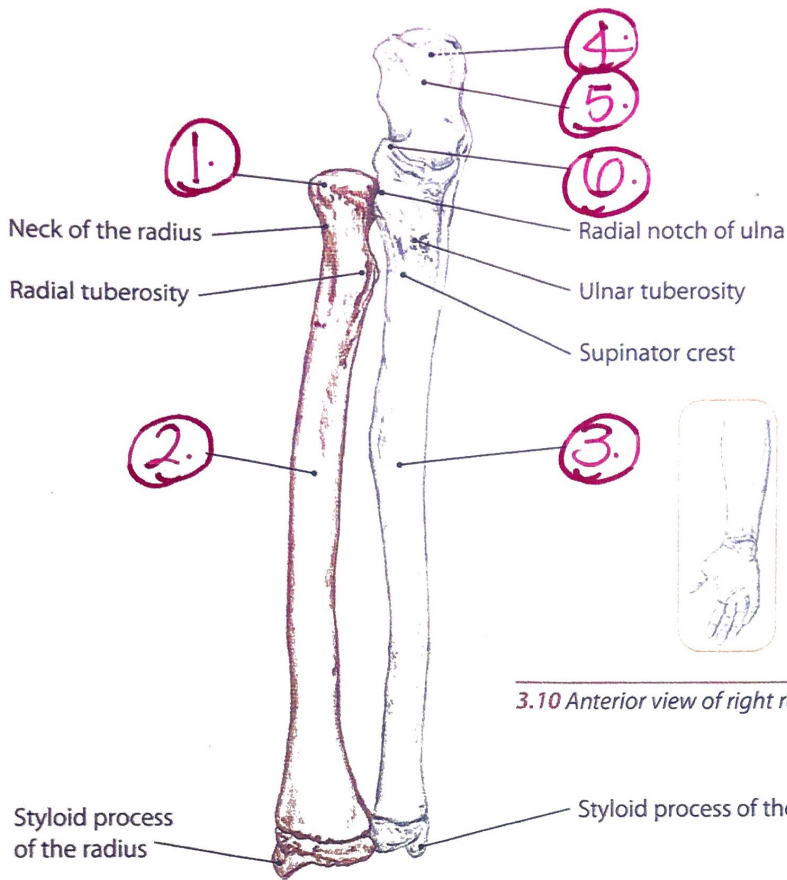
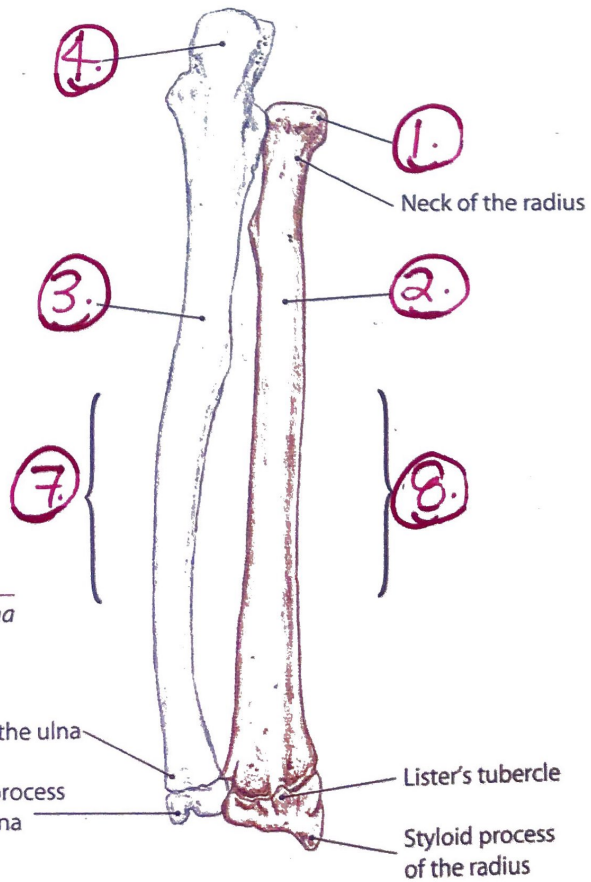
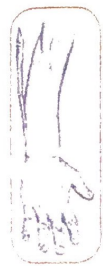


The Ulna and Radius

A.

