

# Weight Lifting

## Mini Unit



by Ron Borkowicz, Ph.D.  
National Teacher of the Year

Three Separate Sections for Grades 5-6, 7-8, and 9-12

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## A Guide To General Weight Lifting

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# Suggestions For Using This Mini-Unit

This resource was developed by a National Teacher of the Year who taught at the middle school, high school and university levels. One of the primary goals when developing this resource was to **make everything easier for the teacher**. All of the research and time-consuming work is already done. The only thing that a teacher needs to do is decide on the level of difficulty for the students and make copies at the copy machine. A description of each component follows.

## Articles: A Guide To General Weight Lifting

In addition to describing the health benefits that a general weight lifting exercise program provides, these articles provide the readers with the correct training principles for their personal strength training program. The information is presented in a manner which is easy for the students to understand. The articles are divided into three levels of ability; Grades 5-6, Grades 7-8, and Grades 9-12. The two shorter articles (5-6, 7-8) correspond with Levels one and two of the tests and crossword puzzles.

Many teachers who have been using these Mini-Units for their students have found another use for the articles. They make copies of the article (along with one of the puzzles) and distribute them to the staff as part of their Worksite Wellness program.

## Educational Puzzles

There are four levels of Crossword puzzles and five levels of Word Search puzzles. The puzzles are arranged with Level One being the easiest to complete and the highest level being the most difficult.

The puzzles are an entertaining way to introduce the students to the vocabulary terms that will be included in a lesson and help to reinforce reading, spelling and comprehension skills. They can also be given to students who finish their classroom work early or to study hall students who say that they have "nothing to do." All of the puzzles come with an Answer Key.

## Tests and Review Questions

Because each Mini-Unit is designed for multiple grade levels, there are several levels of Tests and Review Questions. Like the Educational Puzzles, the higher the level, the more difficult the material. **In addition to using as standard assignments, Review Questions can be used as alternate work for homebound students, for non-participants in gym class, for make-up work due to an absence, for extra credit, etc.** All of the Tests and Review Questions come with an Answer Key.

## Worksheets

The three Worksheets levels are similar to the Tests and Review Questions but are arranged to be easier for the students to complete. Each Worksheet is arranged so that the questions are in the same order as the information presented in the article. This is especially useful if using the Worksheets as explained in the Teacher Lesson Plan. All of the Worksheets come with an Answer Key.

## Teacher Lesson Plan

This Lesson Plan can be used by the classroom teacher for a daily class or it can be set aside for a substitute teacher who is not familiar with the topic.



# A Guide To General Weight Lifting

Grades 5-6

There are many different ways to increase muscular strength. Some people perform calisthenics like push-ups and sit-ups. Others use progressive-resistance equipment like elastics tubing. However, most individuals prefer weights for strength training to build muscles.



## Warm-up

All weight lifting sessions should begin with warm-up exercises. They help prepare the body for the activity that will follow. In addition to reducing the chance of injury, the warm-up session will prepare the body for a better workout. That is because muscles perform better if they are warmed-up before the activity.

## Reps and Sets

Repetitions, or reps, refer to the number of times you perform an exercise without resting. For example, if you perform 10 leg presses in a row, it is referred to as 10 reps.

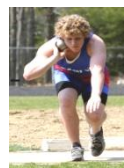


A set refers to the number of times that you complete your reps. For example, if you perform 10 leg presses and rest, then perform 7 leg presses and rest, then perform 4 leg presses, you have completed three sets of 10, 7 and 4 reps. For a general weight lifting program, you should perform three sets of each exercise.

You should not be able to perform more than 10 reps for each set of exercises. If you can perform more than 10 reps without giving up good form, you should add more weight.

## Timing

The amount of time that you spend during the harder part of the exercise and during the easier part of the exercise depends on a variety of things. If you are performing the inclined bench press for general strength, you will perform the harder part at a slower pace than if you are training as a shot putter who needs to put the shot with maximum speed.



Although the harder phase of an exercise does more to increase muscle strength than the easier phase, both phases strengthen muscle tissue. Hence, the rule-of-thumb for a general weight lifting program is to spend twice as much time on the easier phase of the exercise. If you take one second to lift the weight, take two seconds to lower it.

## Rest Periods

How much time should you rest between each set of exercises? That depends on your weight lifting goals. For a general weight lifting program, the rest period between sets should last from 2 to 3 minutes.



How much time should you rest between exercise sessions? It takes 48 hours of rest, not exercising, for the muscles to become completely rested. Therefore, if participating in a general weight lifting program, you should have one day of rest between each day of exercise.

## Breathing

During a weight lifting exercise, you should exhale during the harder phase and inhale during the easier phase. Never hold your breath during an exercise as this can cause you to feel light-headed and pass out.



## Conclusion

In conclusion, it is best not to exercise too much when first starting your exercise program. And remember, excess weight places more stress on your body. So it is best to maintain a healthy weight.

Also, mild soreness during the first few days after

starting to exercise is common and is not a reason to stop your exercise program. However, a sharp pain during the exercise may indicate a serious problem. To be safe, discuss your plan with your doctor before starting any exercise program.



## Helpful Websites

**PLEASE NOTE:** The Helpful Websites section is not part of the Mini Unit. It is a potential bonus. This is because no publisher can be assured that any URLs will remain active. The resources listed below were included here because the URLs were working at the time of copyright and because these websites have proven themselves to be very reliable. We are sorry if access to some of these websites stop but we know that you can appreciate the situation. Also, given the format for this resource, the URLs do not link up automatically.

**Weight Training** [www.exrx.net/Exercise](http://www.exrx.net/Exercise)

**Weight Training Exercises** <http://www.mayoclinic.com/health/weight-training/SM00041>

**Physiology of Weight Lifting** <http://www.ncbi.nlm.nih.gov/pubmed/7073463>

**Weight Lifting Injuries** <http://www.ncbi.nlm.nih.gov/pubmed/1746391>

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# A Guide To General Weight Lifting

Grades 7-8

There are many different ways to increase muscular strength. Some people perform calisthenics like push-ups and sit-ups. Others use progressive-resistance equipment like elastic tubing. However, most individuals prefer lifting weights for their path to stronger muscles.



## Warm-up

All weight lifting sessions should begin with warm-up exercises. They help prepare the body for the activity that will follow. In addition to reducing the chance of injury, the warm-up session will prepare the body for a better workout. That is because muscles perform better if they are warmed-up prior to the activity.

## Reps and Sets

Repetitions, or reps, refer to the number of times you perform an exercise without resting. For example, if you perform 10 leg presses in a row, it is referred to as 10 reps.



A set refers to the number of times that you complete your reps. For example, if you perform 10 leg presses and rest, then perform 7 leg presses and rest, then perform 4 leg presses, you have completed three sets of 10, 7 and 4 reps. For a general weight lifting program, you should perform three sets of each exercise.

## Timing

Each exercise has an easier phase and a harder phase. The amount of time that you spend during the harder part of the exercise and during the easier part of the exercise depends on a variety of things.

If you are performing an exercise that only takes the specified muscle group through a 90 degree range of motion, like the bench press, you will only spend half as much time performing the exercise than if you are performing an exercise that takes the specified muscle group through a 180 degree range of motion, like the biceps arm curl.



Also, if you are performing the inclined bench press for general strength, you will perform the harder phase at a slower pace than if you are training as a shot putter who needs to put the shot with maximum velocity.

Although the harder (*positive*) phase of an exercise does more to increase muscle strength than the easier (*negative*) phase, both phases strengthen muscle tissue. Hence, the rule-of-thumb for a general weight lifting program is to spend twice as much time on the easier phase of the exercise. If you take one second to lift the weight, take two seconds to lower it.

## Overload Principle

In order to become stronger, muscles need to perform more work than they are used to performing. This is called the overload principle. As you progress and you become capable of performing more than ten reps for a set of exercises, you should increase the amount of weight.

To reduce the chance of injuries when training with weights, you should be sure to exercise opposing muscle groups. An example of opposing muscle groups in the upper arm is the biceps and triceps. The biceps are responsible for elbow flexion while the triceps are responsible for elbow extension.

### Overtraining

When applied to exercise, more is not always better. It is possible to experience negative health results if exercising too much. This is called overtraining.

To reduce the chance of an overtraining injury, consider these recommendations.

- Be sure to use the proper technique when exercising. Improper technique can lead to chronic muscle and connective tissue problems.

- Monitor your time and your exercise intensity

when working out. This will help reduce the chance of overworking yourself during your exercise session.

- Maintain your proper weight. Excess weight places more stress on your body.

### Breathing

During a weight lifting exercise, you should exhale during the harder phase and inhale during the easier phase. Never hold your breath during an exercise as this can cause you to feel light-headed and pass out.



### Rest Periods

How much time should you rest between each set of exercises? That depends on your weight lifting goals. For a general weight lifting program, the rest period between sets should last from 2 to 3 minutes.



How much time should you rest between exercise

sessions? It takes 48 hours of rest, not exercising, for the muscles to become completely rested. Therefore, if participating in a general weight lifting program, you should have one day of rest between each day of exercise.

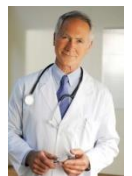
### Goals

Before starting a weight lifting program, you first need to determine your goals. Established goals will help you to select a weight training program that is most appropriate for your desired outcome.

### Conclusion

In conclusion, mild soreness during the first few days after starting to exercise is common and is not a reason to stop your exercise program. A sharp pain during the exercise, however, may indicate a serious problem.

To be safe, discuss your plan with your doctor before starting any exercise program.



## Helpful Websites

SEE NOTICE ON PAGE 4

**Weight Training**

[www.exrx.net/Exercise](http://www.exrx.net/Exercise)

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# A Guide To General Weight Lifting

Grades 9-12

There are many different ways to increase muscular strength. Some people perform calisthenics like push-ups and sit-ups. Others use progressive-resistance equipment like elastic tubing. However, most individuals prefer lifting weights for their path to stronger muscles.



## Warm-up

All weight lifting sessions should begin with warm-up exercises. They help prepare the body for the vigorous activity that will follow. In addition to reducing the chance of injury, the warm-up session will prepare the body for a better workout. That is because muscles perform better if they are warmed-up prior to the activity.

