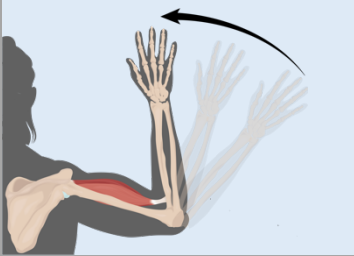
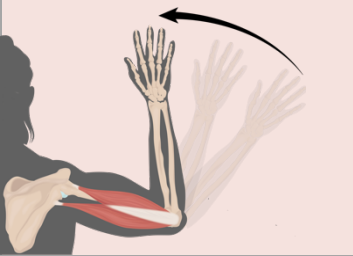
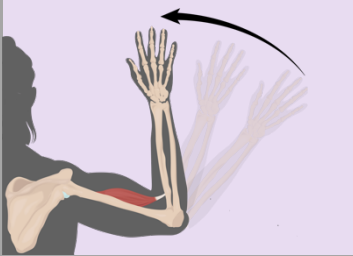
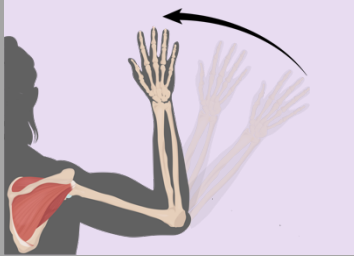


## TOPIC: MUSCLE ACTIONS

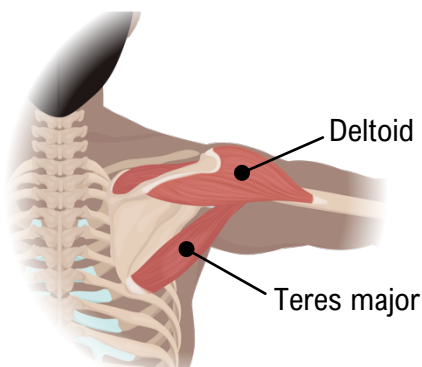
- Muscles can take on different \_\_\_\_\_ to perform a movement.

Agonist or _____ Mover	Antagonist	Synergist	Fixator
_____ muscle responsible for movement.	_____ the action of the prime mover.	_____ the prime mover.	_____ the origin of the prime mover.
<b>Biceps</b> _____: flexes the elbow joint.	<b>Triceps</b> _____: Allows for flexion at elbow.	<b>Brachialis</b> _____ the amount of force.	<b>Rotator cuff</b> _____ the humerus.
			

**EXAMPLE:** For each action below, identify which of the two labeled muscles you would expect to be the agonist and which you would expect to be the antagonist. Then, state roughly where on the body you would expect to find a synergist for each of these movements.

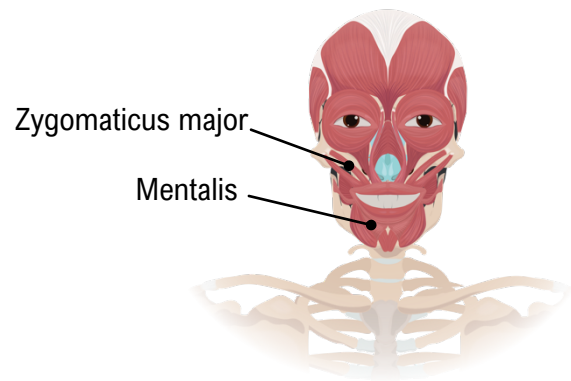
### Lifting your arm to the side:

- Agonist: \_\_\_\_\_
- Antagonist: \_\_\_\_\_
- Synergist Location: \_\_\_\_\_



### Smiling:

- Agonist: \_\_\_\_\_
- Antagonist: \_\_\_\_\_
- Synergist Location: \_\_\_\_\_



**TOPIC: MUSCLE ACTIONS**

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

A fixator works to stabilize the insertion of the antagonist.

- a) True.
- b) False, the fixator stabilizes the origin of the agonist.
- c) False, the fixator relaxes while the agonist contracts.
- d) False, the fixator stabilizes the insertion of the agonist.

**PRACTICE:** The genioglossus is the primary muscle involved sticking out your tongue. The styloglossus is responsible for pulling the tongue back in, making it a(n) \_\_\_\_\_ for sticking out your tongue?

- |               |                |
|---------------|----------------|
| a) Agonist.   | c) Antagonist. |
| b) Synergist. | d) Fixator.    |

**PRACTICE:** The soleus, gastrocnemius, and the tibialis anterior are all major muscles of the lower leg. The gastrocnemius and the soleus are both located in the posterior region of the calf, while the tibialis anterior is located in the anterior region of the lower leg. Based only on this information, which statement do you think is most likely true?

- a) The gastrocnemius and the soleus are antagonists.
- b) The soleus and the tibialis anterior are synergists.
- c) The tibialis anterior is a fixator for the gastrocnemius and the soleus.
- d) The gastrocnemius and the tibialis anterior are antagonists.