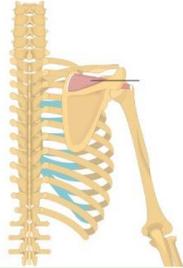
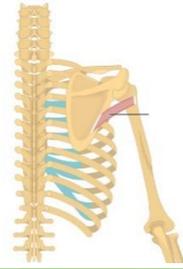
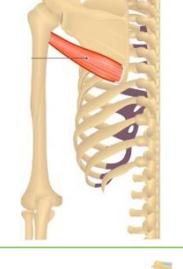
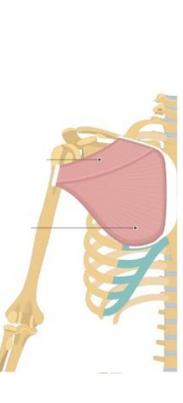
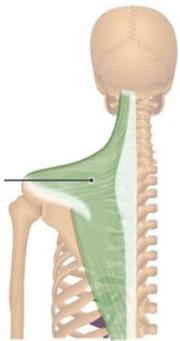
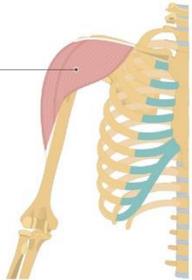
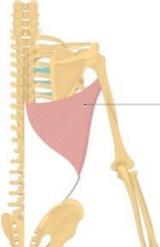
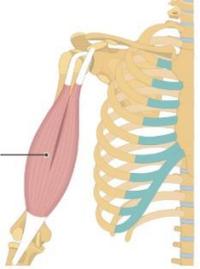
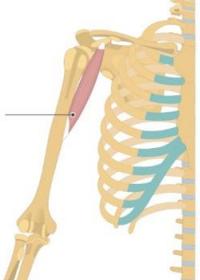


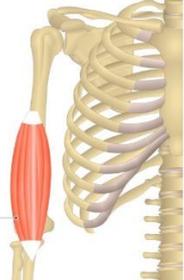
Muscle	Origin	Insertion	Innervation	Action	Image
<b>POSTERIOR SCAPULAR REGION</b>					
<b>Supraspinatus</b>	Supraspinous fossa of the scapula (above the spine) on the posterior surface of the scapula	They form tendons that insert on the greater tubercle of the humerus (upper facet)	Suprascapular Nerve	The supraspinatus initiates abduction of the arm( 0-15degree)	
<b>Infraspinatus</b>	(It should be the infraspinatus fossa but it is not mentioned in the slides)	The tendon of the infraspinatus passes posteriorly to the glenohumeral joint and inserts on the middle facet of the greater tubercle	Suprascapular Nerve	The infraspinatus laterally rotates the humerus	
<b>Teres minor</b>	It is a cord-like muscle it originates from the lateral border of the scapula below the infraglenoid tubercle	inferior facet of the greater tubercle of the humerus	Axillary Nerve	laterally rotates the humerus	
<b>Teres major</b>	from a large oval region on the posterior surface of the inferior angle of the scapula	medial lip of the intertubercular sulcus on the anterior surface of the humerus	Lower subscapular Nerve	medially rotates and extends the humerus.	
<b>Subscapularis</b> (it is not considered one of the posterior muscles, it is found anteriorly on the scapula)	Subscapular fossa	Lesser tubercle	Upper and lower subscapular nerves.	Medial rotation of the arm	
<b>PECTOREAL REGION</b>					
<b>Pectoralis major</b>	1-The clavicular head originates from the medial half of the clavicle  2-The sternocostal head originates from the medial part of the anterior thoracic wall; anterior surface of	into the lateral lip of the intertubercular sulcus of the humerus.	by the lateral and medial pectoral nerves, which originate from the brachial plexus in the axilla.	Acting together, the two heads of the pectoralis major flex, adduct, and medially rotate the arm at the shoulder joint.	
<b>It is the largest and most superficial muscle of pectoral region The muscle has two heads: 1-The clavicular head</b>					

