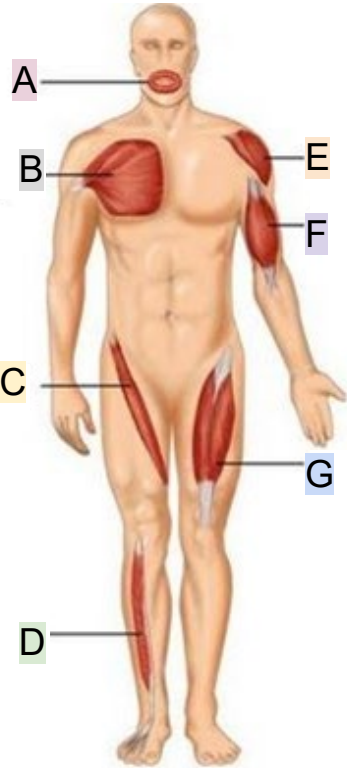


Classification of Muscles

Krystal Ong

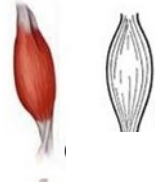
Classification of Muscles

Circular Muscle: a ring like band of muscle



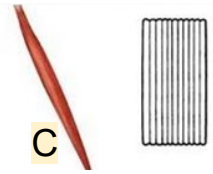
Multipennate Muscle: tendon will branch within the muscle

Convergent Muscle: muscle fibers will converge to one common attachment site

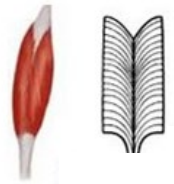


Fusiform muscle: shape of a spindle with parallel fibers that narrow at the ends

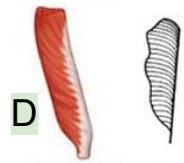
Parallel Muscle: fascicles run parallel to one another



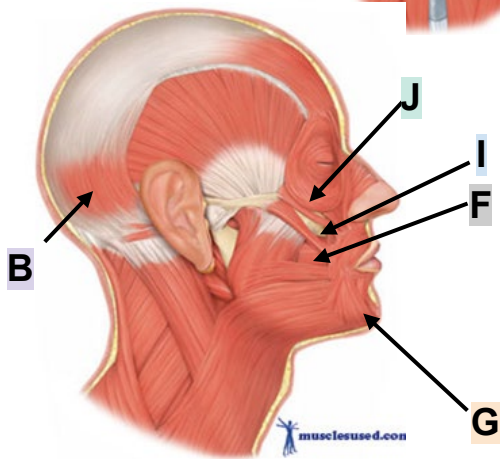
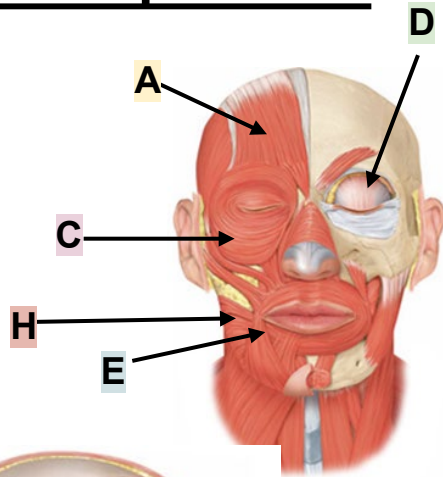
Bipennate Muscle: 2 rows of muscle fibers that are facing in opposite directions (looks like a feather)