If you are not in good physical condition, walking at a moderate pace or riding an exercise bike at a moderate pace is a good selection of a warm-up activity. If you are in top physical condition, your warm-up exercise might



consist of a slow jog or using an exercise bike with resistance. In any case, the warm-up period is a must before any strenuous exercise session.

## Types of Programs

Weight lifting programs can differ considerably depending on the goals of the participant. Some individuals lift weights to improve absolute strength. Absolute strength is achieved by performing few reps with more weight. Others lift weights to improve dynamic strength. Dynamic strength is achieved by performing more reps with less weight.

A circuit weight training program combines strength training with aerobic exercise. Although good for improving muscle endurance, circuit weight training does not increase muscle strength as well as absolute or dynamic weight training programs.

Circuit weight training programs are best suited for individuals who wish to improve both their cardiovascular fitness and their general strength but do

not have enough time to participate in two separate exercise programs.

General weight lifting, on the other hand, involves near-maximum weight with minimum repetitions. Unless training for a specific event, most individuals participate in a general weight lifting program.

## Reps and Sets

Repetitions, or reps, refer to the number of times you perform an exercise without resting. For example, if you perform 10 leg presses in a row, it is referred to as 10 reps.



A set refers to the number of times that you complete your reps. For example, if you perform 10 leg presses and rest, then perform 7 leg presses and rest, then perform 4 leg presses, you have completed three sets of 10, 7 and 4 reps. For a general weight lifting program, you should perform three sets of each exercise.

You should not be able to perform more than 10 reps



for each set of exercises. If you can perform more than 10 reps without compromising good form, you should add more weight.

Each set should be performed to near fatigue level, which means you cannot perform another rep while maintaining the correct technique and form. It is common that you will only be able to perform 3 or 4 reps on the last set if performing 10 reps on the first set.

### Timing

Each exercise has an easier phase and a harder phase. During the squat, lowering the weight is the easier phase. This is called the *eccentric* or *negative* phase. Pushing the weight up is the harder or more strenuous phase and is called the *concentric* or *positive* phase.



The amount of time that you spend during the more difficult part of the exercise (*concentric* phase) and during the easier part of the exercise (*eccentric* phase) depends on a variety of things.

If you are performing an exercise that only takes the specified muscle group through a 90 degree range of motion, like the bench press, you will only spend half as much time performing the



exercise than if you are performing an exercise that takes the specified muscle group through a 180 degree range of motion like the biceps arm curl.



Also, if you are performing the inclined bench press for general strength, you will perform the *concentric* phase at a slower pace than if you are training as a shot putter who needs to put the shot with maximum velocity.

Although the positive phase of an exercise does more to increase muscle strength than the negative phase, both phases strengthen muscle tissue. Hence, the rule-of-thumb for a general weight lifting program is to spend twice as much time on the easier phase of the exercise. If you take one second to lift the weight, take two seconds to lower it.

### Overload Principle

In order to become stronger, muscles need to perform more work than they are accustomed to. This is called the overload principle. As you progress and you become capable of performing more than ten reps for a set of exercises, you should increase the amount of weight.

Also, to reduce the chance of injuries when training with weights, you should be sure to exercise opposing muscle

groups. An example of opposing muscle groups in the upper arm is the biceps and triceps. The biceps are responsible for elbow flexion while the triceps are responsible for elbow extension.

### Rest Periods

How much time should you rest between each set of exercises? That depends on your weight lifting goals. If training as a power lifter, you may wish to rest 4 to 5 minutes between each set of exercises. If training as a wrestler, you may wish to rest for only 30 seconds between exercises. That is because your weight lifting program should be designed to best prepare you for the actual activity you are training for.

For a general weight lifting program, the rest period between sets should last from 2 to 3 minutes. This time frame allows the muscles to recuperate sufficiently for the next set, while still remaining warm enough for both maximum performance and injury prevention.

How much time should you rest between exercise sessions? It takes 48 hours of rest, not exercising, for the muscles to become completely recuperated. Therefore, if participating in a general weight lifting program, you should have one day of rest between each day of exercise.

## Breathing

During a weight lifting exercise, you should exhale during the harder phase and inhale during the easier phase. Never hold your breath during an exercise as this can cause you to feel light-headed and pass out.



- Maintain your proper weight. Excess weight places more stress on your body.

- If you like to lift weights every day, do not exercise the same muscle groups each day. Exercise half the muscle groups on one day and the other half of the muscles on another day.

## Overtraining

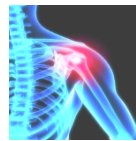
When applied to exercise, more is not always better. Known as overtraining, exercising too much may cause negative health consequences.

To reduce the chance of an overtraining injury, consider these recommendations.

- Be sure to use the proper technique when exercising. Improper technique can lead to chronic muscle and connective tissue problems.

- Monitor your time and your exercise intensity when working out. This will help reduce the chance of overexerting yourself during your exercise session.

Common symptoms of overtraining include soreness, lowered resistance to colds, chronic fatigue and lowered coordination. If you have any of these symptoms, you may need to lessen the intensity of your training.



## Benefits

Everyone understands that lifting weights helps to increase both muscle size and strength, but there are many other benefits to weight lifting that are not as obvious. Additional physical benefits include an increase in bone mass, a moderate reduction in body fat and when practicing circuit weight

training, reductions in cardiovascular disease risk factors. Psychological benefits include a reduction in stress along with an increase in self-confidence.



## Goals

Before starting a weight lifting program, you first need to determine your goals. Establishing goals will help you to select the weight training program that is most appropriate for your desired outcome.

## Conclusion

In conclusion, mild soreness during the first few days after starting to exercise is common and is not a reason to stop your exercise program. A sharp pain during the exercise, however, may indicate a serious problem.

To be safe, discuss your plan with your doctor before starting any exercise program.



## Helpful Websites

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**True or False Test - Level One**  
**A Guide To General Weight Lifting**

**Directions:** For the following statements, circle the **T** if the statement is true and circle the **F** if the statement is false.

- T**    **F**1. Weight lifting sessions should always begin with warm-up exercises.
- T**    **F**2. Stretching is not considered a warm-up exercise.
- T**    **F**3. A general weight training program combines strength training with aerobic exercises.
- T**    **F**4. The number of times that you perform an exercise without resting is called reps.
- T**    **F**5. For a general weight lifting program, you should perform one set of each exercise.
- T**    **F**    6. For a general weight lifting program, you should not be able to perform more than ten reps for each set of exercises.
- TF**7. The harder phase of an exercise of an exercise should be performed slower than the easier phase.
- T**    **F**8. For a general weight lifting program, periods between sets should last about two minutes.
- TF**9. It takes twenty-four hours of rest, not exercising, for the muscles to become completely recuperated (rested).
- T**    **F**10. During a weight lifting exercise, you should exhale during the harder phase.

\_\_\_\_\_

Name

\_\_\_\_\_

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**Test or Questions for Review - Level One**  
**A Guide To General Weight Lifting**

**Directions:** From the information included in the article you read, complete each statement with the best answer.

1. All weight lifting sessions should begin with \_\_\_\_\_ exercises.
2. The number of times that you perform an exercise without resting is called \_\_\_\_\_.
3. For a general weightlifting program, you should perform \_\_\_\_\_ sets of each exercise.
4. During a weight lifting exercise, you should exhale during the \_\_\_\_\_ phase.
5. Excess \_\_\_\_\_ places more stress on your body.
6. Warm-up exercises reduce the chance of \_\_\_\_\_.
7. The easier phase of an exercise should be performed \_\_\_\_\_ than the harder phase.
8. The number of times that you complete your reps is called a \_\_\_\_\_.
9. Holding your breath during an exercise can make you \_\_\_\_\_.
10. For a general weight lifting program, periods between sets should last about \_\_\_\_\_ minutes.

\_\_\_\_\_

Name

\_\_\_\_\_

class

\_\_\_\_\_

grade

**Test or Questions for Review - Level Two**  
**A Guide To General Weight Lifting**

**Directions:** From the information included in the article you read, complete each statement with the best answer.

1. All weight lifting sessions should begin with \_\_\_\_\_ exercises.
2. The number of times that you perform an exercise without resting is called \_\_\_\_\_.
3. For a general weightlifting program, you should perform \_\_\_\_\_ sets of each exercise.
4. During a weight lifting exercise, you should exhale during the \_\_\_\_\_ phase.
5. Excess \_\_\_\_\_ places more stress on your body.
6. Warm-up exercises reduce the chance of \_\_\_\_\_.
7. The easier phase of an exercise should be performed \_\_\_\_\_ than the harder phase.
8. The number of times that you complete your reps is called a \_\_\_\_\_.
9. Holding your breath during an exercise can make you \_\_\_\_\_.
10. For a general weight lifting program, periods between sets should last about \_\_\_\_\_ minutes.
11. Before starting a weight lifting program, you first need to determine your \_\_\_\_\_.
12. The bench press is an exercise that involves a \_\_\_\_\_ degree range of motion.
13. To reduce the chance of injuries when training with weights, you should be sure to exercise \_\_\_\_\_ muscle groups.
14. Exercising too much is called \_\_\_\_\_.
15. Muscles needing to perform more work than they are used to is called the \_\_\_\_\_ principle.