<p><b>2- The sternocostal head</b></p>	<p>sternum first seven costal cartilages sternal end of sixth rib aponeurosis of external oblique</p>				
<p><b>Pectoralis minor</b></p>	<p>It is a small triangular-shaped muscle that lies deep to the pectoralis major muscle originates as three muscular slips from the anterior surfaces and upper margins of ribs 3 to 5</p>	<p>Insertion: into the coracoid process</p>	<p>medial pectoral nerve, which originates from the brachial plexus in the axilla.</p>	<p>protracts the scapula (by pulling the scapula anteriorly on the thoracic wall) and depresses the lateral angle of the scapula.</p>	
<p><b>Subclavius</b></p>	<p>is a small muscle that lies deep to the pectoralis major muscle and passes between the clavicle and rib I, It originates medially, as a tendon, from rib I at the junction between the rib and its costal cartilage</p>	<p>groove on the inferior surface of the middle third of the clavicle</p>	<p>Nerve to Subclavius , a small branch from the superior trunk of the brachial plexus.</p>	<p>The function of the subclavius is not entirely clear, but it may act to pull the shoulder down by depressing the clavicle and may also stabilize the sternoclavicular joint by pulling the clavicle medially.</p>	

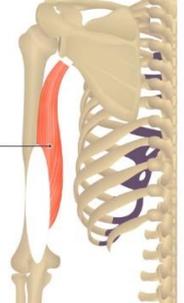
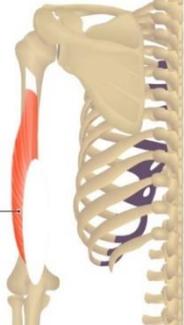
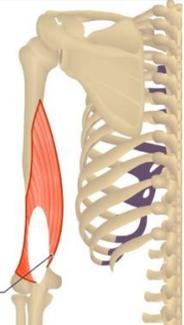
**Superficial Muscles of the shoulder**

<p><b>Trapezius</b></p>	<p>has an extensive origin from the from: Skull spines of C1-T12 vertebrae. From C1 to CVII, the muscle attaches to the vertebrae through the ligamentum nuchae</p>	<p>(U-shaped insertion opposite to the origin of deltoid) Its fibers run in 3 directions:</p> <ol style="list-style-type: none"> <li>1) Down: Clavicle.</li> <li>2) Horizontal: Acromion.</li> <li>3) Up: Spine of scapula.</li> </ol>	<p>accessory nerve [XI] and the anterior rami of cervical nerves C3 and C4</p>	<p>powerful elevator of the shoulder and also rotates the scapula to extend the reach superiorly. Trapezius cooperates with other muscles in steadying the scapula, controlling it during movements of the arm Upper fibers elevate the scapula middle fibers pull scapula medially lower fibers pull medial border of scapula downward</p>	
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<b>Deltoid</b>	Clavicle, acromion and spine of scapula (U shaped)	Deltoid tuberosity	Axillary Nerve (branch of the posterior cord of the brachial plexus)	A muscle that performs three function because of the direction of its fibers:-  1)Post: extend shoulder 2)Ant: flex shoulder 3)Middle: Abduct arm 15-90degree.	
<b>Latissimus dorsi</b>	<ul style="list-style-type: none"> <li>• T7-T12, L1- L5</li> <li>• Sacrum &amp; Iliac crest</li> <li>• lower 3-4 ribs and inferior</li> <li>• Angle of the scapula</li> </ul>	Floor of biceptal groove	Thoracodorsal Nerve	extends, adducts and medially rotate humerus like in canoeing.	
<b>Serratus anterior</b>	from the lateral surfaces of ribs I to IX and the intervening deep fascia overlying the related intercostal spaces	insert primarily on the costal surface of the medial border of the scapula.	long thoracic nerve	Pulls the scapula forward over the thoracic wall(protraction) and facilitates scapular rotation. it also keeps the costal surface of the scapula closely opposed to the thoracic wall	
<b>Anterior compartment of the arm (BBC Group)</b>					
<b>Biceps brachii</b>	It has two heads; long and short  <ul style="list-style-type: none"> <li>• Origin of the long head: Supraglenoid tubercle of scapula</li> <li>• Origin of the short head: Coracoid process of scapula</li> </ul>	Radial tuberosity (round tendon), the main insertion and bicipital aponeurosis into deep fascia of forearm	<ul style="list-style-type: none"> <li>• Blood supply: Brachial artery</li> </ul>	Supinator of Forearm (at the superior and inferior radioulnar joints) and strong flexor of elbow joint; weak flexor of shoulder joint	
<b>Coracobrachialis</b>	Coracoid process of scapula	Medial aspect of shaft of humerus	<ul style="list-style-type: none"> <li>• Nerve supp: Musculocutaneous nerve</li> </ul>	Flexes arm and also weak adductor	

