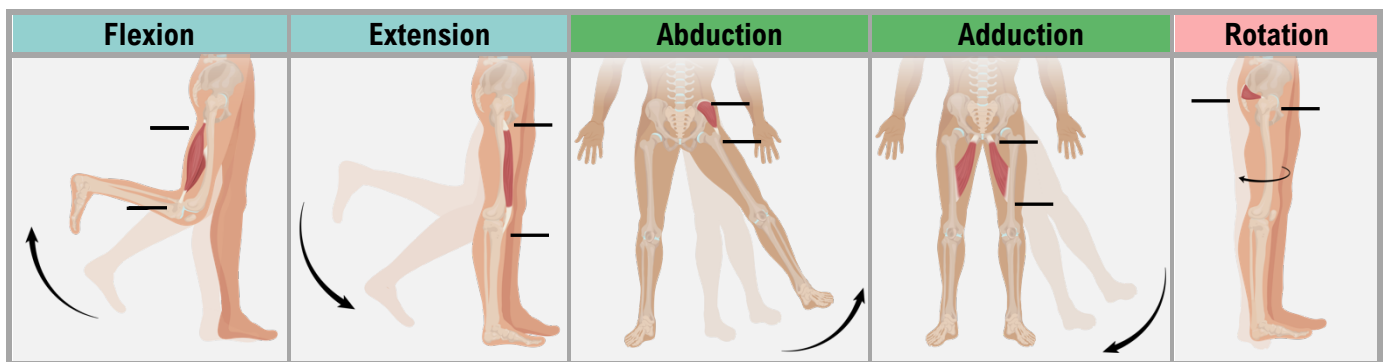
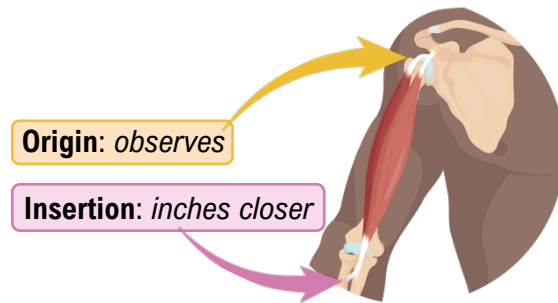


TOPIC: ORIGIN AND INSERTION

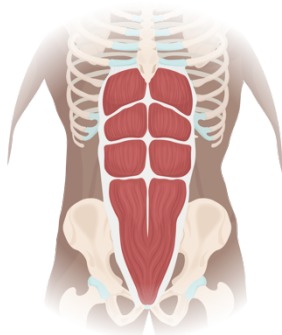
- Muscles make two parts of the body get _____.
- The **insertion** moves _____ the **origin**.
 - **Origin:** _____ attachment site.
 - **Insertion:** _____ attachment site.
- The origin and insertion determine the _____.



EXAMPLE: The origins and insertions of different muscles are given. What type of movement or movements would be created when these muscles contract?

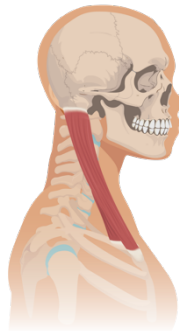
O: Pubis

I: Xiphoid process



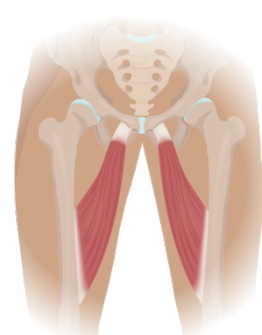
O: Manubrium

I: Mastoid process



O: Pubis

I: Linea aspera of the femur



TOPIC: ORIGIN AND INSERTION

PRACTICE: True or False: if false, choose the answer that best corrects the statement.

During a muscle contraction, the origin moves towards the insertion.

- a) True.
- b) False, the insertion moves towards the origin during contraction.
- c) False, both the origin and the insertion move during contraction.
- d) False, neither the origin nor the insertion moves during contraction.

PRACTICE: The flexor carpi ulnaris is a muscle that adducts and flexes the hand at the wrist. The muscle attaches to both the humerus and the base of the 5th metacarpal. Based on the movement that this muscle performs, which attachment is the origin?

- a) Humerus.
- b) Wrist.
- c) 5th metacarpal.
- d) It's impossible to say from the information given.

PRACTICE: The diagram below shows some of the muscles used for chewing. Using your knowledge of the bones, identify the insertion of the masseter.

- a) Temporal Bone.
- b) Zygomatic.
- c) Mandible.
- d) Maxilla.

