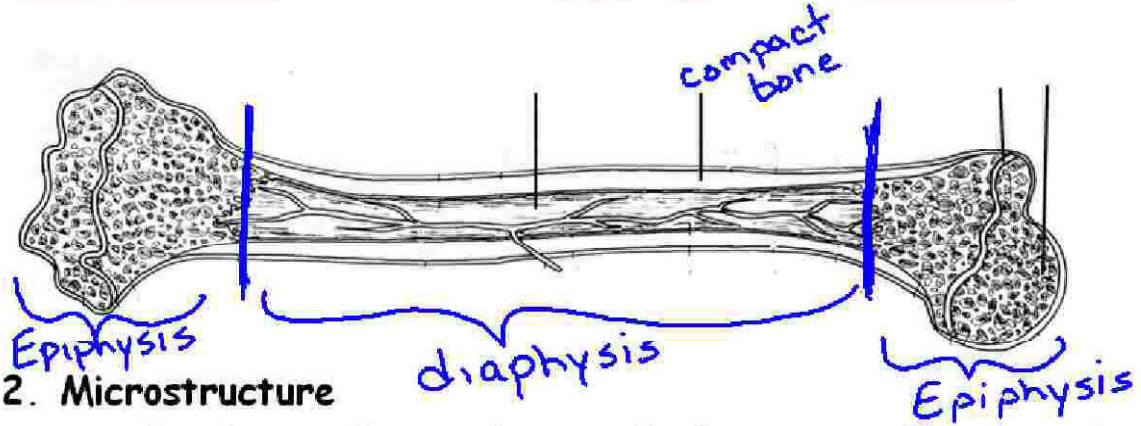
- b. Compact Bone - Dense, arranged in haversian system

C. Bone Structure

- 1. macrostructure
- (drow longbone w/ diaphysis, epip, ep plate, medullary canal)



- 2. Microstructure
  - 1. Spongy Bone - bone cells (osteocytes) secrete bone plates
    Many spaces.

- 5. Storage of Ca and P

B. *Types of bone*

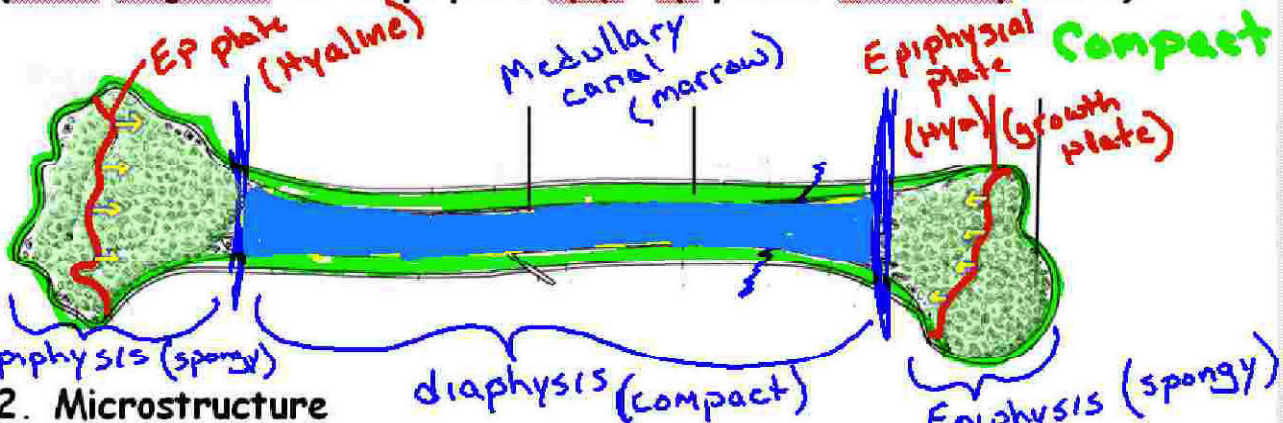
- 1. Shape
  - *a. Long Bone - All extremities except Ankle and Wrist*
  - *b. Short Bones - Ankle and Wrist*
  - *c. Flat Bones - Scapula, Sternum, Ribs, Cranial*
  - *d. Irregular - Facial, Pelvic, vertebrae, clavicle*
  - *e. Sesamoid - Float in muscle*
    - Patella, Hyoid
- 2. Structure
  - *a. Spongy Bone - Loosely arranged plates of bone. In Epiphyses* (Pumice)
  - *b. Compact Bone - Dense, arranged in haversian system* (Rock)

