iv. Carp/o- carpus (wrist bone)
v. Cephal/o- head
vi. Cervic/o- neck; cervix uteri (neck of uterus)
vii. Clavicular/o- clavicle (collar bone)
viii. Cost/o- ribs
ix. Cranio- cranium (skull)
x. Dactyl/o- fingers, toes
xi. Femoral/o- femur (thigh bone)
xii. Fibular/o- fibula (smaller bone of lower leg)
xiii. Humer/o- humerus (upper arm bone)
xiv. Ili/o- ilium (lateral, flaring portion of hip bone)
xv. Ischial/o- ischium (lower portion of hip bone)
xvi. Lumb/o- loins (lower back)
xvii. Metacarpal/o- metacarpus (hand bones)
xviii. Metatarsal/o- metatarsus (foot bones)
xix. Patellar/o- patella (kneecap)
xx. Pelvic/o- pelvis
xxi. Phalangeal/o- phalanges (bones of the fingers and toes)
xxii. Podal/o- foot
xxiii. Pubal/o- pubis bone (anterior part of the pubis bone)
xxiv. Radial/o- radiation, x-ray; radius (lower arm bone on thumb side)
xxv. Spondylal/o- vertebrae (backbone)
xxvi. Vertebra/o- vertebrae (backbone)
xxvii. Tibial/o- tibia (larger bone of lower leg)

Muscular System
i. Leiomyal/o- smooth muscle (visceral)
ii. Muscular/o- muscle
iii. Myal/o- muscle
iv. Rhabdial/o- rod-shaped (striated)
v. Rhabdomyal/o- rod shaped (striated) muscle

d. Related Structures
i. Chondral/o- cartilage
ii. Fascial/o- band, fascia (fibrous membrane supporting and separating muscles)
iii. Fibral/o- fiber, fibrous tissue
iv. Synovial/o- synovial membrane, synovial fluid
v. Tendal/o- tendon
vi. Tendal/o- tendon
vii. Tendin/o-tendon

e. Suffixes
i. –asthenia: weakness, debility
ii. –blast: embryonic cell
iii. –clasia: to break, surgical fracture
iv. –clast: to break
v. **desis**: binding, fixation (of a bone or joint)
vi. **malacia**: softening
vii. **physis**: growth
viii. **porosis**: porous
ix. **scopy**: visual examination

f. Prefixes
   i. A-: without, not
   ii. Dys-: bad, painful, difficult
   iii. Sub-: under, below
   iv. Supra-: above, excessive, superior
   v. Syn-: union, together, joined

VII. Pathology

   a. Joints are vulnerable to constant wear and tear
      i. Repeated motion, disease, trauma, and aging affect joints, muscles, and tendons
   b. Disorders of the musculoskeletal system are likely causes by injury than disease
   c. **Orthopedics**: branch of medicine concerned with prevention, diagnosis, care, and treatment of musculoskeletal disorders
   d. **Orthopedist**: physician who specializes in diagnoses and treatment
      i. Employ medical, physical, and surgical procedures to restore function that has been lost
   e. **Rheumatologist**: specializes in treating joint disease
   f. **Doctor of Osteopathy**: maintains good health requires proper alignment of bones, muscles, ligaments, and nerves

VIII. Bone disorders

   a. Include fractures, dislocations, osteoporosis, and spinal curvatures
   b. Fractures
      i. **Fracture**: broken bone
      ii. **Closed (simple) fracture**: the bone is broken but no external wound exists
      iii. **Open (compound) fracture**: involves broken bone and an external wound that leads to site of fracture. Fragments of bone usually protrude through skin
      iv. **Complicated Fracture**: a broken bone has injured an internal organ
      v. **Comminuted fracture**: bone has broken or splintered into pieces
      vi. **Impacted fracture**: occurs when bone is broken and one end is wedged into the interior of another bone
      vii. **Incomplete Fracture**: occurs when the line of fracture does not completely transverse the entire bone
      viii. **Greenstick fracture**: broken bone does not extend through the entire thickness of the bone
         1. one side is broken, one side is bent
         2. most often in children
         3. AKA incomplete fracture