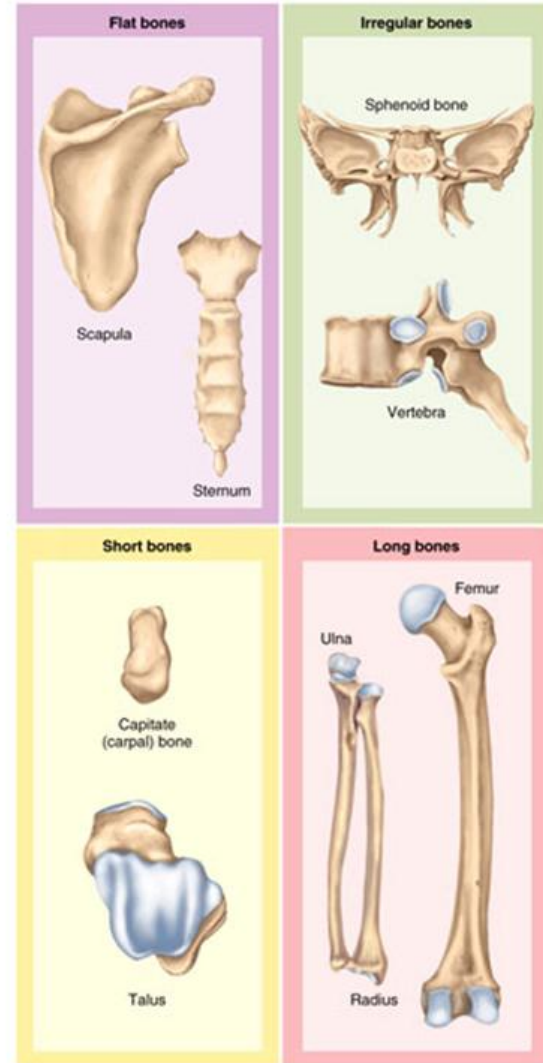
- Stability and some movement
- In wrist and ankle

Irregular bones

- No rhyme or reason

Sesamoid Bones

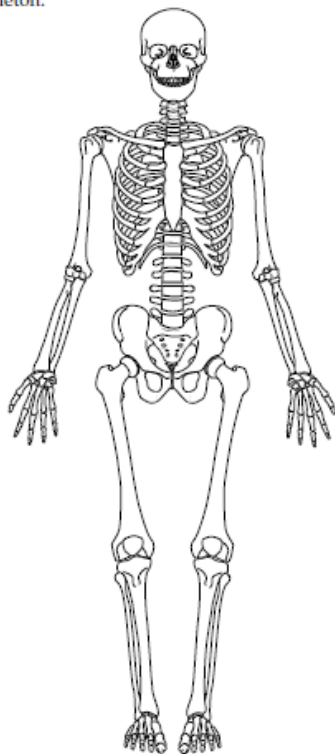
- Reinforce Tendons (muscle to bone)



ACTIVITY 2F: CLASSIFYING BONES

BONE CLASSIFICATION

On the skeleton below, classify the bones of the body using a color-coding system. Complete the color key by assigning a color to represent the long bones, another color to represent the short bones, one for the flat bones and one for the irregular bones. Use the key to color the skeleton.



Bone Classification Color Key

= Long Bones = Short Bones = Flat Bones = Irregular Bones

