Name: _____ Per: _____

Chapter 5 Notes- Skeletal System

The skeletal system consists of:
-

-

-

-

Functions of the skeleton:
1.

2.

3.

4.

5.

6.

Skeletal Organization:

Axial skeleton:

Appendicular skeleton:

Bone Classification according to shape:

Long bones:

Short bones:

Flat bones:

Irregular bones:

Anatomy of a Long Bone:

1. Periosteum-

2. Epiphysis-

3. Articular cartilage-

4. Diaphysis-

5. Epiphyseal line-

6. Medullary cavity-

7. Endosteum-

8. Compact bone-

9. Spongy bone-

10. Bone marrow-

Yellow marrow	Red marrow

Bone growth:

1. Osteoprogenitor cells-

2. Osteoblasts-

3. Osteocytes-

4. Osteoclasts-

Microscopic structure:

1. Osteon-

2. Central canal-

3. Lamellae-

4. Lacunae-

5. Canaliculi-

Bone Development and Growth:

1. Ossification-

2. Bones form in the fetus in two distinct ways:
    a. Intramembranous ossification-

    b. Endochondral ossification-

Bone Remodeling and Repair:

Remodeling of bones in the adult occurs on a regular basis as bone is continually being broken down and built up again.

Osteoclasts:

Osteoblasts:

Osteoblasts become:

Bone Repair of a Bone Fracture:

1. Hematoma-

2. Cartilaginous callus-

3. Bony callus-

4. Remodeling-

Types of Bone Fractures:

1. Incomplete fracture-

2. Complete fracture-

    a. Simple fracture-

    b. Compound fracture-

3. Impacted fracture-

4. Spiral fracture-

Joints (Articulations):

Joint Problems:

    Rheumatoid arthritis-

    Osteoarthritis-

Joint Classification:

    1. Fibrous-

    2. Cartilaginous-

    3. Synovial-

Synovial Joint Classification:

1. Ball and Socket-

2. Hinge-

3. Condyloid-

4. Gliding-

5. Pivot-

6. Saddle-

Types of Joint Movements:

1. Angular-

2. Circular-

3. Special-