Unipennate Muscle: muscle fibers are arranged on same side as tendon



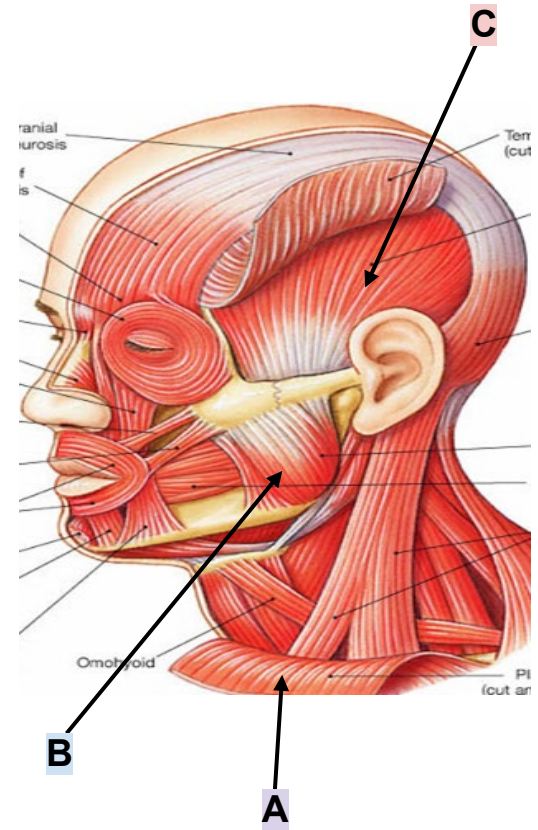
Musculature of Facial Expression



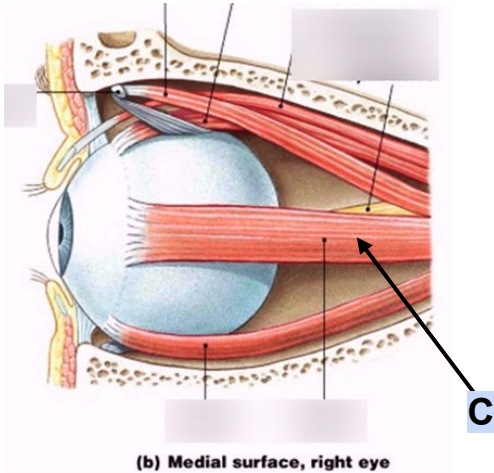
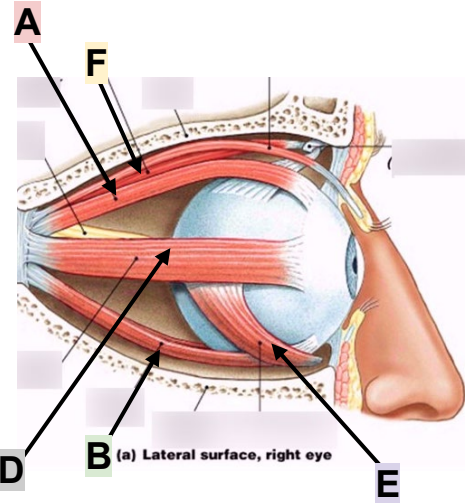
Muscle	Origin	Insertion	Action
A: Frontal belly of occipitofrontalis	Epicranial aponeurosis		Raises eyebrows & wrinkles forehead
B: Occipital belly of occipitofrontalis	Superior nuchal line of occipital bone	Epicranial aponeurosis	Tenses & retracts scalp
C: Orbicularis oculi	Frontal bone & maxilla on medial orbit	Eyelid	Closes eye
D: Levator Palpebrae Superioris	Lesser wings of sphenoid bone	Superior palpebrae	Open eyes
E: Orbicularis oris	Maxillae & mandible	Skin of lips	Closes and purses lips
F: Buccinator	Alveolar process of mandible & maxillae	Angle of mouth	Compresses cheeks
G: Depressor anguli oris	Body of mandible	Angle of mouth	Depresses angle of mouth
H: Risorius	Masseter	Angle of mouth	Retracts angle of mouth
I: Zygomaticus major	Zygomatic bone	Angle of mouth	Raises angle of mouth
J: Zygomaticus minor	Zygomatic bone	Upper lip	Raises upper lip