<b>Brachialis</b>	Front of lower half of humerus	Coronoid process of ulna		Flexor of elbow joint	
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**Posterior compartment of the arm**

<b>long head of Triceps brachii</b>	Infraglenoid tubercle of scapula	Olecranon process of ulna		<ul style="list-style-type: none"> <li>• Blood supply: 1. Profunda brachii 2. Ulnar collateral arteries</li> </ul>	<ul style="list-style-type: none"> <li>• Extensor of elbow joint</li> </ul>	
<b>lateral head of Triceps brachii</b>	Upper half of posterior surface of shaft of humerus					
<b>medial head of Triceps brachii</b>	Lower half of posterior surface of shaft of humerus					

**The superficial group of the muscles of the front of forearm**

<b>*Pronator teres muscle</b>	Medial epicondyle (common flexion origin, CFO)	Into the lateral surface of the shaft of the radius	From the median nerve.	<ul style="list-style-type: none"> <li>• Pronation of the forearm</li> <li>• Flexion of the forearm.</li> </ul>	
<b>Flexor carpi radialis</b>	From the medial epicondyle of the humerus (CFO)	Into the bases of the second and third metacarpal bones.	From the median nerve	<ul style="list-style-type: none"> <li>• Flexion of the hand at the wrist joint.</li> <li>• Abduction of the hand at the wrist joint.</li> </ul>	

<b>Palmaris longus</b>	From the medial epicondyle of the humerus (CFO)	Into the palmar aponeurosis and flexor retinaculum.	From the median nerve.	Flexion of the hand at the wrist joint.	
<b>Flexor carpi ulnaris</b>	Medial epicondyle(CFO)	Into the pisiform bone, hook of hamate and base of the 5 th metacarpal bone.	From the ULNAR nerve	<ul style="list-style-type: none"> <li>• Flexion of the hand at the wrist joint.</li> <li>• Adduction of the hand at the wrist joint.</li> </ul>	

**The intermediate layer of the muscles of the front of forearm**

<b>Flexor digitorum superficialis</b>	Take origin from three bone CFO +radius + ulna	into the middle phalanges of the medial 4 fingers	From the median nerve.	Flexes middle phalanx of fingers and assists in flexing proximal phalanx and hand.	
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**The deep layer of the muscles of the front of forearm**

<b>Flexor pollicis longus</b>	From the anterior surface of the shaft of the radius and radial half of the interosseus membrane	distal phalanx of the thumb	From the anterior interosseus nerve (branch of the median nerve).	Flexes distal phalanx of thumb	
<b>Flexor digitorum profundus</b>	From the anterior and medial surface of the shaft of the ulna and and anterior medial half of the interosseus membrane.	inserted into the distal phalanges of the medial 4 fingers.	<ul style="list-style-type: none"> <li>• Its lateral half: from the anterior interosseus nerve (branch of the median nerve).</li> <li>• It medial half: from the ulnar nerve</li> </ul>	<ul style="list-style-type: none"> <li>• Flexes distal phalanx of fingers;</li> <li>• assists in flexion of middle and proximal phalanges</li> <li>3. Helps of flexion of the hand at the wrist joint.</li> </ul>	
<b>Pronator quadratus</b>	From the anterior surface of the shaft of the ulna	Into the anterior surface of the shaft of the radius	From the anterior interosseus nerve (branch of the median nerve).	Pronation of the forearm at the radio-ulnar joints	

**Contents of the Lateral Fascial Compartment of the Forearm**

<b>Brachioradialis</b>	Lateral supracondylar ridge lateral epicondyle of the humerus	Base of styloid process of radius	Radial Nerve	Stabilizes the elbow joint during flexion  rotates forearm to the midprone position	
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<b>extensor carpi radialis longus</b>	Lateral supracondylar ridge of humerus	Posterior surface of base of second metacarpal bone	Radial Nerve	Extends and abducts hand at wrist joint	
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**The Superficial group**