C. *Bone Structure*

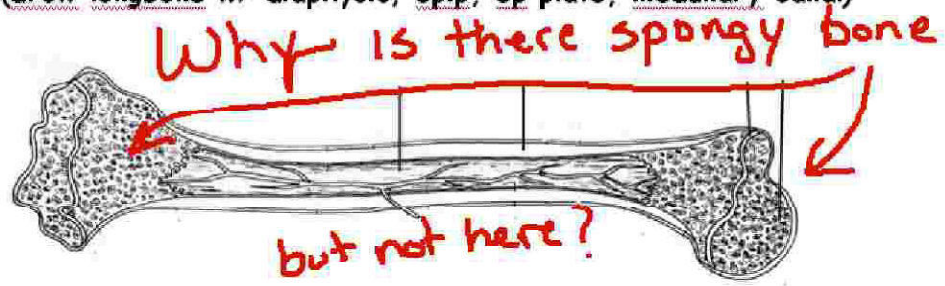
- 1. macrostructure
- (drow longbone w/ diaphysis, epip, ep plate, medullary canal)

- b. Compact Bone - Dense, arranged in haversian system

C. Bone Structure

- 1. big macrostructure
- (drow longbone w/ diaphysis, epip, ep plate, medullary canal)
- 

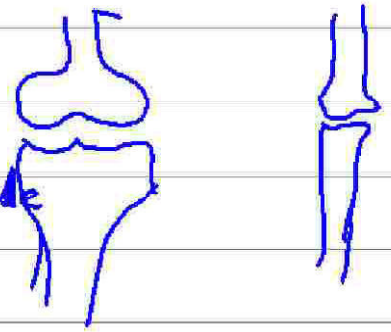
- 2. Microstructure
  - 1. Spongy Bone - bone cells (osteocytes) secrete bone plates
    Many spaces

- 1. macrostructure
- (drow longbone w/ diaphysis, epip, ep plate, medullary canal)
- 

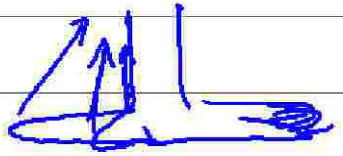
- 2. Microstructure
  - *1. Spongy Bone - bone cells (osteocytes) secrete bone plates. Many spaces.*
  - *2. Compact Bone - Cylendrical Haversian systems*
  - 
  - 

Why are the ends of bones larger than the center?

- Balance

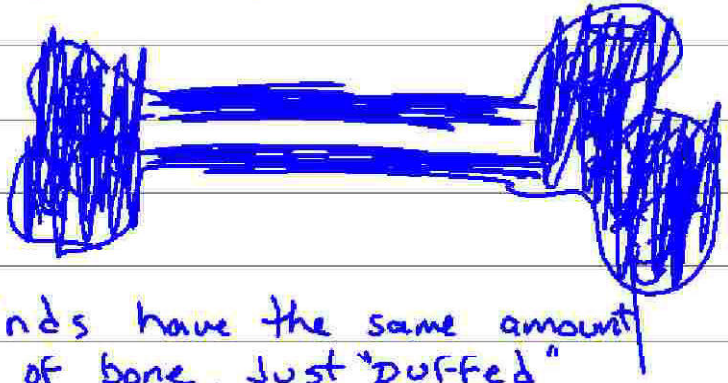


- Bone stronger at joint
- Ligament hold better when they are wider
- More surface area to absorb impacts
- Levers for pulling muscles