Name \_\_\_\_\_

class \_\_\_\_\_

grade \_\_\_\_\_

## Test or Questions for Review - Level Three

### A Guide To General Weight Lifting

**Directions:** From the information included in the article you read, complete each statement with the best answer.

1. All weight lifting sessions should begin with \_\_\_\_\_ exercises.
2. The number of times that you perform an exercise without resting is called \_\_\_\_\_.
3. For a general weightlifting program, you should perform \_\_\_\_\_ sets of each exercise.
4. During a weight lifting exercise, you should exhale during the \_\_\_\_\_ phase.
5. Excess \_\_\_\_\_ places more stress on your body.
6. Warm-up exercises reduce the chance of \_\_\_\_\_.
7. The easier phase of an exercise should be performed \_\_\_\_\_ than the harder phase.
8. The number of times that you complete your reps is called a \_\_\_\_\_.
9. Holding your breath during an exercise can make you \_\_\_\_\_.
10. For a general weight lifting program, periods between sets should last about \_\_\_\_\_ minutes.
11. Before starting a weight lifting program, you first need to determine your \_\_\_\_\_.
12. The bench press is an exercise that involves a \_\_\_\_\_ degree range of motion.
13. To reduce the chance of injuries when training with weights, you should be sure to exercise \_\_\_\_\_ muscle groups.
14. Exercising too much is called \_\_\_\_\_.
15. Muscles needing to perform more work than they are used to is called the \_\_\_\_\_ principle.
16. One physical benefit of weight lifting can include an increase in \_\_\_\_\_ mass.
17. \_\_\_\_\_ strength is achieved by performing more reps with less weight.
18. The harder phase of an exercise is called the \_\_\_\_\_ phase.
19. \_\_\_\_\_ strength is achieved by performing few reps with more weight.
20. The easier phase of an exercise is called the \_\_\_\_\_ phase.

# A Guide To General Weight Lifting

## Answer Key - True or False Test - Level One

1. Weight lifting sessions should always begin with warm-up exercises. **True**
2. Stretching is not considered a warm-up exercise. **True**
3. A general weight training program combines strength training with aerobic exercises. **False**  
A **circuit** weight training program combines strength training with aerobic exercises.
4. The number of times that you perform an exercise without resting is called reps. **True**
5. For a general weight lifting program, you should perform one set of each exercise.  
**False** For a general weight lifting program, you should perform **three** sets of each exercise.
6. For a general weight lifting program, you should not be able to perform more than ten reps for each set of exercises. **True**
7. The harder phase of an exercise of an exercise should be performed slower than the easier phase. **False** The **easier** phase of an exercise should be performed slower than the **harder** phase.
8. For a general weight lifting program, periods between sets should last about two minutes. **True**
9. It takes twenty-four hours of rest, not exercising, for the muscles to become completely recuperated (rested). **False** It takes **forty-eight** hours of rest, not exercising, for the muscles to become completely recuperated (rested).
10. During a weight lifting exercise, you should exhale during the harder phase. **True**

# A Guide To General Weight Lifting

## Answer Key - Tests and Review Questions

(Note: This solution applies to all three levels)

1. All weight lifting sessions should begin with **warm-up** exercises.
2. The number of times that you perform an exercise without resting is called **reps**.
3. For a general weightlifting program, you should perform **three** sets of each exercise.
4. During a weight lifting exercise, you should exhale during the **harder** phase.
5. Excess **weight** places more stress on your body.
6. Warm-up exercises reduce the chance of **injury**.
7. The easier phase of an exercise should be performed **slower** than the harder phase.
8. The number of times that you complete your reps is called a **set**.
9. Holding your breath during an exercise can make you **pass out**.
10. For a general weight lifting program, periods between sets should last about **two or three** minutes.
11. Before starting a weight lifting program, you first need to determine your **goals**.
12. The bench press is an exercise that involves a **ninety** degree range of motion.
13. To reduce the chance of injuries when training with weights, you should be sure to exercise **opposing** muscle groups.
14. Exercising too much is called **overtraining**.
15. Muscles needing to perform more work than they are used to is called the **overload** principle.
16. One physical benefit of weight lifting can include an increase in **bone** mass.
17. **Dynamic** strength is achieved by performing more reps with less weight.
18. The harder phase of an exercise is called the **concentric** phase.
19. **Absolute** strength is achieved by performing few reps with more weight.
20. The easier phase of an exercise is called the **eccentric** phase.



\_\_\_\_\_

Name

\_\_\_\_\_

class

\_\_\_\_\_

grade

**Worksheet - Level One**  
**A Guide To General Weight Lifting**

**Directions:** From the information included in the article you read, complete each statement with the best answer.

1. All weight lifting sessions should begin with \_\_\_\_\_ exercises.
2. Warm-up exercises reduce the chance of \_\_\_\_\_.
3. The number of times that you perform an exercise without resting is called \_\_\_\_\_.
4. The number of times that you complete your reps is called a \_\_\_\_\_.
5. For a general weightlifting program, you should perform \_\_\_\_\_ sets of each exercise.
6. The easier phase of an exercise should be performed \_\_\_\_\_ than the harder phase.
7. For a general weight lifting program, periods between sets should last about \_\_\_\_\_ minutes.
8. During a weight lifting exercise, you should exhale during the \_\_\_\_\_ phase.
9. Holding your breath during an exercise can make you \_\_\_\_\_.
10. Excess \_\_\_\_\_ places more stress on your body.

\_\_\_\_\_

Name

\_\_\_\_\_

class

\_\_\_\_\_

grade

**Worksheet - Level Two**  
**A Guide To General Weight Lifting**

**Directions:** From the information included in the article you read, complete each statement with the best answer.

1. All weight lifting sessions should begin with \_\_\_\_\_ exercises.
2. Warm-up exercises reduce the chance of \_\_\_\_\_.
3. The number of times that you perform an exercise without resting is called \_\_\_\_\_.
4. The number of times that you complete your reps is called a \_\_\_\_\_.
5. For a general weightlifting program, you should perform \_\_\_\_\_ sets of each exercise.
6. The easier phase of an exercise should be performed \_\_\_\_\_ than the harder phase.
7. For a general weight lifting program, periods between sets should last about \_\_\_\_\_ minutes.
8. During a weight lifting exercise, you should exhale during the \_\_\_\_\_ phase.
9. Holding your breath during an exercise can make you \_\_\_\_\_.
10. Excess \_\_\_\_\_ places more stress on your body.
11. The bench press is an exercise that involves a \_\_\_\_\_ degree range of motion.
12. Muscles needing to perform more work than they are used to is called the \_\_\_\_\_ principle.
13. To reduce the chance of injuries when training with weights, you should be sure to exercise \_\_\_\_\_ muscle groups.
14. Exercising too much is called \_\_\_\_\_.
15. Before starting a weight lifting program, you first need to determine your \_\_\_\_\_.

Name \_\_\_\_\_

\_\_\_\_\_ class

\_\_\_\_\_ grade

**Worksheet - Level Three**  
**A Guide To General Weight Lifting**

**Directions:** From the information included in the article you read, complete each statement with the best answer.

1. All weight lifting sessions should begin with \_\_\_\_\_ exercises.
2. Warm-up exercises reduce the chance of \_\_\_\_\_.
3. The number of times that you perform an exercise without resting is called \_\_\_\_\_.
4. The number of times that you complete your reps is called a \_\_\_\_\_.
5. For a general weightlifting program, you should perform \_\_\_\_\_ sets of each exercise.
6. The easier phase of an exercise should be performed \_\_\_\_\_ than the harder phase.
7. For a general weight lifting program, periods between sets should last about \_\_\_\_\_ minutes.
8. During a weight lifting exercise, you should exhale during the \_\_\_\_\_ phase.
9. Holding your breath during an exercise can make you \_\_\_\_\_.
10. Excess \_\_\_\_\_ places more stress on your body.
11. The bench press is an exercise that involves a \_\_\_\_\_ degree range of motion.
12. Muscles needing to perform more work than they are used to is called the \_\_\_\_\_ principle.
13. To reduce the chance of injuries when training with weights, you should be sure to exercise \_\_\_\_\_ muscle groups.
14. Exercising too much is called \_\_\_\_\_.
15. Before starting a weight lifting program, you first need to determine your \_\_\_\_\_.
16. \_\_\_\_\_ strength is achieved by performing few reps with more weight.
17. \_\_\_\_\_ strength is achieved by performing more reps with less weight.
18. The easier phase of an exercise is called the \_\_\_\_\_ phase.
19. The harder phase of an exercise is called the \_\_\_\_\_ phase.
20. One physical benefit of weight lifting can include an increase in \_\_\_\_\_ mass.

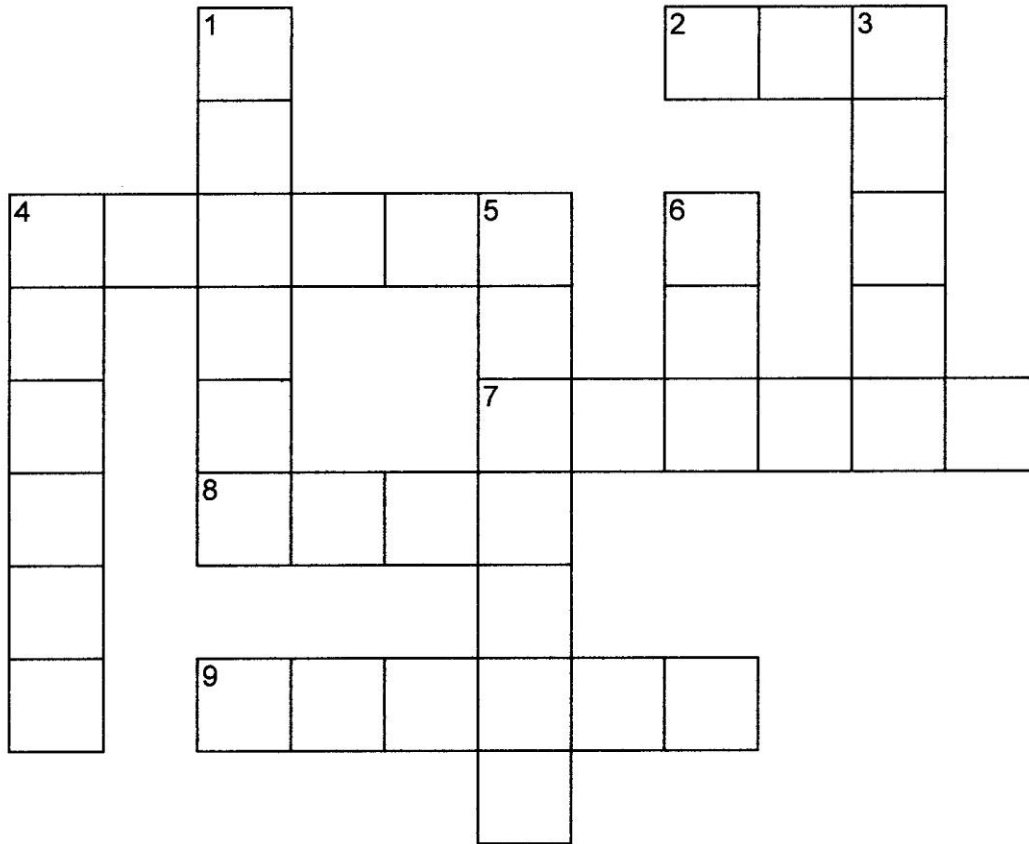
# A Guide To General Weight Lifting

## Answer Key - Worksheets

(Note: This solution applies to all three levels)