Musculature of Mastication

Muscle	Origin	Insertion	Action
A: Platysma	Fascia over deltoid muscles	Mandible & skin of cheek	Depresses mandible & tenses skin of neck
B: Masseter	Zygomatic arch	Angle of mandible	Elevates mandible
C: Temporalis	Temporal lines of parietal bone	Coronoid process of mandible	Elevates Mandible



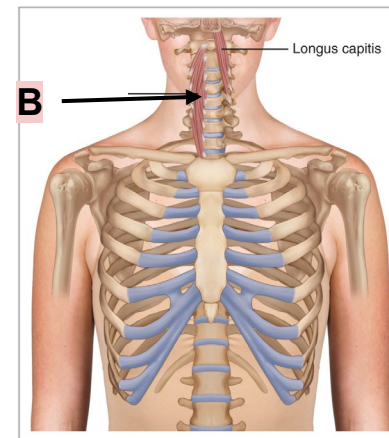
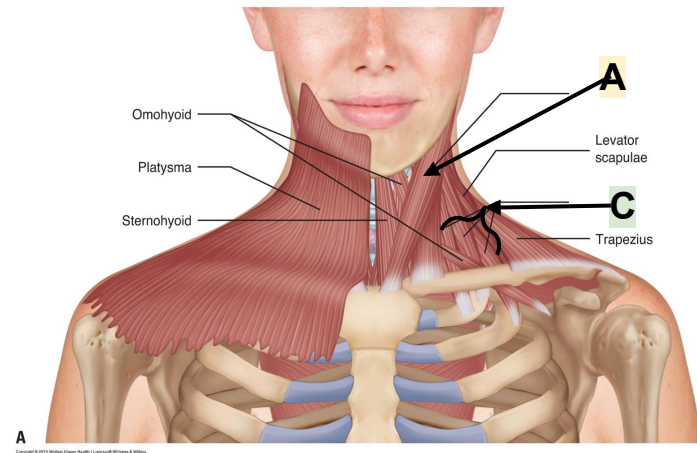
Extrinsic Muscles of The Eye



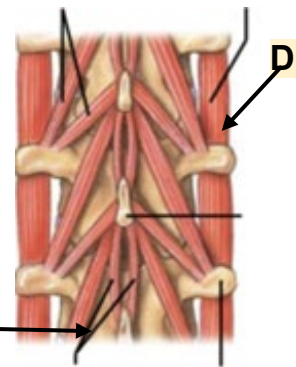
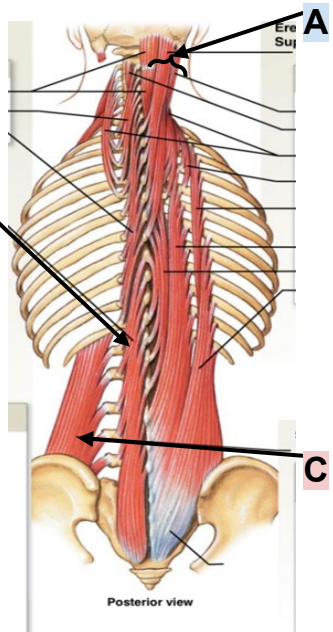
Muscle	Origin	Insertion	Action
A: Superior rectus	Optic canal of sphenoid bone	Sclera	Elevates eye
B: Inferior rectus	Optic canal of sphenoid bone	Sclera	Depresses eye
C: Medial rectus	Optic canal of sphenoid bone	Sclera	Rotates eye medially
D: Lateral rectus	Optic canal of sphenoid bone	Sclera	Rotates eye laterally
E: Inferior oblique	Maxilla	Sclera	Elevates eye and rotates eye laterally
F: Superior oblique	Optic canal of sphenoid bone	Sclera	Depresses eye and rotates eye laterally

Musculature of the Neck

Muscle	Origin	Insertion	Action
A: Sternocleidomastoid	Manubrium and sternal end of clavicle	Mastoid process of temporal bone and superior nuchal line	2 heads together: neck flexion 1 head: rotation
B: Longus Colli	Anterior body of T1-3, anterior tubercles of transverse processes of C3-7	Anterior arch of atlas (C1) and bodies of C2-4	Neck flexion and rotation; limits hyperextension
C: Scalenes	n/a	n/a	Neck flexion and rotation



