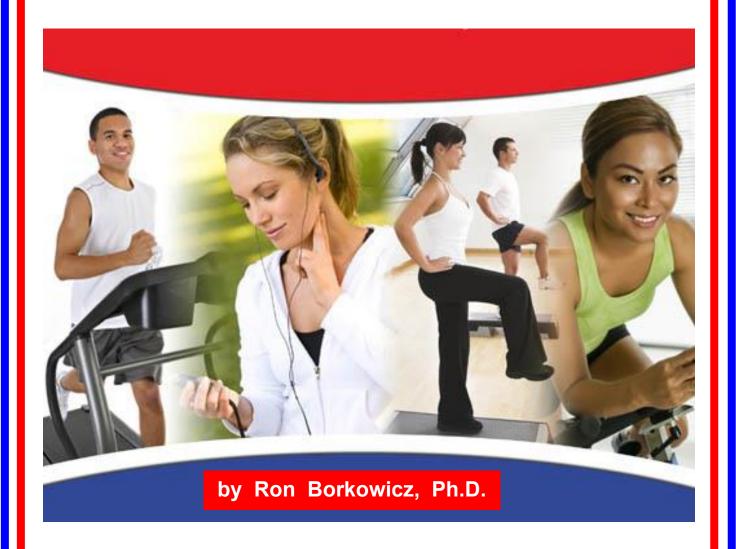
# Learning About Aerobic Exercise



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# **Aerobic Exercise**

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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.

#### **Article: Aerobic Exercise**

In addition to describing the health benefits that aerobic exercise provides, this article provides the readers with the correct training principles for their personal aerobic exercise program. The information is presented in a manner which is easy for the students to understand.

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.



# **AEROBIC EXERCISE**

Every American who watches TV has seen many commercials for aerobic exercise facilities. aerobic classes or aerobic exercise equipment. However, prior to 1970, most Americans had never even heard the term "aerobic." That is when Dr. Cooper wrote a book that was simply called "Aerobics."

In addition to defining aerobic exercise. he explained the health benefits that aerobic exercise provides. Besides adding a new term to our collective vocabulary, this book contributed to promoting an entirely new lifestyle --- an active lifestyle --- for many Americans.

#### What is Aerobic Exercise?

One definition of aerobic exercise is "low-intensity physical activity performed over an extended period of time." Low-intensity physical activities include things like jogging or riding an exercise bike with moderate resistance.

In contrast, high-intensity physical activities include things like sprinting a 40-yard dash or bench pressing as much weight as you can. Most experts agree that the

extended period of time should be at least 30 continuous minutes.

Although aerobics are considered low-intensity exercises, they are not effortless. Aerobic exercisers must work hard enough to raise their heart rate to a certain level. This level is called the Target or Training Heart Rate (THR) zone.



This zone varies depending upon an individual's age. To determine your THR zone, you first need to know your Maximum Heart Rate.

#### **Maximum Heart Rate**

Your MHR is the maximum number of times that your heart will beat per minute when exercising strenuously. As you age, your MHR decreases. Hence, a 50-year old person will have a much lower MHR than a teenager.

The most common way to

estimate your MHR is to subtract your age from 220. If you are 15 years old, your MHR would be 220 minus 15 or 205. In other words, when exercising, the 15-year-old's estimated MHR would not be higher than 205 beats per minute. No one, not even Olympic athletes, can exercise for 30 continuous minutes while at their MHR.

#### **Target Heart Rate**

The THR zone for exercising aerobically is determined by multiplying the MHR by certain percentages. For most healthy individuals this is 70-85% of the MHR.

Some individuals work between 60-70% of their MHR but exercise for a longer period of time. Although the 70-85% is better for improving one's physical fitness, exercising in either zone will contribute toward health benefits.

Also, a small percentage of top athletes work between 85-90% of their MHR for at least part of their workout. However, unless individuals are in exceptional physical condition, they should not exercise higher than the 85% limit. Also, recent studies have indicated that children

who are younger than teenagers may need a different formula for determining their THR zone.



#### Frequency

How often do you need to aerobically exercise fitness and health benefits? The answer is at least three times per week. (If exercising three days per week, exercise on alternate days) Four days per week is a little better than three days and five days per week is a little better than four days. However, in regard to health benefits, exercising six or seven days per week is not significantly better than exercising five days a week.

#### **Overtraining**

It is possible to exercise too hard, even when exercising for fitness. This is commonly referred to as overtraining. Hence, for most people, exercising above the THR zone is not better than exercising within the zone. Exercising at too high an intensity or exercising too often can result in doing more harm than good to the body.



If you feel sore or drained of energy, you need to back off on your exercise training. The belief that "more is always better" does not apply to exercise and neither does the old "no pain, no gain" adage.

Some tips for your aerobic exercise program are as follows.

- Unless training for competition, do not exercise at the top of your THR zone every day.
- If you like to exercise every day, consider cross training. Instead of running seven days per week, substitute swimming laps or riding an exercise bike every third day.
- Be sure to use proper equipment. Something as simple as a poor choice in footwear can lead to serious problems.
- Be sure to use the proper technique when exercising. Improper technique can lead to chronic muscle and connective tissue problems.
- Maintain your proper weight. Excess weight places more stress on your body.
- Monitor your time and your exercise intensity when working out. This will help to reduce the chance of overexerting yourself during your exercise session.

• Be certain to warm-up before you start exercising and to cool-down after the exercise session.

#### Warm-up and Cool-down

A warm-up session will prepare the body for a better workout and it will also reduce the chance of injury during the workout. If you are not in good physical condition, walking at a moderate pace or riding an exercise bike at a moderate pace can be 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. (Note, stretching is not a warm-up exercise and should only be performed after the muscles are warmed-up)

Cool-down exercises are also an important part of an aerobic exercise program. They help the body to maintain adequate circulation. The cool-down period is a must after an aerobic workout.