1. All weight lifting sessions should begin with **warm-up** exercises.
2. Warm-up exercises reduce the chance of **injury**.
3. The number of times that you perform an exercise without resting is called **reps**.
4. The number of times that you complete your reps is called a **set**.
5. For a general weightlifting program, you should perform **three** sets of each exercise.
6. The easier phase of an exercise should be performed **slower** than the harder phase.
7. For a general weight lifting program, periods between sets should last about **two or three** minutes.
8. During a weight lifting exercise, you should exhale during the **harder** phase.
9. Holding your breath during an exercise can make you **pass out**.
10. Excess **weight** places more stress on your body.
11. The bench press is an exercise that involves a **ninety** degree range of motion.
12. Muscles needing to perform more work than they are used to is called the **overload** principle.
13. To reduce the chance of injuries when training with weights, you should be sure to exercise **opposing** muscle groups.
14. Exercising too much is called **overtraining**.
15. Before starting a weight lifting program, you first need to determine your **goals**.
16. **Absolute** strength is achieved by performing few reps with more weight.
17. **Dynamic** strength is achieved by performing more reps with less weight.
18. The easier phase of an exercise is called the **eccentric** phase.
19. The harder phase of an exercise is called the **concentric** phase.
20. One physical benefit of weight lifting can include an increase in **bone** mass.

## General Weight Lifting- Level One



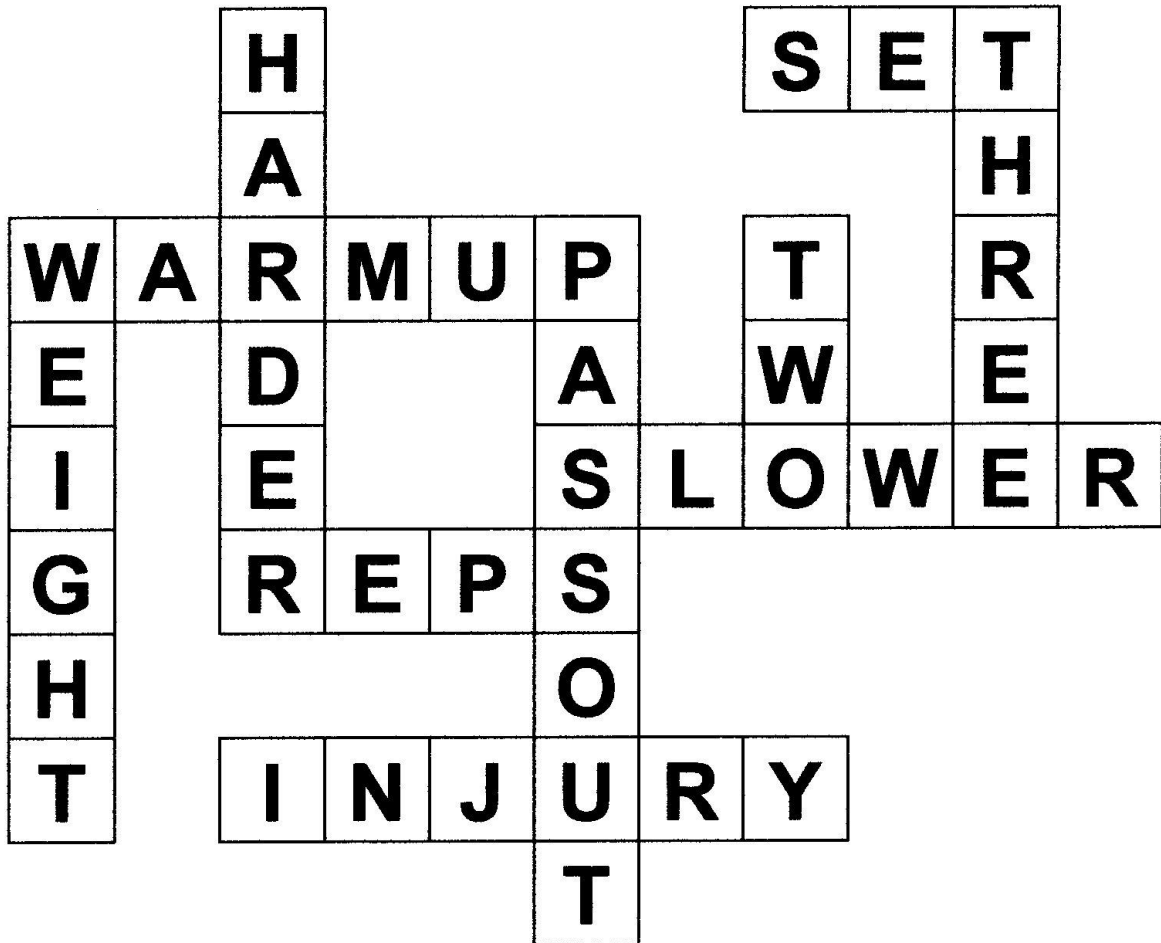
### Across

- 2 The number of times that you complete your reps is called a \_\_\_\_\_.
- 4 All weight lifting sessions should begin with \_\_\_\_\_ exercises.
- 7 The easier phase of an exercise should be performed \_\_\_\_\_ than the harder phase.
- 8 The number of times that you perform an exercise without resting is called \_\_\_\_\_.
- 9 Warm-up exercises reduce the chance of \_\_\_\_\_.

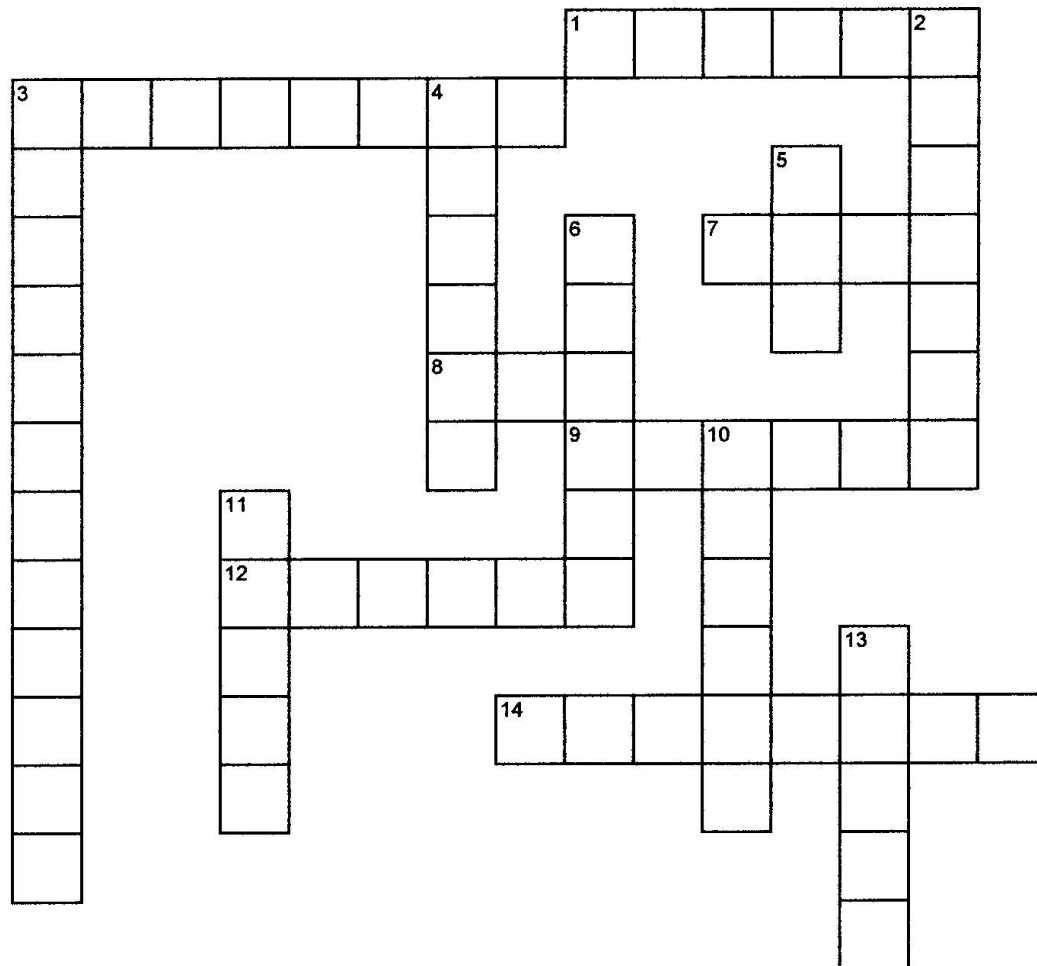
### Down

- 1 During a weight lifting exercise, you should exhale during the \_\_\_\_\_ phase.
- 3 For a general weight lifting program, you should perform \_\_\_\_\_ sets of each exercise.
- 4 Excess \_\_\_\_\_ places more stress on your body.
- 5 Holding your breath during an exercise can make you \_\_\_\_\_.
- 6 For a general weight lifting program, periods between sets should last about \_\_\_\_\_ minutes.