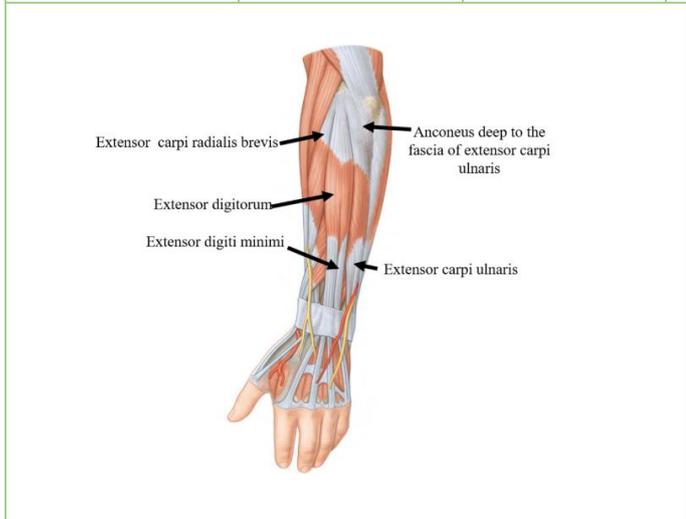
<b>Extensor carpi radialis brevis</b>	the lateral epicondyle of the humerus	Posterior surface of base of third metacarpal bone	Nerve supply: deep branch of the radial nerve	Extends and abducts hand at wrist joint	
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<b>Extensor digitorum</b> (It is the major extensor of the four fingers (index, middle, ring, and little fingers))	from the lateral epicondyle of the humerus	*It forms four tendons, each of which passes into a finger  (see the pic that has * in the next page)	Nerve supply: by the posterior interosseous nerve which is the continuation of the deep branch of the radial nerve after it emerges from the supinator muscle	Extends the index, middle, ring, and little fingers;  can also extend the wrist	
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<b>Extensor digiti minimi</b>	the lateral epicondyle of the humerus	Extensor expansion of little finger (Dorsal hood of the little finger)	Posterior interosseous nerve (not mentioned in the slides, I think the doc just forgot to add it)	Extends the little finger	
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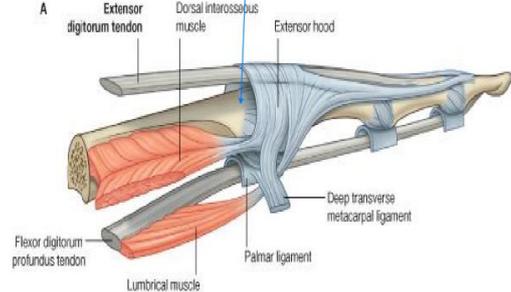
<b>Extensor carpi ulnaris</b>	Lateral epicondyle of humerus	Base of fifth metacarpal bone	Posterior interosseous nerve	Extends and adducts the wrist	
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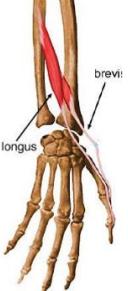
<b>Anconeus</b>	Lateral epicondyle of humerus	olecranon process of ulna	Nerve supply: Radial nerve	Abduction of the ulna in pronation; accessory extensor of the elbow joint	
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➤ On the dorsal surface of the hand, adjacent tendons of extensor digitorum are interconnected. In the fingers, each tendon inserts, via a triangular-shaped connective tissue aponeurosis (the **extensor hood**), into the base of **the dorsal surfaces of the middle and distal phalanges.**



Deep group					
<b>*Supinator</b>	Not required	Front and lateral and posterior surfaces of the upper 1/3 of the radius.	Nerve supply: Deep branch of Radial Nerve	Supination the forearm	
<b>Abductor pollicis longus</b>		Base of the 1st Metacarpal bone	Nerve supply: posterior interosseous nerve.	Abducts and extends thumb	
<b>Extensor pollicis brevis</b>		Base of the <u>proximal phalanx</u> of the thumb.	Nerve supply: posterior interosseous nerve.	Extends Metacarpophalangeal joint of the thumb.	
<b>Extensor pollicis longus</b>		Base of the <u>distal phalanx</u> of the thumb	Nerve supply: posterior interosseous nerve.	Extends the distal phalanx of the thumb	
<b>Extensor indicis</b>		Its tendon joins the extensor expansion of the index finger	Nerve supply: posterior interosseous nerve	Extends all the joints of the index finger	
<p>❖ <b>Blood supply: Posterior and anterior interosseous arteries</b></p> <p>❖ <b>Nerve supply: Deep branch of the radial nerve</b></p>					

Done by Waseem Aldemeri

References:

All of the information is from Dr. Amjad Shatarat's slides.

Images are from: get body smart, kenhub and some are from the slides.

Good luck to you all