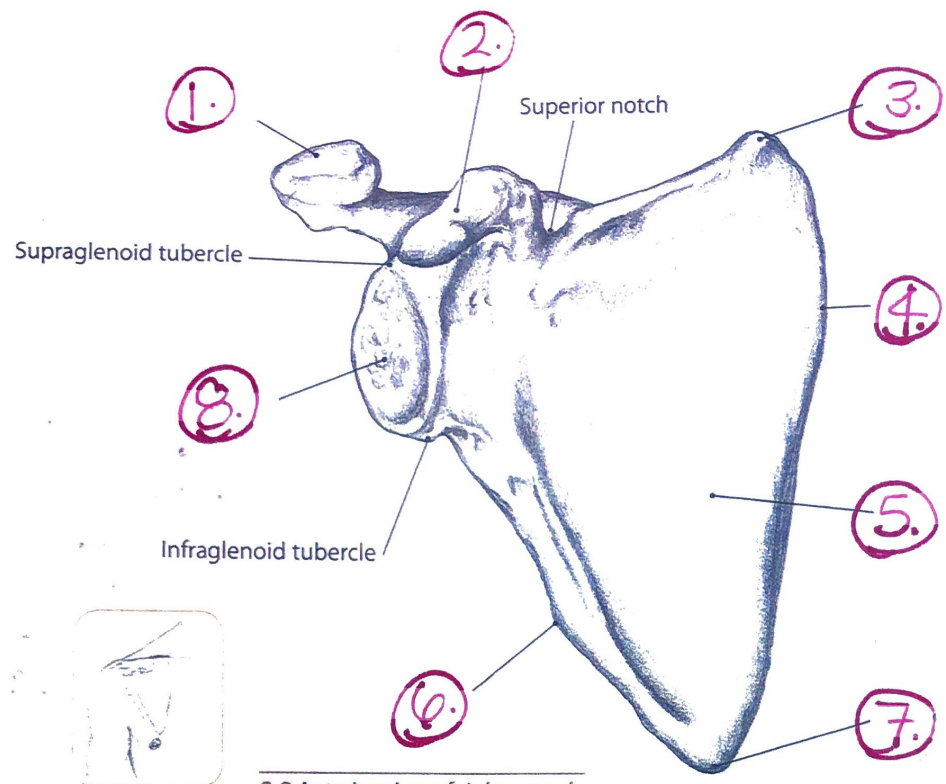


3.10 Anterior view of right radius and ulna

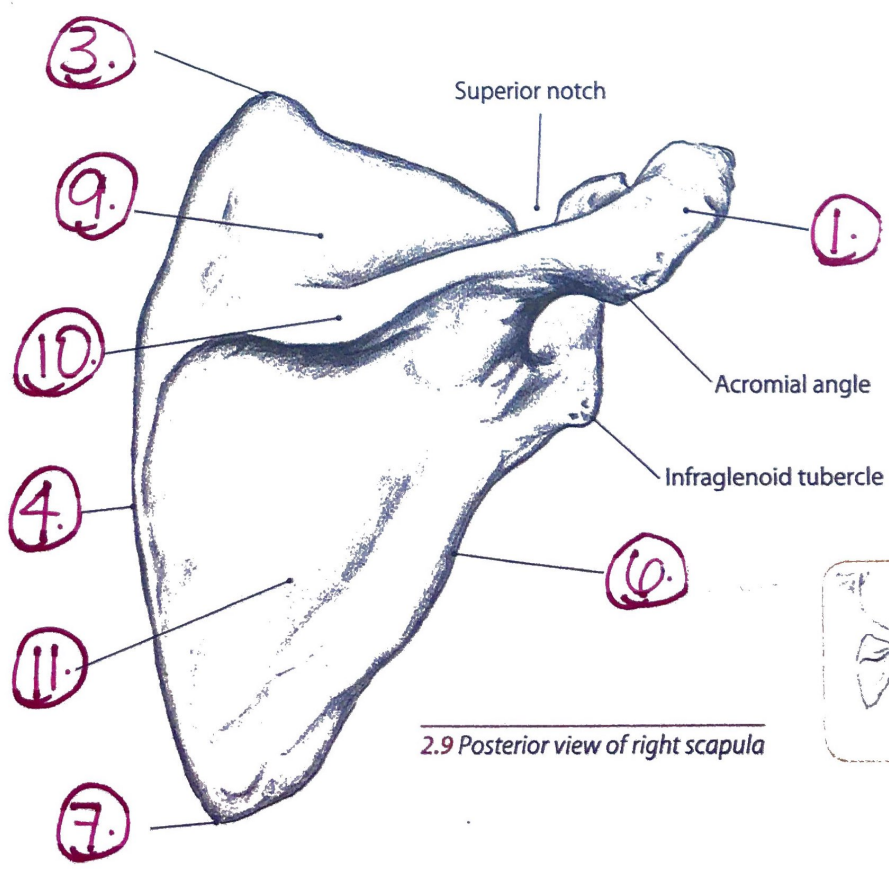


3.11 Posterior view of right radius and ulna

Forearm & Hand



2.8 Anterior view of right scapula



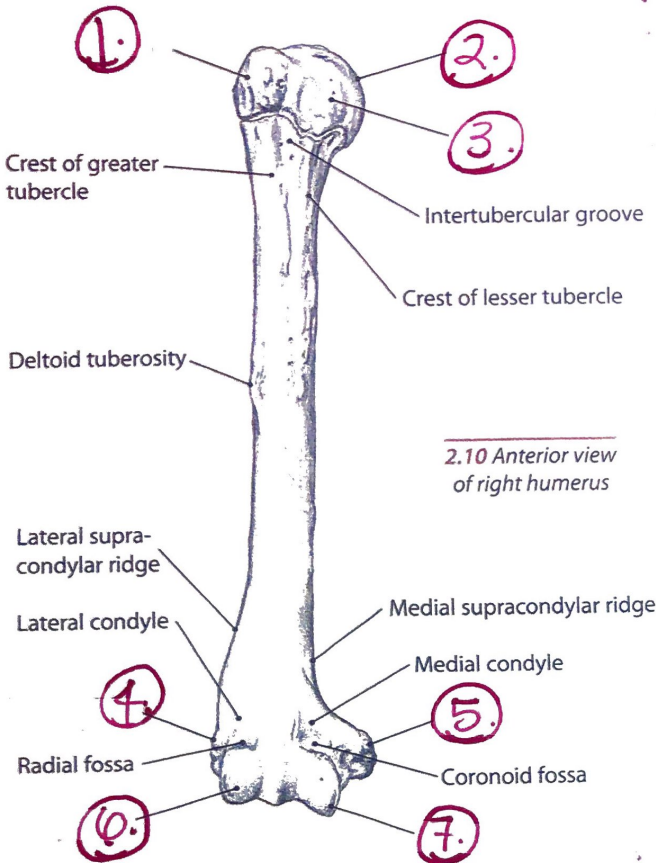
2.9 Posterior view of right scapula

process
scapula
scapulae

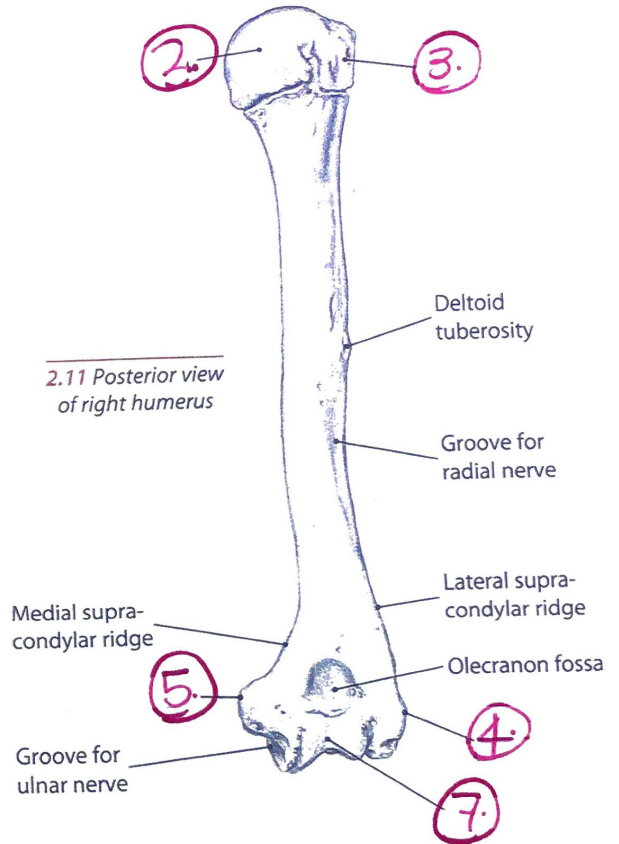
pros-es
skap-u-la
skap-u-lay

L. going forth
L. shoulder, blade
plural for scapula

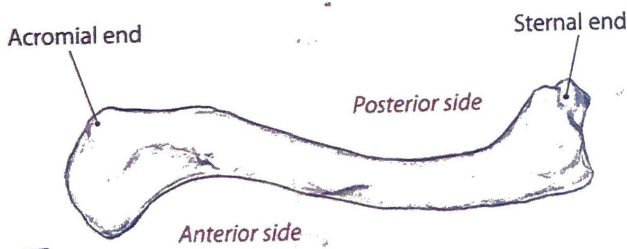
The Humerus and Clavicle



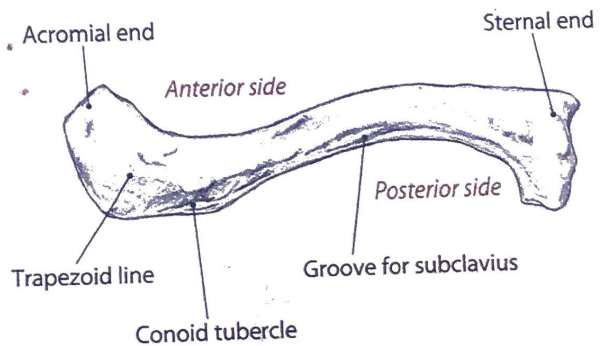
2.10 Anterior view of right humerus



2.11 Posterior view of right humerus



2.12 Superior view of right clavicle



2.13 Inferior view of right clavicle

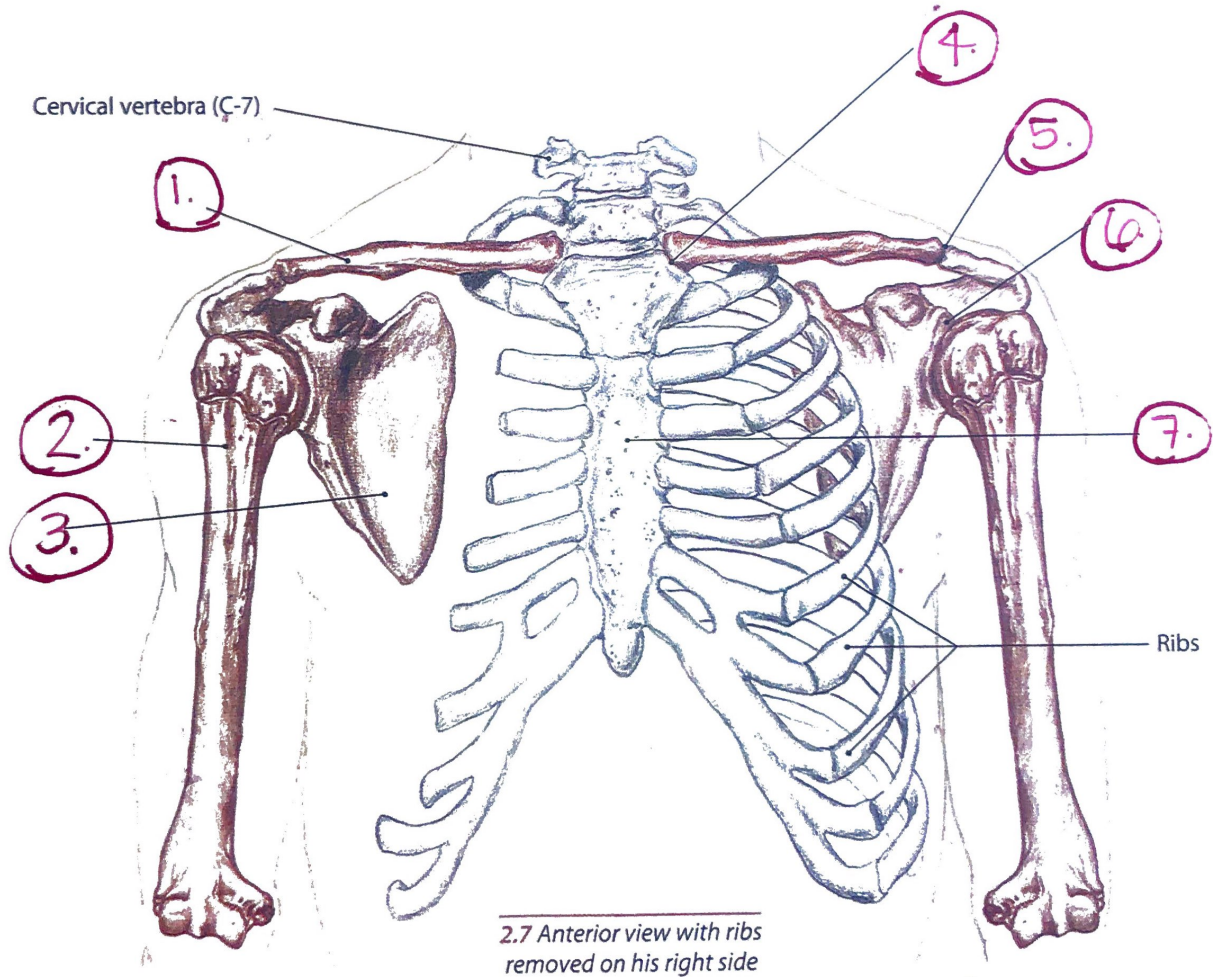