# General Weight Lifting - Level One Solution



## General Weight Lifting - Level Two



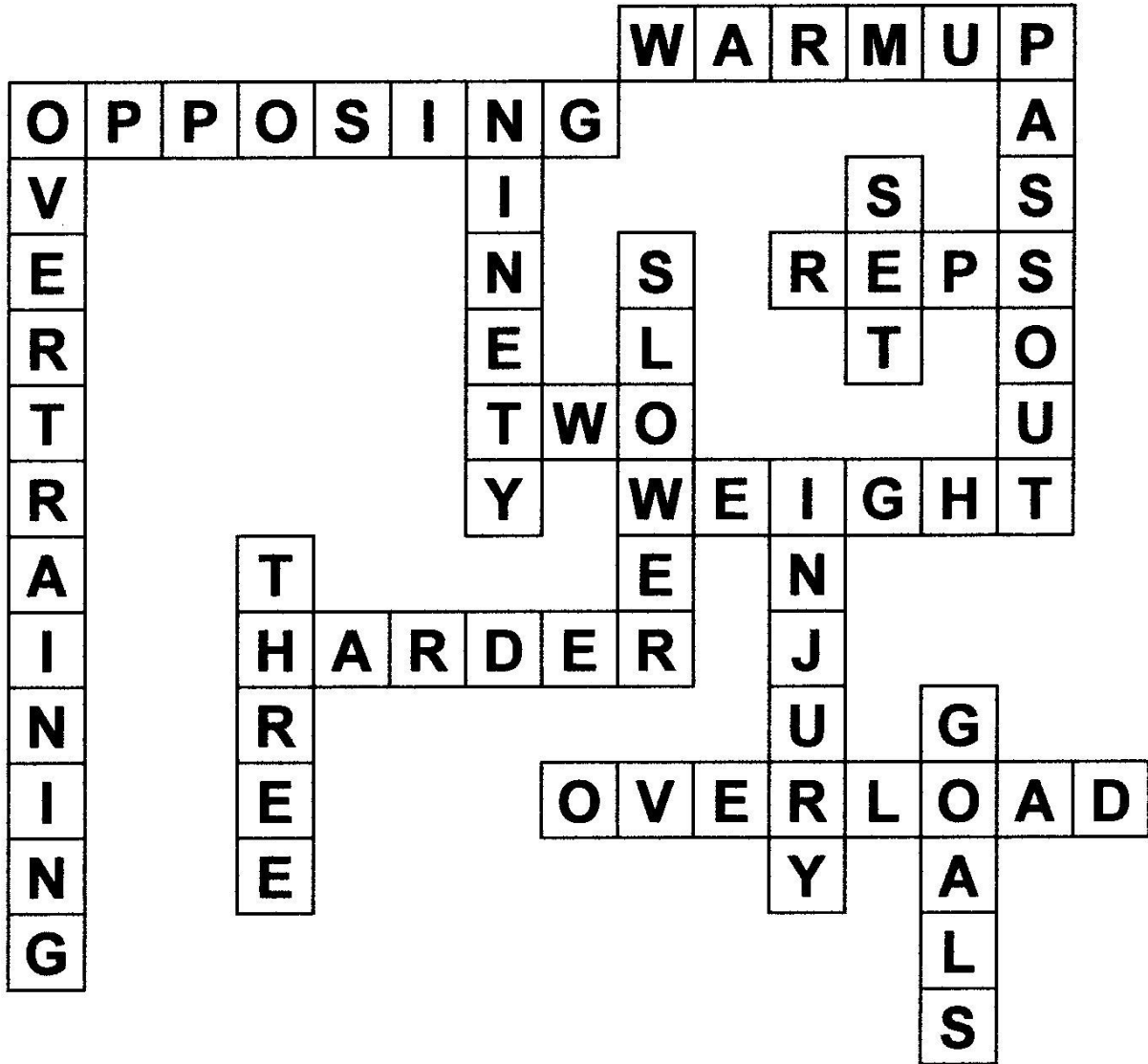
### Across

- 1 All weight lifting sessions should begin with \_\_\_\_\_ exercises.
- 3 To reduce the chance of injuries when training with weights, you should be sure to exercise \_\_\_\_\_ muscle groups.
- 7 The number of times that you perform an exercise without resting is called \_\_\_\_\_.
- 8 For a general weight lifting program, periods between sets should last about \_\_\_\_\_ minutes.
- 9 Excess \_\_\_\_\_ places more stress on your body.
- 12 During a weight lifting exercise, you should exhale during the \_\_\_\_\_ phase.
- 14 Muscles needing to perform more work than they are used to is called the \_\_\_\_\_ principle.

### Down

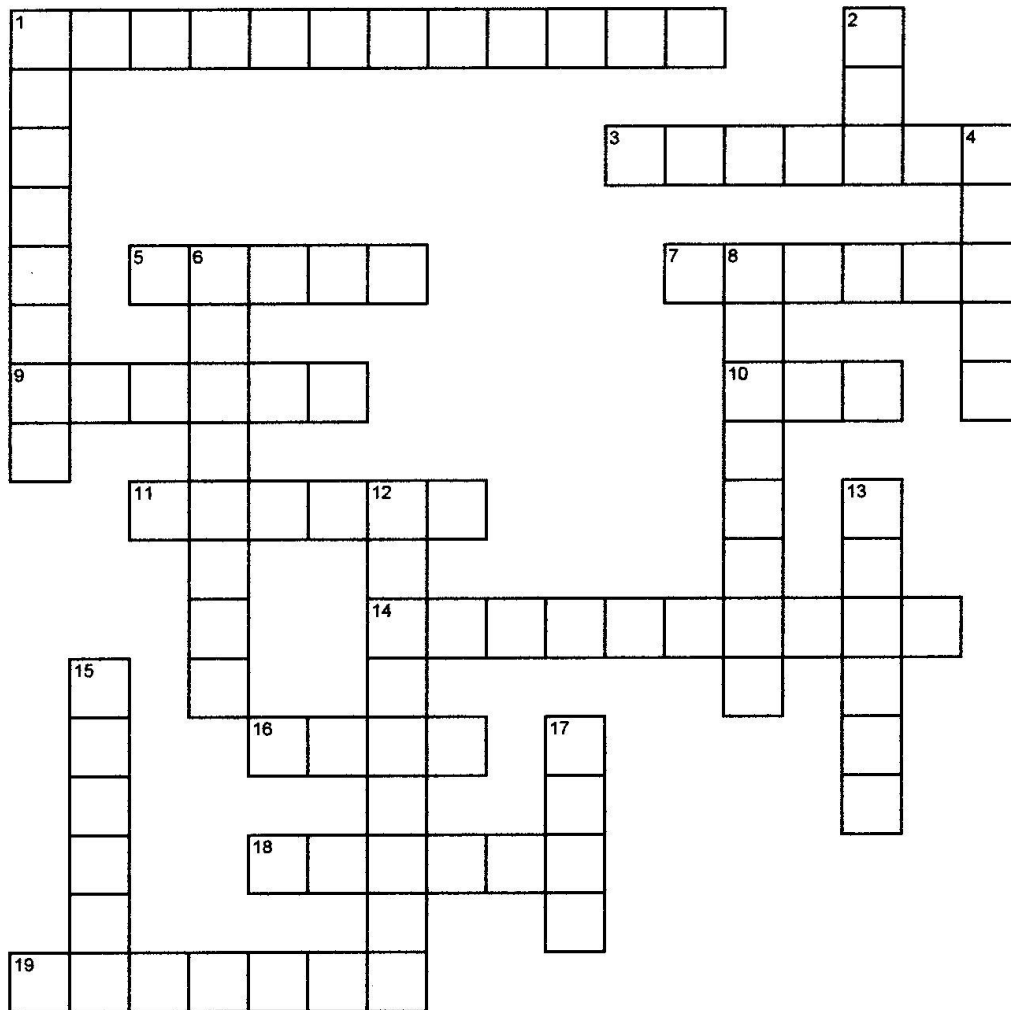
- 2 Holding your breath during an exercise can make you \_\_\_\_\_.
- 3 Exercising too much is called \_\_\_\_\_.
- 4 The bench press is an exercise that involves a \_\_\_\_\_ degree range of motion.
- 5 The number of times that you complete your reps is called a \_\_\_\_\_.
- 6 The easier phase of an exercise should be performed \_\_\_\_\_ than the harder phase.
- 10 Warm-up exercises reduce the chance of \_\_\_\_\_.
- 11 For a general weight lifting program, you should perform \_\_\_\_\_ sets of each exercise.
- 13 Before starting a weight lifting program, you first need to determine your \_\_\_\_\_.

