

TASK SHEET 13: RANGE OF MOTION AND BREATHING

Name: _____

Objectives:

Upon completion of this lesson, you will:

1. Identify the term of full range of motion and apply it to your workouts.
2. State the importance of breathing during exercise.

Instructions:

This lesson is presented with a paragraph of information followed by questions pertaining to the paragraph. The answers to the questions are found below the three asterisks (***) that follow each question. By folding a piece of paper and sliding it down the page, you keep the answers covered until you have made a response to the question. After you respond, slide the paper down and compare your answer with the answer given below the asterisks. If your answer is correct, then go to the next question. If your answer is incorrect, then review the preceding paragraph and find out why your answer was wrong. Be sure to write the correct answer on your lesson.

Range of Motion

To achieve maximal benefits from your weight training program, you must perform your exercises through the full range of motion. Range of motion refers to the area covered from the beginning of a movement to the end of a movement. The full range of motion is the greatest amount of movement possible in either direction. For example, in performing a push-up, a person who touches his chest to the ground and then fully extends his arms is considered to have performed the exercise through the full range of motion. However, if a person were to lower his body so his chest was six inches from the ground and only partially extended his arms, then he did not exercise through the full range of motion. When you perform an exercise through the full range of motion you are strengthening your muscles through the full range. If you perform an exercise through less than the full range of motion, then you are limiting your strength development to that range.

1. Range of motion refers to the area covered from the _____ of a movement to the _____ of a movement.

beginning and end
2. If you perform an exercise through less than the full range of motion, then you are _____ your strength development to that particular range.

limiting
3. Full range of motion is the _____ amount of movement possible in either direction.

greatest
4. If you perform an exercise through the full range of motion, then you will _____ your muscles through the full range.

strengthen
5. In performing a push-up, if you touch your chest to the ground and fully extend your arms, you are exercising through _____.

the full range of motion

Breathing

Your muscles must have an adequate supply of oxygen to function properly. This is especially true in the case of exercise and weight training. Breathing is an important part of exercising since you must breathe air into the lungs in order for your body to transport the much-needed oxygen to the working muscles. In addition, your muscles produce waste products from exercising and some of these waste products can be emitted through the air you exhale from your lungs.

In weight training you must be very careful not to hold your breath during a lift. By doing so you may temporarily raise the pressure in your chest cavity, as well as your blood pressure, to abnormal levels. This may cause you to black out and possibly injure yourself.

There are different and sometimes conflicting theories concerning the method of breathing during weight training. For the purposes of this class and for simplicity, you will exhale during the last third of the positive phase of a lift and inhale during the last third of the negative phase.

For example:

Bench Press:

(positive/exhale): After two-thirds (during the last one-third) of the movement of pushing the bar off of the chest.

(negative/inhale): After two-thirds (during the last third) of the movement of returning the bar to the chest.

1. Your muscles must have an adequate supply of _____ to function properly during exercise.

oxygen

2. Your muscles produce _____ from exercising.

- a. oxygen
- b. waste products
- c. pressure

b

3. You must be very careful not to _____ your breath during a lift.

hold

4. You will _____ during the last third of the positive phase of a lift.

exhale

5. You will _____ during the last third of the negative phase of a lift.

inhale

TASK SHEET 14: BENCH PRESS

Student's Name: _____

Date: _____

Observer's Name: _____

Period: _____

Spotter's Name: _____

Student Information: In this lesson you will learn the proper form for performing the bench press. You will be working with two partners in this lesson. One person will act as the lifter (doer), one as the observer (recorder), and the other person will be the spotter. You will rotate until all students have acted in all three roles.

Objectives: You will perform one set of ten repetitions of bench press while using your maximum amount of weight and proper form.

Directions:

1. Choose two partners that you would like to work with while completing this lesson.
2. Go to the appropriate viewing station with your partners and view the videotape on performing the bench press.
3. Go to the bench press area with your partners and decide who will act first as the doer, observer, and spotter.
4. The doer will practice performing the bench press while the observer records and gives feedback to the doer. You will repeat this lesson until you have received "yes" responses on all of the checkpoints.
5. The observer will check the appropriate response (YES/NO) for each checkpoint for the bench press. The observer should check only one checkpoint at a time and give verbal feedback to the lifter on each checkpoint marked "no".
6. You will always use at least one spotter when performing the bench press. The spotter's only responsibility is that of spotting the lifter (doer). The observer is not to act as a spotter.

BENCH PRESS	Yes	No
1. Select a weight that might be performed for a total of only ten repetitions.		
2. While on your back, assume a position on the bench with the eyes directly under the bar.		
3. Spread the feet and legs wide for good balance and support.		
4. Keep the feet flat on the floor at all times.		
5. Keep the head, shoulders, and hips on the bench throughout the lift.		
6. Using an overhand grip, grasp the bar between one and two handgrips out from a shoulder width grip. Make sure the grip is evenly centered on the bar.		
7. Lift the bar off the rack until the arms are fully extended.		
8. Position the bar directly over the shoulders.		
9. Slowly lower the bar to the center of the chest while keeping the elbows out.		
10. Inhale approximately two-thirds of the way down.		
11. Touch the bar lightly on the center of the chest.		
12. While keeping the elbows out, straighten the arms and press the bar back to the starting position above the shoulders.		
13. Exhale approximately two-thirds of the way up.		
14. Perform one set of as many repetitions as possible using proper form.		
15. Apply the principle of progression to find the maximum weight for ten repetitions.		
16. Perform one set of ten repetitions using maximum weight and proper form.		

TASK SHEET 15: LAT PULLDOWN

Student's Name: _____

Date: _____

Student Information: In this lesson you will learn the proper form for performing the lat pull down. You will be working with two partners in this lesson. One person will act as the lifter (doer), one as the observer/recorder. You will rotate with your partner after completing the lesson.

All weight training exercises must be performed slowly and with the proper form in order to gain the maximum benefits and to ensure safety. The lat pull down exercises the latissimus dorsi muscles in the back and the biceps in the upper arm.

Objectives: You will perform one set of ten repetitions of lat pull downs while using your maximum amount of weight and proper form.

Directions:

1. Choose two partners that you would like to work with while completing this lesson.
2. Go to the appropriate viewing station with your partner and view the videotape on performing the lat pull down.
3. Go to the lat pull down machine with your partner and decide who will be the doer and the observer.
4. The doer will practice performing the lat pull down while the observer records and gives feedback. You will repeat this lesson until you have received "yes" responses at all the checkpoints.
5. The observer will check the appropriate response (YES/NO) for each checkpoint for the lat pull down. The observer should check only one checkpoint at a time and give verbal feedback to the lifter on each checkpoint marked "no."

LAT PULLMAN	Yes	No
1. Select a weight that might be performed for a total of only ten repetitions.		
2. Face the machine and assume as wide an overhand grip as possible on the bar.		
3. Slowly lower the body until the arms are fully extended.		
4. Allow the body's weight to pull the bar down until reaching a sitting or kneeling position.		
5. Keep the back perpendicular to the ground.		
6. Tuck the chin slightly.		
7. Inhale.		
8. Smoothly pull the bar down behind the head to the base of the neck.		
9. Exhale approximately two-thirds of the way down.		
10. Allow the bar to slowly raise to the starting position.		
11. Inhale approximately two-thirds of the way up.		
12. Perform one set of as many repetitions as possible using proper form.		
13. Apply the principle of progression to find your maximum weight for ten repetitions.		
14. Perform one set of ten repetitions using your maximum weight and proper form.		