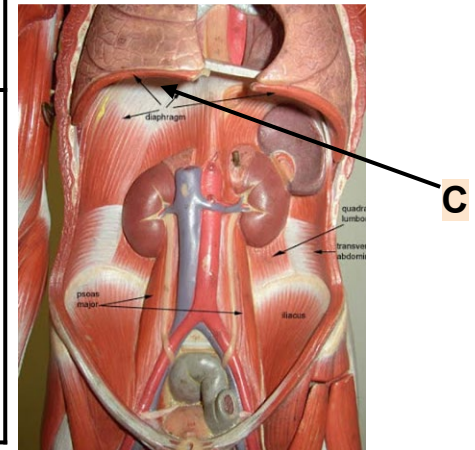
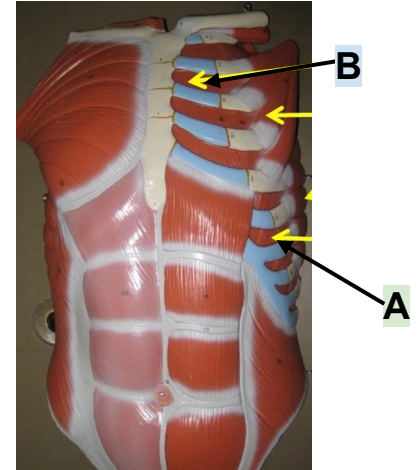
Musculature of the Vertebral Column



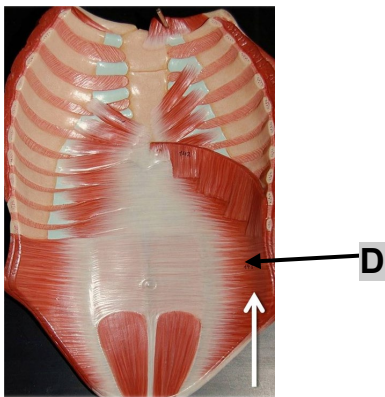
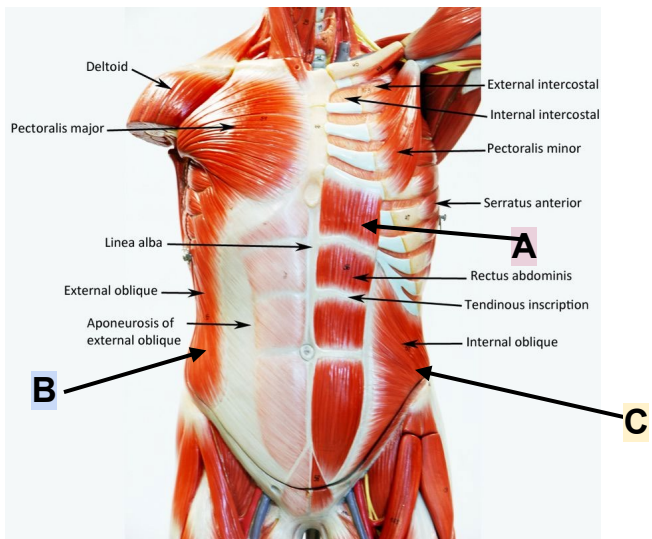
Muscle	Origin	Insertion	Action
A: Erector Spinae group: 1. Spinalis group 2. Longissimus group 3. Iliocostalis group	n/a	n/a	Extends, laterally flexes vertebral column
B: Multifidus	Sacrum and transverse process of vertebrae	Spinous process of vertebrae	Extends and rotates vertebral column
C: Quadratus lumborum	Transverse process of inferior vertebra	Transverse process of superior vertebra	Laterally flexes vertebral column
D: Intertransversarii	Transverse process of inferior vertebra	Transverse process of superior vertebra	Laterally flexes vertebral column
E: Interspinales	Spinous process of inferior vertebra	Spinous process of superior vertebra	Extends vertebral column