# General Weight Lifting - Level Two Solution





## General Weight Lifting - Level Three



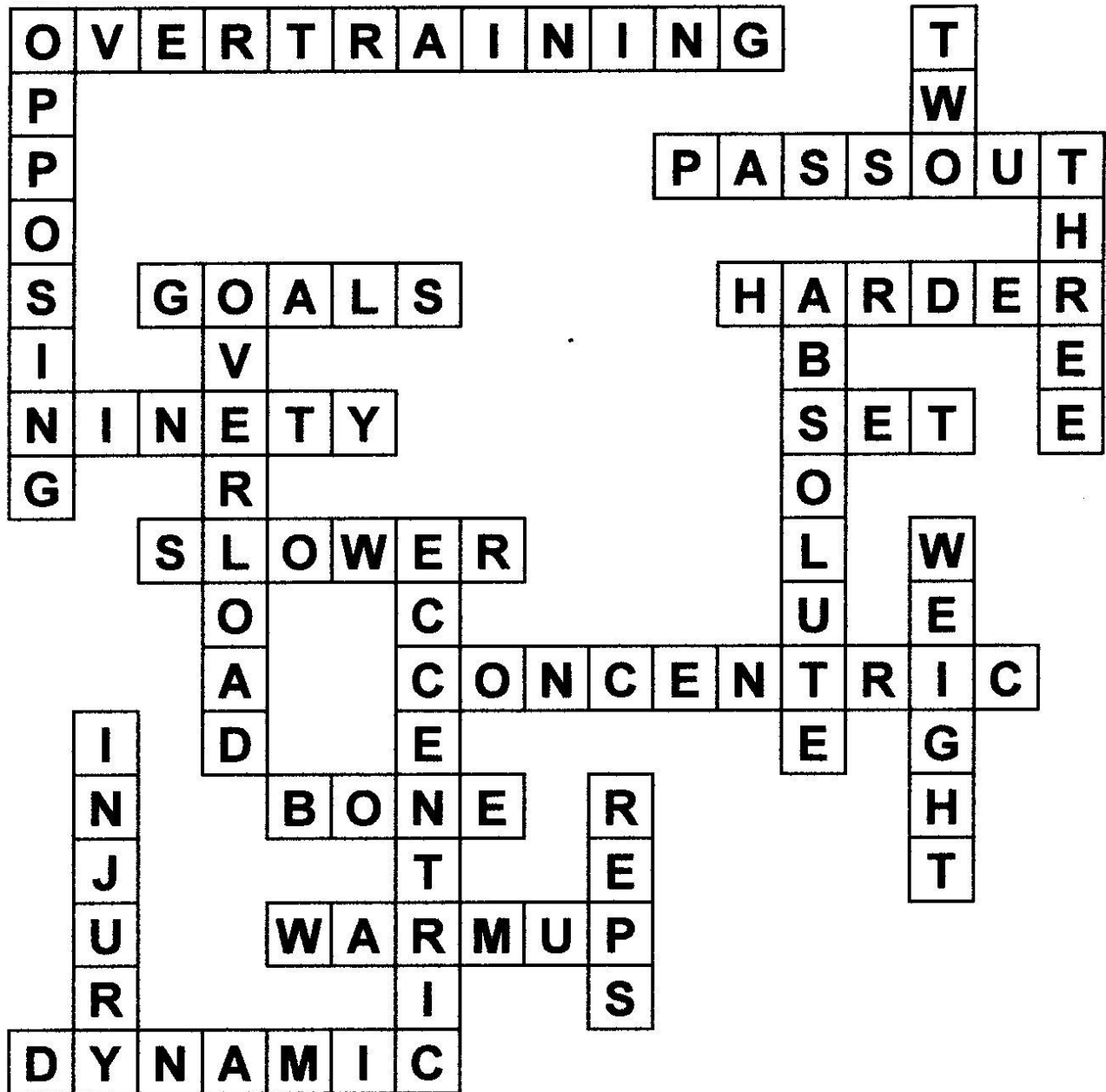
### Across

- 1 Exercising too much is called \_\_\_\_\_.
- 3 Holding your breath during an exercise can make you \_\_\_\_\_.
- 5 Before starting a weight lifting program, you first need to determine your \_\_\_\_\_.
- 7 During a weight lifting exercise, you should exhale during the \_\_\_\_\_ phase.
- 9 The bench press is an exercise that involves a \_\_\_\_\_ degree range of motion.
- 10 The number of times that you complete your reps is called a \_\_\_\_\_.
- 11 The easier phase of an exercise should be performed \_\_\_\_\_ than the harder phase.
- 14 The harder phase of an exercise is called the \_\_\_\_\_ phase.
- 16 One physical benefit of weight lifting can include an increase in \_\_\_\_\_ mass.
- 18 All weight lifting sessions should begin with \_\_\_\_\_ exercises.
- 19 \_\_\_\_\_ strength is achieved by performing more reps with less weight.

### Down

- 1 To reduce the chance of injuries when training with weights, you should be sure to exercise \_\_\_\_\_ muscle groups.
- 2 For a general weight lifting program, periods between sets should last about \_\_\_\_\_ minutes.
- 4 For a general weight lifting program, you should perform \_\_\_\_\_ sets of each exercise.
- 6 Muscles needing to perform more work than they are used to is called the \_\_\_\_\_ principle.
- 8 \_\_\_\_\_ strength is achieved by performing few reps with more weight.
- 12 The easier phase of an exercise is called the \_\_\_\_\_ phase.
- 13 Excess \_\_\_\_\_ places more stress on your body.
- 15 Warm-up exercises reduce the chance of \_\_\_\_\_.
- 17 The number of times that you perform an exercise without resting is called \_\_\_\_\_.

# General Weight Lifting - Level Three Solution



# General Weight Lifting - Level One



M Z L T D C R E S T P E R I O D B M B O N E M A S S  
F N W P R Z N F A T I G U E X T K R D X P O W E R D  
J C F L P O V E R L O A D K Q E C C E N T R I C Q K  
G R D J Y D U M B B E L L O P P O S I N G B C G T T  
R N J V R S E D E N T A R Y D I E T I N G Y Z K L L  
M U S C L E S K C K O B E S E Q Q W R M Z R M K J Z  
P W P G C D Y N A M I C V B P Y F Z L G X M P N M F  
K M O V E R T R A I N I N G T F I T N E S S L N T X  
Q Z M R H W E I G H T L I F T I N G J C R E P S R W  
G O A L S T T I N T E N S I T Y F K D X B H M B M Y  
P W N F Y R A B S O L U T E P O B E S I T Y B R M Y  
K R Y M L W M U S C L E T O N E F N R J N N M H J M  
S T R E T C H I N G K Z D M K O V E R W E I G H T N  
D R P R L Y Q A C T I V I T Y Y T V H Q S T R A I N  
L R K T L W A R M U P C C O N C E N T R I C D N P H  
R L R L F I T N X L C R T C G O A L B O D Y F A T X  
H E N D U R A N C E M K B A R B E L L L C H B H Z C  
W E X E R C I S E R X I N J U R Y C C G R L V V L L  
X H Y R E P E T I T I O N W C Q M L I F E S T Y L E  
K M T J R C B N S P R A I N W R H D I E T C K N T W  
T M T N F L E X I O N W E I G H T S Z T M B M C L V  
R S T R E N G T H G M U S C L E M B T R G T D Y X X  
L Z D P L Y W Y T E C H N I Q U E R V L Z T K Q Q N  
D R C A E R O B I C Z X Y Y M X L E X T E N S I O N  
P R T Q B G N O V E R T R A I N M B L T S T R O N G  
Q L H E A L T H K R Z F T M H B R E A T H I N G N D

Absolute  
Activity  
Aerobic  
Barbell  
Bodyfat  
Bonemass  
Breathing  
Concentric  
Diet  
Dieting

Dumbbell  
Dynamic  
Eccentric  
Endurance  
Exercise  
Extension  
Fatigue  
Fit  
Fitness  
Flexion

Goal  
Goals  
Health  
Injury  
Intensity  
Lifestyle  
Muscle  
Muscles  
Musclestone  
Obese

Obesity  
Opposing  
Overload  
Overtrain  
Overtraining  
Overweight  
Power  
Repetition  
Reps  
Restperiod

Sedentary  
Sprain  
Strain  
Strength  
Strong  
Stretching  
Technique  
Warmup  
Weights  
Weightlifting

# General Weight Lifting - Level One Solution



M Z L T D C **R E S T P E R I O D** B M **B O N E M A S S**  
F N W P R Z N **F A T I G U E** X T K R D X **P O W E R** D  
J C F L P **O V E R L O A D** K Q **E C C E N T R I C** Q K  
G R D J Y **D U M B B E L L** **O P P O S I N G** B C G T T  
R N J V R **S E D E N T A R Y** **D I E T I N G** Y Z K L L  
**M U S C L E S** K C K **O B E S E** Q Q W R M Z R M K J Z  
P W P G C **D Y N A M I C** V B P Y F Z L G X M P N M F  
K M **O V E R T R A I N I N G** T **F I T N E S S** L N T X  
Q Z M R H **W E I G H T L I F T I N G** J C **R E P S** R W  
**G O A L S** T T **I N T E N S I T Y** F K D X B H M B M Y  
P W N F Y R **A B S O L U T E** P **O B E S I T Y** B R M Y  
K R Y M L W **M U S C L E T O N E** F N R J N N M H J M  
**S T R E T C H I N G** K Z D M K **O V E R W E I G H T** N  
D R P R L Y Q **A C T I V I T Y** Y T V H Q **S T R A I N**  
L R K T L **W A R M U P** C **C O N C E N T R I C** D N P H  
R L R L **F I T** N X L C R T C **G O A L** **B O D Y F A T** X  
H **E N D U R A N C E** M K **B A R B E L L** L C H B H Z C  
W **E X E R C I S E** R X **I N J U R Y** C C G R L V V L L  
X H Y **R E P E T I T I O N** W C Q M **L I F E S T Y L E**  
K M T J R C B N **S P R A I N** W R H **D I E T** C K N T W  
T M T N **F L E X I O N** **W E I G H T S** Z T M B M C L V  
R **S T R E N G T H** G **M U S C L E** M B T R G T D Y X X  
L Z D P L Y W Y **T E C H N I Q U E** R V L Z T K Q Q N  
D R C **A E R O B I C** Z X Y Y M X L **E X T E N S I O N**  
P R T Q B G N **O V E R T R A I N** M B L T **S T R O N G**  
Q L **H E A L T H** K R Z F T M H **B R E A T H I N G** N D

## General Weight Lifting - Level Two



K F T W P B R E A T H I N G L D O I R E P T S E R  
 G F X K Z Q T K T I F L C M K H T G N E R T S H R  
 L Z T N O I S N E T X E R E P S S E D E N T A R Y  
 C V M Q V C L I N T E N S I T Y N I A R T R E V O  
 M H D Q C I M A N Y D W G H R N X Y M J M Y N C R  
 N Y T I V I T C A M K P F H D M T S T R A I N H T  
 G R Y N D G S E L C S U M M Q L D U M B B E L L J  
 E C N A R U D N E P U M R A W J Y R U J N I H L Q  
 Z V Q J X F I T N E S S S T R O N G N V V T L N R  
 F H E A L T H P M U S C L E T O N E Y G V L M N N  
 G Q K W E I G H T S E C C E N T R I C J G G M F R  
 L B R R N A E R O B I C G K W T E C H N I Q U E K  
 B E L Y T S E F I L M M G N A B S O L U T E M V G  
 P L S S A M E N O B O B E S I T Y B K P O W E R W  
 T W T L G N I S O P P O X J D D T F A T I G U E F  
 T T B D L H B M Y B E X E R C I S E G Z F D I E T  
 F L M M R G T D K L P S L A O G J F M U S C L E N  
 F D K X G O A L Y L L L E B R A B W Z R M P D R T  
 E S E B O V N O I T I T E P E R C Z M W B K B P L  
 G M D K Q T H G I E W R E V O L H N O I X E L F D  
 R T B O D Y F A T G N I T F I L T H G I E W R T D  
 M Q K G R P G N I H C T E R T S F M H N I A R P S  
 M N C I R T N E C N O C R R T T M T M H R N K K V  
 O V E R T R A I N I N G O V E R L O A D R N G R F  
 W Y J F Z N M F D N G N I T E I D V Z G Q Y T G L