Bones of the Shoulder and Arm

The shoulder complex is made up of three bones: the clavicle, scapula and humerus (2.7). The **clavicle** or collar bone is superficial and runs horizontally along the top of the chest at the base of the neck. It articulates laterally with the acromion of the scapula (acromioclavicular joint) and medially with the sternum (sternoclavicular joint). Both joints are synovial joints. The sternoclavicular joint is the single attachment site between the upper appendicular and axial skeletons.

The **scapula** is the triangular-shaped bone of the upper back. Along with the clavicle, the scapula plays a vital role in stabilization and movement of the arm. The scapula has several fossae, corners and ridges that

serve as attachment sites for sixteen muscles. The scapula glides across the posterior surface of the thorax to form the scapulothoracic joint. However, because this articulation does not have any of the usual joint components, it is considered a false joint.

The **humerus** is the bone of the arm. The proximal humerus articulates with the glenoid fossa of the scapula to form the glenohumeral joint. The glenohumeral joint is a synovial, ball-and-socket joint with a wide range of movement. The deltoid muscle and numerous tendons surround the proximal humerus and the glenohumeral joint.



The clavicle is the first bone to start ossifying (hardening) in a human fetus, yet paradoxically it is the last to completely develop—often not until the late teens or early twenties. This fact, along with its superficial location, may explain why the clavicle is one of the most frequently broken bones in the body.

A quadruped, such as a dog or cat, however, is not concerned with breaking its clavicle. Since a quadruped's scapula is positioned on the lateral side of the trunk (as opposed to a human's, which lies on the posterior side of the trunk), its clavicle is not as essential to the movement of the shoulder complex. Actually, cats have a

thin sliver for a clavicle while dogs have just a small piece of cartilage.

A bird's clavicles are joined to form a furcula. The single unit of the furcula acts as a strut, offering greater stability to the large pectoral muscles during flight. The furcula is what we split apart when vying for the long end of the "wishbone."