Musculature of the Thorax

Muscle	Origin	Insertion	Action
A: External intercostals	Inferior border of superior rib	Superior border of inferior rib	Elevates ribs
B: Internal intercostals	Superior border of inferior rib	Inferior border of superior rib	Depresses ribs
C: Diaphragm	n/a	n/a	Expands thoracic cavity for breathing and compresses abdominopelvic cavity



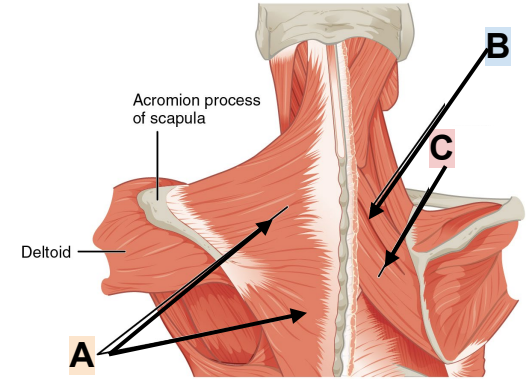
Musculature of the Abdomen



Muscle	Origin	Insertion	Action
A: Rectus abdominis	Pubic crest and pubic symphysis	Xiphoid process of sternum and costal cartilage of ribs 5-7	Compresses abdomen; depresses ribs, and flexes vertebral column
B: External oblique	n/a	n/a	Compresses abdomen; depresses ribs, flexes and rotates vertebral column
C: Internal oblique	n/a	n/a	Compresses abdomen; depresses ribs; flexes and rotates vertebral column
D: Transversus abdominis	n/a	n/a	Compresses abdomen

Muscle	Origin	Insertion	Action
A: Trapezius	n/a	Clavicle and acromion process and spine of scapula	Elevates the clavicle; elevates, depresses, and adducts (retracts) the scapula
B: Rhomboid minor	n/a	Medial border of scapula at base of spine	Adducts and rotates scapula downward
C: Rhomboid major	n/a	Medial border of scapula inferior to spine	Adducts and rotates scapula downward
D: Levator scapulae	n/a	Medial border of scapula superior to spine	Elevates scapula
E: Pectoralis minor	Ribs 2-4 or 3-5	Coracoid process of scapula	Rotates scapula downward
F: Serratus anterior	Ribs 1-8, 1-9 or 1-10	Medial border of scapula	Rotates scapula upward

Muscles that move the Pectoral Girdle



Muscles that move the Brachium

Muscle	Origin	Insertion	Action
Pectoralis major		Greater tubercle of humerus	Flexes, adducts, medially rotates the brachium
Latissimus dorsi		Intertubercular sulcus of humerus	Extends, adducts , medially rotates the brachium
Deltoid	Clavicle, acromion process and spine of scapula	Deltoid tuberosity of humerus	Flexes, extends, abducts, medially and laterally rotates the brachium
Subscapularis	Subscapular fossa of scapula	Lesser tubercle of humerus	Stabilizer of shoulder (medially rotates the brachium)
Supraspinatus	Supraspinous fossa of scapula	Greater tubercle of humerus	Stabilizer of shoulder (abducts arm and laterally rotates the brachium)
Infraspinatus	Infraspinous fossa of scapula	Greater tubercle of humerus	Stabilizer of shoulder (laterally rotates the brachium)
Teres minor	Lateral border of scapula	Greater tubercle of humerus	Stabilizer of shoulder (laterally rotates the brachium)
Teres major	Inferior angle of scapula	Lesser tubercle and intertubercular sulcus of humerus	extends , adducts, and medially rotates the brachium
Coracobrachialis	Coracoid process of scapula	N/A	Flexes and adducts the brachium