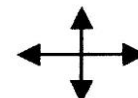
- |            |           |             |              |               |
|------------|-----------|-------------|--------------|---------------|
| Absolute   | Dumbbell  | Goal        | Obesity      | Sedentary     |
| Activity   | Dynamic   | Goals       | Opposing     | Sprain        |
| Aerobic    | Eccentric | Health      | Overload     | Strain        |
| Barbell    | Endurance | Injury      | Overtrain    | Strength      |
| Bodyfat    | Exercise  | Intensity   | Overtraining | Strong        |
| Bonemass   | Extension | Lifestyle   | Overweight   | Stretching    |
| Breathing  | Fatigue   | Muscle      | Power        | Technique     |
| Concentric | Fit       | Muscles     | Repetition   | Warmup        |
| Diet       | Fitness   | Muscle tone | Reps         | Weights       |
| Dieting    | Flexion   | Obese       | Restperiod   | Weightlifting |

# General Weight Lifting - Level Two Solution



K F T W P B R E A T H I N G L D O I R E P T S E R  
G F X K Z Q T K T I F L C M K H T G N E R T S H R  
L Z T N O I S N E T X E R E P S S E D E N T A R Y  
C V M Q V C L I N T E N S I T Y N I A R T R E V O  
M H D Q C I M A N Y D W G H R N X Y M J M Y N C R  
N Y T I V I T C A M K P F H D M T S T R A I N H T  
G R Y N D G S E L C S U M M Q L D U M B B E L L J  
E C N A R U D N E P U M R A W J Y R U J N I H L Q  
Z V Q J X F I T N E S S S T R O N G N V V T L N R  
F H E A L T H P M U S C L E T O N E Y G V L M N N  
G Q K W E I G H T S E C C E N T R I C J G G M F R  
L B R R N A E R O B I C G K W T E C H N I Q U E K  
B E L Y T S E F I L M M G N A B S O L U T E M V G  
P L S S A M E N O B O B E S I T Y B K P O W E R W  
T W T L G N I S O P P O X J D D T F A T I G U E F  
T T B D L H B M Y B E X E R C I S E G Z F D I E T  
F L M M R G T D K L P S L A O G J F M U S C L E N  
F D K X G O A L Y L L L E B R A B W Z R M P D R T  
E S E B O V N O I T I T E P E R C Z M W B K B P L  
G M D K Q T H G I E W R E V O L H N O I X E L F D  
R T B O D Y F A T G N I T F I L T H G I E W R T D  
M Q K G R P G N I H C T E R T S F M H N I A R P S  
M N C I R T N E C N O C R R T T M T M H R N K K V  
O V E R T R A I N I N G O V E R L O A D R N G R F  
W Y J F Z N M F D N G N I T E I D V Z G Q Y T G L

# General Weight Lifting - Level Three



R E P E T I T I O N T H R W X E T T H G I E W R E V O H  
 Q Y K M F D L V M J M K T G M U Y K Y O W P Y Y K J K B  
 T F G R L F N O I X E L F L R G N P K B H T Z K Z W N T  
 E K R T Q K C X J K T B E W F I J K P E E X Q P N W T N  
 N Y Q G N I S O P P O X T N R T R V M S A B V X N N R R  
 O G Y O V E R T R A I N U M Z A C N T I L N V Q L F T K  
 T N X Y M K Q F I T N B L Y L F L J K T T O B E S E Y S  
 E I M R Y Q C Y T M Q R O N X Y F R Q Y H G T L B W T T  
 L T U L I F E S T Y L E S V G N O I S N E T X E V R I H  
 C F S L Z D R C L R H A B F A C T I V I T Y S G Q D S G  
 S I C Y R U J N I W L T A I K B B W F X P L T Q J Y N I  
 U L L Y D I E T I N G H B T G O A L S Q N D R N T G E E  
 M T E R Q R G C C H G I Y N W V M Q M T L D A O E F T W  
 J H K A D C R D F N H N W E B Q J Z Q M R N I V C D N R  
 Y G T T A I Q F L V K G G S K R L W N X M M N E H U I D  
 R I R N O R Y P C G Y W N S D O I R E P T S E R N M V R  
 Q E G E L T H K N Y H K F S E L C S U M T N R T I B L N  
 G W G D R N N F P U M R A W F C I M A N Y D Q R Q B P R  
 C T N E E E Y Y M K M R L L E B R A B M M Q J A U E T E  
 G T O S V C K B O N E M A S S X L M Y D K P M I E L A W  
 N N R M O C Y R Q L A N K H R V E S P R A I N N H L F O  
 C J T M T E R P T L E C H Y Q L X T L X W Q K I Z T Y P  
 Z L S D Y L N Z X T R H R C L R E E B C V L C N F M D K  
 C I R T N E C N O C O T T R A E R I N V F V D G K D O V  
 E N D U R A N C E Q B G V N O P C D R M T L T L H T B N  
 K K R D T P M T Y K I Z N L G S I J M F N N J Z R T K L  
 L W D X N R K Y G Y C T Y F J G S H T G N E R T S K G P  
 X T G K H S T R E T C H I N G G E N N T N R V L X G R L

Absolute  
 Activity  
 Aerobic  
 Barbell  
 Bodyfat  
 Bonemass  
 Breathing  
 Concentric  
 Diet  
 Dieting

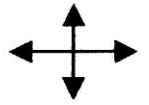
Dumbbell  
 Dynamic  
 Eccentric  
 Endurance  
 Exercise  
 Extension  
 Fatigue  
 Fit  
 Fitness  
 Flexion

Goal  
 Goals  
 Health  
 Injury  
 Intensity  
 Lifestyle  
 Muscle  
 Muscles  
 Muscletone  
 Obese

Obesity  
 Opposing  
 Overload  
 Overtrain  
 Overtraining  
 Overweight  
 Power  
 Repetition  
 Reps  
 Restperiod

Sedentary  
 Sprain  
 Strain  
 Strength  
 Strong  
 Stretching  
 Technique  
 Warmup  
 Weights  
 Weightlifting

# General Weight Lifting - Level Three Solution



**REPETITION** T H R W X E T T H G I E W R E V O H  
 Q Y K M F D L V M J M K T G M U Y K Y O W P Y Y K J K B  
 T F G R L F **NOIXELF** L R G N P K B H T Z K Z W N T  
 E K R T Q K C X J K T B E W F I J K P E E X Q P N W T N  
 N Y Q **GNISOPPO** X T N R T R V M S A B V X N N R R  
 O G Y **OVERTRAIN** U M Z A C N T I L N V Q L F T K  
 T N X Y M K Q **FITN** B L Y L F L J K T T **OBES** E Y S  
 E I **M** R Y Q C Y T M Q R O N X Y F R Q Y H G T L B W T T  
 L T U **LIFESTYLE** S V G **NOISNETXE** V R I H  
 C F S L Z D R C L R H A B F **ACTIVITY** S G Q D S G  
 S I C **YRUJNI** W L T A I K B B W F X P L T Q J Y N I  
 U L L Y **DIETING** H B T **GOALS** Q N D R N T G E E  
**M** T E R Q R G C C H G I Y N W V M Q M T L D A O E F T W  
 J H K A D C R D F N H N W E B Q J Z Q M R N I V C D N R  
 Y G T T A I Q F L V K G G S K R L W N X M M N E H U I D  
 R I R N O R Y P C G Y W N S **DOIREPTSER** N M V R  
 Q E G E L T H K N Y H K F **SELCSUM** T N R T I B L N  
 G W G D R N N F **PUMRAW** F C I M A N Y D Q R Q B P R  
 C T N E E E Y Y M K M R **LEBRAB** M M Q J A U E T E  
 G T O S V C K **BONEMASS** X L M Y D K P M I E L A W  
 N N R M O C Y R Q L A N K H R V E **SPRAIN** N H L F O  
 C J T M T E R P T L E C H Y Q L X T L X W Q K I Z T Y P  
 Z L S D Y L N Z X T R H R C L R E E B C V L C N F M D K  
**CIRTN** E C N O C O T T R A E R I N V F V D G K D O V  
**ENDURANCE** Q B G V N O P C D R M T L T L H T B N  
 K K R D T P M T Y K I Z N L G S I J M F N N J Z R T K L  
 L W D X N R K Y G Y C T Y F J G S **HTGNERTS** K G P  
 X T G K H **STRETCHING** G E N N T N R V L X G R L



# General Weight Lifting - Level Four



F V N G T L N L Y V B N R M J M L Q V N M G N G L Y R Q  
 J H B M N K M O K R C K O L G M M O G Y P Q M Z M K T B  
 R N D Z T G V F I B A Y R I Q H N C V G V Y G N H N H L  
 M L X Y W R P T T S H T N X X J S Z D E O T X P Z Q M Z  
 K L B T K W A W D T N O N T Z E M P P P R A L H M N B N  
 D K T C G F Y A E V N E B E L M L G R V T T L T X R N K  
 N F P Z Y T O I W Q K C T E D L N F J A D W R S E D L N  
 L R I D F L D K L Q M Y I X S E E K N U I L Z A W K Z V  
 N J O T R N L A R D K Q T M E E S B M P W N T D I O R T  
 C B V E V L O E O M K T W M A F K B R Z X H M W V N M Q  
 N C V V Z G P I R S D M R X T N B R V A I K E E F L D Q  
 M O T X T S R E T Y Y K D T P E Y X L N B U R P C J M D  
 F C G T F E X R T Y R T R I L H K D G B G T C D Z G R C  
 R V K M P E E Q T C E U E L E N C M D I R L R T B N K M  
 Z X X T R T B I N C I N J A H T K T T A L Q L H Z T X M  
 C J S C C A S B H G O R L N J P I A I S R T C N M R G L  
 T E I H T N C N O T R T T A I Q F N T K E I W U K N L K  
 R S I G E H I T E N H E E N Y L I E G Z R L S A I M G M  
 E N N T N Q G L I V E R P K E N D E N T H C C T R N M K  
 G T N M U I C I W V O M C E G C T L N D L T F S O M T P  
 P I B E L S S J E B I F A P T U N E I E U I G R U Z U T  
 R S D R U G B O I W L T B S L I C O C F L R T N O M F P  
 L M T M V Z T C P Q R S Y O S C T R C T E S A B E I K M  
 Q N R H F V M C H P T E S K E Z E I H T P S E N T R K N  
 Y W J L G Q J Q V R O B V T P W M G O X R S T N C D T R  
 J L W Z H I Y R A F A D T O O N I C D N I V E Y P E T S  
 M B M N L M E I Z Q L Q Z P D E F R T T T S M P L M L Z  
 W V Q Q H V N W L C W R L K W M J J Y T S Y P Q Z E Q G

