

**Lab: Muscle Action**

**Directions:** Perform the following exercises in the weight room. Follow the directions carefully and do not use any weight. We are interested only in the action of the muscle not your brute strength.

As you perform the exercise name the muscle you are working and the action of that muscle.

1. **Crunch:** Lie flat on your back. Place your feet flat-footed against the wall so that the hips and knees form a 90-degree angle. Loosely clench your fists and place them under your chin, with your elbows resting on your abdomen. Slowly curl up your abdomen.

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| <p><b>Name of muscle being exercised:</b> _____</p> <p><b>What is the antagonist for this exercise?</b> _____</p> <p><b>Joint Action:</b> _____</p> <p>Plane action takes place in: _____</p> |
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2. **Bench Press with dumbbells or bar:** Lie on your bench with feet flat on the floor. Hold the lightest dumbbells above shoulders at arm's length with palms facing forward. Dumbbells should be perpendicular to your body. Slowly lower dumbbells until elbows are even with the bench. Elbows should never be below the bench. Return to the starting position.

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| <p><b>Name of muscle being exercised:</b> _____</p> <p><b>What is the antagonist for this exercise?</b> _____</p> <p><b>Joint Action:</b> _____</p> <p>Plane action takes place in: _____</p> |
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3. **Starting position:** Sit on a bench or seat . Position barbell overhead with a narrow overhand grip. Lower forearm behind upper arm with elbows remaining overhead. Extend forearm overhead. Lower and repeat.

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| <p><b>Name of muscle being exercised:</b> _____</p> <p><b>What is the antagonist for this exercise?</b> _____</p> <p><b>Joint Action:</b> _____</p> <p>Plane action takes place in: _____</p> |
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4. **Starting position:** Stand with feet slightly spread. Raise up on the balls of your feet, hold for a few seconds and slowly return to starting position

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| <p><b>Name of muscle being exercised:</b> _____</p> <p><b>What is the antagonist for this exercise?</b> _____</p> <p><b>Joint Action:</b> _____</p> <p>Plane action takes place in: _____</p> |
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5. **Starting position:** Facing bench, stand between bench and lever pads. Lie prone on bench with knees just beyond edge of bench and lower legs under lever pads. Grasp handles. Raise lever pads to back of thighs by flexing knees. Lower lever pads until knees are straight. Repeat

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| <p><b>Name of muscle being exercised:</b> _____</p> <p><b>What is the antagonist for this exercise?</b> _____</p> <p><b>Joint Action:</b> _____</p> <p>Plane action takes place in: _____</p> |
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6. Now turn over on your ventral side. Line up the back of your knee with the curl bar. In a slow, controlled motion, raise legs until bar almost touches your behind. Pause. Slowly lower legs to starting position.

**Name of muscle being exercised:** \_\_\_\_\_

**What is the antagonist for this exercise?** \_\_\_\_\_

**Joint Action:** \_\_\_\_\_

**Plane action takes place in:** \_\_\_\_\_

7. **Lever PullOver:** Use lever machine Adjust seat height so lever is near shoulder axis. Sit on machine and Push foot lever. Place elbows in pads and grasp bar from behind. Release foot lever and place feet on platform or to sides. Pull lever forward and down until elbows are to sides. Return until shoulder is fully flexed, or upper arm is parallel to torso. Repeat.



**Name of muscle being exercised:** \_\_\_\_\_

**What is the antagonist for this exercise?** \_\_\_\_\_

**Joint Action:** \_\_\_\_\_

**Plane action takes place in:** \_\_\_\_\_

**8. Standing Curl**

Starting position: Stand up straight with your feet about shoulders' width apart and knees slightly bent. Hold the dumbbell at your side with palm facing forward. Keep your abdominal muscles tightened and your back straight.

Slowly raise dumbbell toward your collarbone. Stop before you reach full flexion of elbow. Don't twist or curl wrists, keep them rigid. Doing this exercise with the wrists twisted doesn't work the biceps as effectively as keeping them straight. Slowly lower dumbbell to starting position. Stop just before you reach full extension of the arm.



Name of muscle being exercised: \_\_\_\_\_

What is the antagonist for this exercise? \_\_\_\_\_

Joint Action: \_\_\_\_\_

Plane action takes place in: \_\_\_\_\_

9. **Starting position:** Stand straight with feet shoulder width apart. You should be holding a dumbbell in each hand. The dumbbells should be perpendicular to your body. Raise both your arms to the side until they are shoulder height. Pause. Gently return to starting position.

Name of muscle being exercised: \_\_\_\_\_

What is the antagonist for this exercise? \_\_\_\_\_

Joint Action: \_\_\_\_\_

Plane action takes place in: \_\_\_\_\_

10. **Lateral Raise:** Starting position- Stand upright with no dumbbells in hand. Rotate your trunk to the left and then to the right.

Name of muscle being exercised: \_\_\_\_\_

What is the antagonist for this exercise? \_\_\_\_\_

Joint Action: \_\_\_\_\_

Plane action takes place in: \_\_\_\_\_

11. **Squat:** Descend until knees and hips are fully bent. Extend knees and hips until legs are straight. Return and repeat.

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| <p><b>Name of muscle being exercised:</b> _____</p> <p><b>What is the antagonist for this exercise?</b> _____</p> <p><b>Joint Action (s):</b> _____</p> <p><b>Plane action takes place in:</b> _____</p> |
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Complete the following by naming the muscle that performs the function stated.

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| <p><b>Name of muscle being exercised:</b> _____</p> <p><b>Action of the muscle: Closes Jaw</b></p> |
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13.

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| <p><b>Name of muscle being exercised:</b> _____</p> <p><b>Action of the muscle: Raise your eyebrows</b></p> |
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14.

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| <p><b>Name of muscle being exercised:</b> _____</p> <p><b>Action of the muscle: Rotates head and flexes neck. (yes and no)</b></p> |
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| <p><b>Name of muscle being exercised:</b> _____</p> <p><b>Action of the muscle: extends neck and adducts scapula</b></p> |
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**Name of muscle being exercised:** \_\_\_\_\_

**Action of the muscle:** Dorsiflexion of foot

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**Name of muscle being exercised:** \_\_\_\_\_

**Action of the muscle:** Sit with your legs crossed flexes, abducts, and rotates leg