What is the skeletal system?
What is the function of the skeletal system?
Function of the skeletal system

- Allows movement
- Provides support
- Protects soft organs inside the body
What are the parts of the skeleton?
Parts of the skeleton

- Axial – head, ribs and spinal column
- Appendicular – arms, legs and shoulders
What are bones?
Bones

- Strong structures that provide shape and protection
- **Ligaments** are tissues that fasten bones together
- **Cartilage** is the tissue that acts as a buffer between bones
Common types of Arthritis

Healthy Joint  Osteoarthritis  Rheumatoid Arthritis
What are joints?
Joints

- Where two bones meet
- Can be movable or fixed
- Are needed for any bending movement
1. Hinged Joint – can only flex or extend in one direction
   - Example – ankle, elbow, and knee
2. Gliding Joint – where the bones slide or glide in flat planes

- Example – fingers, wrist and spine
3. Immoveable Joint – where two bones join together with little or no movement
  • Example – skull
Types of Joints

4. Pivot Joint – a joint that only allows rotation movement
   • Example – head and forearms
5. Ball and Socket Joint – allows for a wide range of motions

- Example – hips and shoulders
Ice Cream (Femur Bull Grown Flare)

The cone should be centered in soft tissue ice cream. The bone has slipped... SCFE
Skeletal and Joints Video

https://www.youtube.com/watch?v=J8x6tZI2hVI
What is the difference between x-rays, MRIs and CT scans?

• X-Rays – type of radiation that passes through the body and makes the dense objects (like bones) appear white on the x-ray film

• Magnetic Resonance Imaging (MRI) – combines a powerful magnet with radio waves (NOT x-rays) and a computer to manipulate these magnetic elements and create highly detailed images of structures in the body. Images are viewed as cross sections of the body part being scanned.

• Computed Tomography (CT) scan or a CAT scan – sophisticated, powerful x-ray that takes 360-degree pictures of internal organs, the spine and vertebrae.
X-ray of the Face
MRI of Torn Achilles Tendon
And now for an actual CT Scan...