

Skeletal System

Bone Cells

Types

- Osteocyte
- Osteoblast
- Osteoclast

Hormones

- Calcitonin (from thyroid)
 - Calcium from Blood -> Bone
- Parathyroid Hormone (from parathyroid)
 - Calcium from Bone -> Blood

Bone to bone attached by

- Ligaments

- Cartilage

Functions

Protection

- Brain
- Heart / Lungs
- Reproductive system

Support / Framework

Lever

Classes

- Class 1 - Scissor
- Class 2 - Wheelbarrow
- Class 3 - Tweezer

Storage

- Calcium
- Nerves
- Muscle Contractions
- Bones

Blood Production

Trivia

Hardest

- Femur

smallest

- Ossicles - ear bones
 - Malleus
 - Incus
 - Stapes

Parts

Axial

Sternum

- manubrium
- body / gladiolus
- xiphoid process

hyoid

- Only free floating bone in body

skull

- Cranial Bones

- Frontal - forehead
- Parietal - top sides
- Temporal - sides
- Occipital - back of head
- Sphenoid - part at temple

Orbit Bones

- Zygoma
- Ethmoid
- Lacrimal
- Maxilla

Facial

- Mandible
- Vomer
- Palatine

Fontanel

- soft spot on baby's head that become sutures

Sutures

vertebrae

7 Cervical

- C1 = Atlas

- C2 = Axis

- Odontoid Process / Dens fits in to C1

- Convex Curve

12 Thoracic

- Concave Curve

5 Lumbar

- Convex Curve

4-5 Fused in to Sacral

- Concave Curve

3-5 Fused in to Coccygeal

- Concave Curve

Problems

- Kyphosis - Hump Back

- Lordosis - Swayback

- Scoliosis - Side curve

ribs

True Ribs

- 7 pairs

False Ribs

- 5 pairs

- 3 are connected by cartilage

- 2 are floating

Appendicular

Appendages (Extremities)

Upper (Arms)

- Humerus

- (Olecranon Process)

- radius

- ulna

- carpals

- metacarpals

- phalanges

Lower (Legs)
Femur
Patella
fibula
tarsals
metatarsals
phalanges
Calcaneous
tibia

Girdles
Pectoral
Clavicle
Scapula
Pelvic
Pubis
Ischium
Ilium

pisiform