

## Bones and Boney Landmarks

### Axial Skeleton

|   |                                       | <u>Bone</u>            | <u>Landmark</u>  |
|---|---------------------------------------|------------------------|--|
| <b>Skull</b>  | <b>Cranium<br/>(Cap)</b>              | <b>Frontal</b>         |  |
|   |                                       | <b>Parietal</b>        |  |
|   |                                       | <b>Temporal</b>        | mandibular fossa, external auditory meatus   |
|   |                                       | <b>Sphenoid</b>        |  |
|   |                                       | <b>Occipital</b>       | foramen magnum   |
|   | <b>Facial<br/>(Face)</b>              | <b>Zygoma</b>          | zygomatic arch   |
|   |                                       | <b>Maxilla</b>         |  |
|   |                                       | <b>Mandible</b>        | mandibular condyle   |
|   |                                       | <b>Nasal bone</b>      |  |
|   |                                       | <b>Vomer</b>           |  |
| <b>Vertebral<br/>column<br/>(3 Types)<br/>(spinal<br/>column)</b> | <b>Vertebrae</b>                      | <b>Cervical</b>        |  |
|   |                                       | <b>Thoracic</b>        |  |
|   |                                       | <b>Lumbar</b>          | body<br>vertebral foramen<br>spinous process<br>transverse process<br>transverse foramen (cervical vertebrae only)<br>superior articular processes<br>inferior articular processes |
|   |                                       |                        | Dens process (C2)<br>Articular facet for the Dens Process (C1)   |
|   |                                       | <b>Sacrum</b>          | superior articular processes<br>auricular surface<br>median sacral crest   |
|   |                                       | <b>Coccyx</b>          |  |
|   | <b>Costals (3 Types)<br/>(Ribs)</b>   | <b>True</b>            |  |
|   |                                       | <b>False</b>           |  |
|   |                                       | <b>Floating</b>        |  |
|   |                                       |                        | head                      sternal end<br>neck<br>shaft<br>tubercle   |
|   | <b>Sternum<br/>(Breast<br/>Plate)</b> | <b>Manubrium</b>       |  |
|   |                                       | <b>Body</b>            |  |
|   |                                       | <b>Xiphoid process</b> |  |

## Bones and Boney Landmarks

### Upper Appendicular Skeleton

|                 | <u>Bone</u>                         | <u>Landmark</u>   |   |  |   |
|-----------------|-------------------------------------|---|---|--|---|
| <b>Shoulder</b> | <b>Clavicle<br/>(collar bone)</b>   | sternal end<br>acromial end<br>articular facet for the acromion process<br>shaft<br>coracoid tuberosity<br>costal notch   |   |  |   |
|                 | <b>Scapula<br/>(shoulder blade)</b> | medial border<br>lateral border<br>superior border<br>glenoid fossa<br>scapular spine<br>acromion process<br>articular facet for the clavicle<br>coracoid process |   |  |   |
| <b>Arm</b>      | <b>Humerus</b>                      | head<br>anatomical neck<br>surgical neck<br>greater tubercle<br>lesser tubercle   | bicipital groove<br>deltoid tuberosity<br>medial epicondyle<br>lateral epicondyle<br>trochlea | capitulum<br>olecranon fossa<br>coronoid fossa |   |
|                 | <b>Forearm</b>                      | <b>Ulna</b>   | trochlear notch<br>olecranon process<br>coranoid process                                      | radial notch<br>head<br>styloid process        |   |
|                 |                                     | <b>Radius</b>   | head<br>neck  | radial tuberosity<br>shaft                     | styloid process<br>carpal surfaces<br>ulnar notch |
| <b>Hand</b>     | <b>Carpals<br/>(Wrist bones)</b>    | Trapezium<br>Scaphoid<br>Lunate<br>Triangular<br>Pisiform<br>Hamate<br>Capitate<br>Trapezoid  |   |  |   |
|                 | <b>Metacarpals<br/>(palm)</b>       | ( 1 - 5 )   | head, shaft, base   |  |   |
|                 | <b>Phalanges<br/>(fingers)</b>      |   | head, shaft, base   |  |   |
|                 |                                     | <b>Proximal ( 1 - 5 )<br/>Middle ( 2 - 5 )<br/>Distal ( 1 - 5 )</b>   |   |  |   |

## Bones and Boney Landmarks

### Lower Appendicular Skeleton

| <b>Pelvis<br/>(Hips)</b> | <b><u>Bone</u></b> | <b><u>Landmark</u></b>  |
|--------------------------|--------------------|---|
|                          |                    | acetabulum<br>acetabular notch<br>lunate articular surface<br>obturator foramen |
|                          | <b>Ilium</b>       | iliac crest<br>iliac fossa<br>greater sciatic notch<br>auricular surface        |
|                          | <b>Ischium</b>     | ischial ramus<br>ischial tuberosity   |
|                          | <b>Pubis</b>       | superior pubic ramus<br>inferior pubic ramus<br>pubic symphysis                 |

## Bones and Boney Landmarks

### Lower Appendicular Skeleton

| <b>Leg</b> | <b><u>Bone</u></b>            | <b><u>Landmark</u></b>  |
|------------|-------------------------------|---|
|            | <b>Femur<br/>(Thigh)</b>      | head<br>fovea capitis<br>neck<br>lesser trochanter<br>greater trochanter<br>intertrochanteric line<br>gluteal tuberosity<br>shaft<br>linea aspera<br>medial condyle<br>lateral condyle<br>medial epicondyle<br>lateral epicondyle<br>patellar surface<br>articular surfaces for the tibia |
|            | <b>Tibia<br/>(Shin)</b>       | medial condyles<br>lateral condyles<br>superior articular surfaces for the femur<br>intercondylar eminence<br>tibial tuberosity<br>articular facet for the head of the fibula<br>shaft<br>anterior tibial crest<br>medial malleolus<br>fibular notch<br>articular facet for the talus     |
|            | <b>Fibula</b>                 | head<br>articular facet for the tibia<br>neck<br>shaft<br>lateral malleolus<br>malleolar fossa<br>articular facet for the talus   |
|            | <b>Patella<br/>(knee cap)</b> | apex<br>base<br>articular surface for the femur   |

## Bones and Boney Landmarks

### Lower Appendicular Skeleton

|                  | <u>Bone</u>                          | <u>Landmark</u>        |                   |
|------------------|--------------------------------------|------------------------|-------------------|
| Foot             | Tarsals<br>(Ankle bones)             | Calcaneus              |                   |
|                  |                                      | Talus                  | Trochlea          |
|                  |                                      | Navicular              |                   |
|                  |                                      | Cuboid                 |                   |
|                  |                                      | Medial cuneiform       |                   |
|                  |                                      | Intermediate cuneiform |                   |
|                  | Lateral cuneiform                    |                        |                   |
|                  | Metatarsals<br>(sole of<br>the foot) | ( 1 - 5 )              | head, shaft, base |
|                  | Phalanges<br>(toes)                  |                        | head, shaft, base |
|                  |                                      | Proximal ( 1 - 5 )     |                   |
| Middle ( 2- 5 )  |                                      |                        |                   |
| Distal ( 1 - 5 ) |                                      |                        |                   |