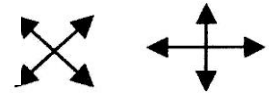
- |            |           |             |              |               |
|------------|-----------|-------------|--------------|---------------|
| Absolute   | Dumbbell  | Goal        | Obesity      | Sedentary     |
| Activity   | Dynamic   | Goals       | Opposing     | Sprain        |
| Aerobic    | Eccentric | Health      | Overload     | Strain        |
| Barbell    | Endurance | Injury      | Overtrain    | Strength      |
| Bodyfat    | Exercise  | Intensity   | Overtraining | Strong        |
| Bonemass   | Extension | Lifestyle   | Overweight   | Stretching    |
| Breathing  | Fatigue   | Muscle      | Power        | Technique     |
| Concentric | Fit       | Muscles     | Repetition   | Warmup        |
| Diet       | Fitness   | Musclestone | Reps         | Weights       |
| Dieting    | Flexion   | Obese       | Restperiod   | Weightlifting |

# General Weight Lifting - Level Four Solution



F V N G T L N L Y V B N R M J M L Q V N M G N G L Y R Q  
J H B M N K M O K R C K O L G M M O G Y P Q M Z M K T B  
R N D Z T G V F I B A Y R I Q H N C V G V Y G N H N H L  
M L X Y W R P T T S H T N X X J S Z D E O T X P Z Q M Z  
K L B T K W A W D T N O N T Z E M P P P R A L H M N B N  
D K T C G F Y A E V N E B E L M L G R V T T L T X R N K  
N F P Z Y T O I W Q K C T E D L N F J A D W R S E D L N  
L R I D F L D K L Q M Y I X S E E K N U I L Z A W K Z V  
N J O T R N L A R D K Q T M E E S B M P W N T D I O R T  
C B V E V L O E O M K T W M A F K B R Z X H M W V N M Q  
N C V V Z G P I R S D M R X T N B R V A I K E E F L D Q  
M O T X T S R E T Y Y K D T P E Y X L N B U R P C J M D  
F C G T F E X R T Y R T R I L H K D G B G T C D Z G R C  
R V K M P E E Q T C E U E L E N C M D I R L R T B N K M  
Z X X T R T B I N C I N J A H T K T T A L Q L H Z T X M  
C J S C C A S B H G O R L N J P I A I S R T C N M R G L  
T E I H T N C N O T R T T A I Q F N T K E I W U K N L K  
R S I G E H I T E N H E E N Y L I E G Z R L S A I M G M  
E N N T N Q G L I V E R P K E N D E N T H C C T R N M K  
G T N M U I C I W V O M C E G C T L N D L T F S O M T P  
P I B E L S S J E B I F A P T U N E I E U I G R U Z U T  
R S D R U G B O I W L T B S L I C O C F L R T N O M F P  
L M T M V Z T C P Q R S Y O S C T R C T E S A B E I K M  
Q N R H F V M C H P T E S K E Z E I H T P S E N T R K N  
Y W J L G Q J Q V R O B V T P W M G O X R S T N C D T R  
J L W Z H I Y R A F A D T O O N I C D N I V E Y P E T S  
M B M N L M E I Z Q L Q Z P D E F R T T T S M P L M L Z  
W V Q Q H V N W L C W R L K W M J J Y T S Y P Q Z E Q G

# General Weight Lifting - Level Five



C H D M Y T I S E B O Z D K B S K L O N L M N N F W K  
 M H M A E R O B I C W D V T P T K R P Y H T L A E H L  
 L N D N N K H P K X M N D T E R D L P M D D Y D J M R  
 Q Y B L G O K B M C I F E H U O F T O Q H Q K K J R M  
 W F F M M T I J K A W N R Y G N F C S N H W T X W T M  
 Y Q G L K U Q S R T D L R M I G G N I H T A E R B E T  
 T Z N M E N S T N U D Q Y L T T M T N R P Z T T Q I F  
 I J I U R X S C R E V L P F A F R T G K T Z Z T K D H  
 S E T S J Z I A L T T W C U F N T R M D M N R L H M T  
 N T F C D T N O I E V X D U M B B E L L R J E B N T R  
 E U I L N C G F N J S J E T Y R F I T N E S S C M C W  
 T L L E E X O R K O T F E T C C A M D R Y Z P R N F N  
 N O T T K X A R B T D C I M K D B W Z M W J G T B O K  
 I S H O T G L E T F H V M U S C L E V R Q M P O C N C  
 V B G N T C S H E N I N K L M Y C Q T L G Q N N E H M  
 K A I E R E G L I T N O I T I T E P E R L E F I C Q D  
 S K E K L F Y Q C K M R V A F R R Y V Q M G N A C S T  
 D T W M Y T U A Q D E K G M R R N C N A N J S R E T H  
 F A R H S E B W Y W R F Y G Y P B R S I X E Q T N H G  
 B L O E D R J A O N C J O B Z R S S T M D R Q R T G I  
 V L F L N Y E P R Z P A D O M T U E F E Z N P E R I E  
 W I R L R G N P R B L D Z D T P I J N L P L L V I E W  
 L P W M R E T A S S E K H Y J D K T N W L Z H O C W R  
 L T P H R K V H M H J L K F M T A R D I H C N N N P E  
 G K W R G X C O T I T P L A B R E S T P E R I O D M V  
 G N I H C T E R T S C M Y T Y R E S I C R E X E C Q O  
 P K T Z B L W Z W O V E R T R A I N I N G K H G D X G

Absolute  
 Activity  
 Aerobic  
 Barbell  
 Bodyfat  
 Bonemass  
 Breathing  
 Concentric  
 Diet  
 Dieting

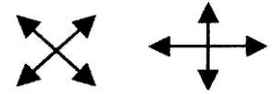
Dumbbell  
 Dynamic  
 Eccentric  
 Endurance  
 Exercise  
 Extension  
 Fatigue  
 Fit  
 Fitness  
 Flexion

Goal  
 Goals  
 Health  
 Injury  
 Intensity  
 Lifestyle  
 Muscle  
 Muscles  
 Muscletone  
 Obese

Obesity  
 Opposing  
 Overload  
 Overtrain  
 Overtraining  
 Overweight  
 Power  
 Repetition  
 Reps  
 Restperiod

Sedentary  
 Sprain  
 Strain  
 Strength  
 Strong  
 Stretching  
 Technique  
 Warmup  
 Weights  
 Weightlifting

# General Weight Lifting - Level Five Solution



C H D M Y T I S E B O Z D K B S K L O N L M N N F W K  
 M H M A E R O B I C W D V T P T K R P Y H T L A E H L  
 L N D N N K H P K X M N D T E R D L P M D D Y D J M R  
 Q Y B L G O K B M C I F E H U O F T O Q H Q K K J R M  
 W F F M M T I J K A W N R Y G N F C S N H W T X W T M  
 Y Q G L K U Q S R T D L R M I G G N I H T A E R B E T  
 T Z N M E N S T N U D Q Y L T T M T N R P Z T T Q I F  
 I J I U R X S C R E V L P F A F R T G K T Z Z T K D H  
 S E T S J Z I A L T T W C U F N T R M D M N R L H M T  
 N T F C D T N O I E V X D U M B B E L L R J E B N T R  
 E U I L N C G F N J S J E T Y R F I T N E S S C M C W  
 T L L E E X O R K O T F E T C C A M D R Y Z P R N F N  
 N O T T K X A R B T D C I M K D B W Z M W J G T B O K  
 I S H O T G L E T F H V M U S C L E V R Q M P O C N C  
 V B G N T C S H E N I N K L M Y C Q T L G Q N N E H M  
 K A I E R E G L I T N O I T I T E P E R L E F I C Q D  
 S K E K L F Y Q C K M R V A F R R Y V Q M G N A C S T  
 D T W M Y T U A Q D E K G M R R N C N A N J S R E T H  
 F A R H S E B W Y W R F Y G Y P B R S I X E Q T N H G  
 B L O E D R J A O N C J O B Z R S S T M D R Q R T G I  
 V L F L N Y E P R Z P A D O M T U E F E Z N P E R I E  
 W I R L R G N P R B L D Z D T P I J N L P L L V I E W  
 L P W M R E T A S S E K H Y J D K T N W L Z H O C W R  
 L T P H R K V H M H J L K F M T A R D I H C N N N P E  
 G K W R G X C O T I T P L A B R E S T P E R I O D M V  
 G N I H C T E R T S C M Y T Y R E S I C R E X E C Q O  
 P K T Z B L W Z W O V E R T R A I N I N G K H G D X G

# Teacher Lesson Plan

## A Guide To General Weight Lifting

For health classes, for rainy gym days, for substitute teachers, and even for study hall students who say that they have nothing to do

### Directions

- Print enough copies of the article so that all of the students in the class have their own copy.
- Each Worksheet is arranged so that the questions are in the same order as the information presented in the article. Select the Worksheet level that is most appropriate for your students and then print enough copies so that all of the students in the class have their own copy.
- If having the questions in the same order as the information presented in the article is too easy for your group of students, you can substitute one of the Test-Review Questions levels for the Worksheet.
- After completing one of the above-mentioned tasks, have the students complete one of the crossword puzzles, one of the word search puzzles, or both puzzles.
- If any of the above-mentioned choices is too difficult for your particular group of students, another option is to allow two students to work together on one of these tasks.

NOTE: Feedback from teachers already using these resources state that staff members really like receiving the health and wellness articles if they are accompanied by a crossword puzzle. For members of the staff, the Level Three crossword puzzle is recommended.