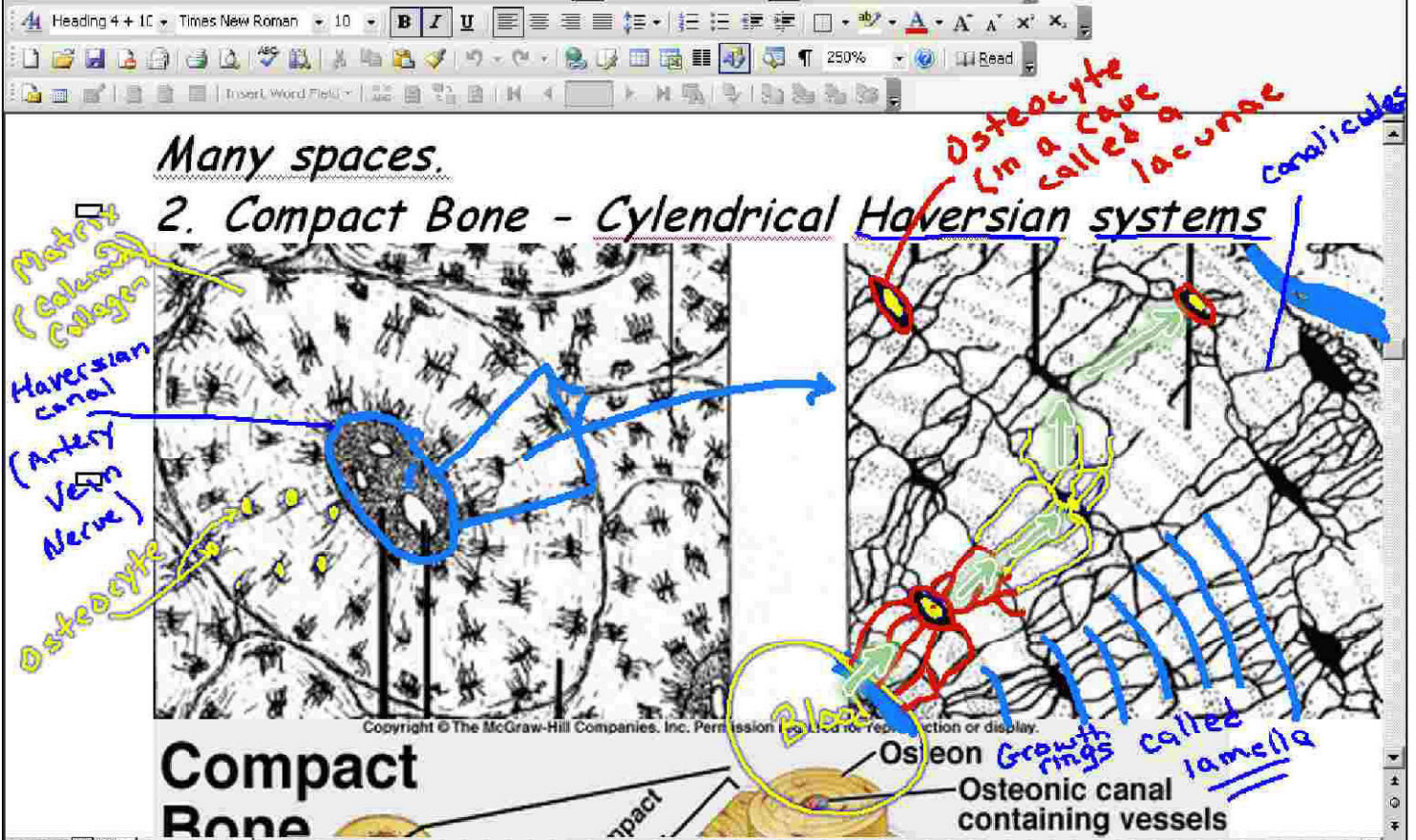


Why Spongy on the ends?

- Not for cusioning, not soft
- Weight savings!



Ends have the same amount of bone, just "puffed" with hollow spaces.


Many spaces.
2. Compact Bone - Cylendrical Haversian systems
Osteocyte (in a cave called a lacunae
canaliculae
Matrix (Calcium Collagen)
Haversian canal (Artery Vein Nerve)
Osteocyte
Blood
Growth rings called lamella
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Compact Bone
Osteon
Osteonic canal containing vessels