Common cool-down exercises include a slow jog, for the well-conditioned athlete, or a slow treadmill or slow walk for the individual just starting their exercise program.

For most healthy individuals, the cool-down period can be stopped when their heart rate goes below 100 beats per minute. However, to be safe, you should discuss this topic with your doctor before starting an exercise program.

#### **Benefits**

People who perform aerobic exercises can expect multiple health benefits. The benefits range from various postponing health problems to eliminating them entirely. When performed on basis. regular aerobic exercise...

- Helps lower both systolic and diastolic blood pressures.
- Helps lower the bad cholesterol and raise the good cholesterol.
- Helps reduce excess weight and after reaching your desired weight, assists in maintaining that weight.
  - Helps reduce stress.
- Helps increase bone strength if the exercises are weight-bearing activities such as step aerobics or jogging.

 Helps reduce the chance of a heart attack, a stroke and certain cancers.

#### Conclusion

Moderate activity such as walking or yard work. performed 30 to 40 minutes per day, several days per week, can reduce your risk of health problems. However. an aerobic exercise program can do even more to prevent health problems as long as you do not overdo it. To be safe, discuss your plans with your doctor before starting your exercise program.



Why Aerobic Exercise <a href="http://www.mayoclinic.com/health/aerobic-exercise/EP00002/METHOD=print">http://www.mayoclinic.com/health/aerobic-exercise/EP00002/METHOD=print</a>

Aerobic Conditioning <a href="http://www.exrx.net/Aerobic.html">http://www.exrx.net/Aerobic.html</a>

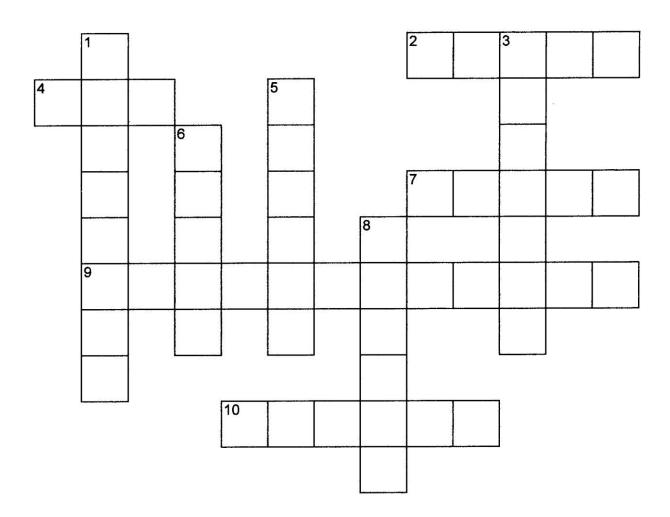
Exercise and Physical Fitness http://health.nih.gov/topic/ExercisePhysicalFitness/WellnessLifestyle

Exercise and Physical Fitness http://www.nlm.nih.gov/medlineplus/exerciseandphysicalfitness.html

**NOTICE:** Although the above websites have been operational for years, as you know, that could change tomorrow. If that is the case, simply Google the organization for a revised address.

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#### Aerobic Exercise - Level One



| ACI | OSS |  |
|-----|-----|--|
|     |     |  |

- 2 Aerobic exercisers must work hard enough to elevate their rate.
- 4 Aerobic exercise is a \_\_\_\_\_ intensity physical activity.
- 7 If you like to exercise every day, consider \_\_\_\_ training.
- 9 Exercising too hard is called
- **10** A warm-up session will reduce the chance of \_\_\_\_.

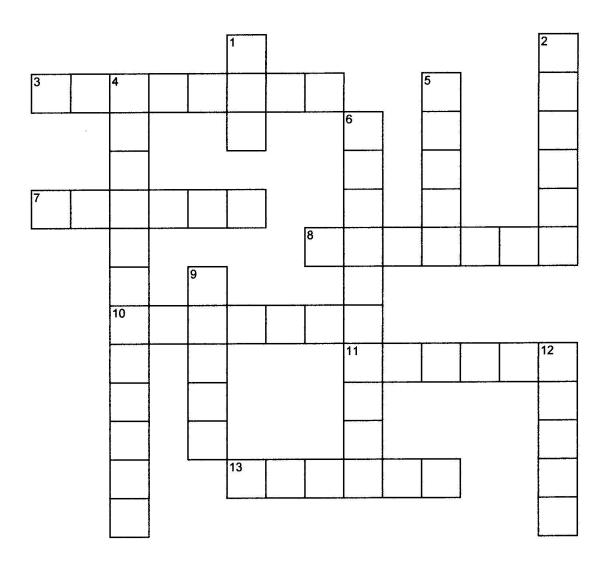
#### Down

- 1 Always perform a \_\_\_\_\_ after an aerobic exercise.
- **3** Blood Pressure can be lowered with \_\_\_\_ exercise.
- 5 Exercising in the Target Heart Rate zone will contribute toward \_\_\_\_\_ benefits.
- 6 You should exercise at least \_\_\_\_ times a week.
- 8 A \_\_\_\_\_ session will prepare the body for a better workout.

# **Aerobic Exercise - Level One Solution**

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|   | L |   | Н |   | A |   |   | C | R | 0   | S | S |
|   | D |   | R |   | L |   | W |   |   | В   |   |   |
|   | 0 | V | E | R | T | R | A | I | N |     | Z | G |
|   | W |   | E |   | Н |   | R |   |   | C   |   |   |
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#### **Aerobic Exercise - Level Two**



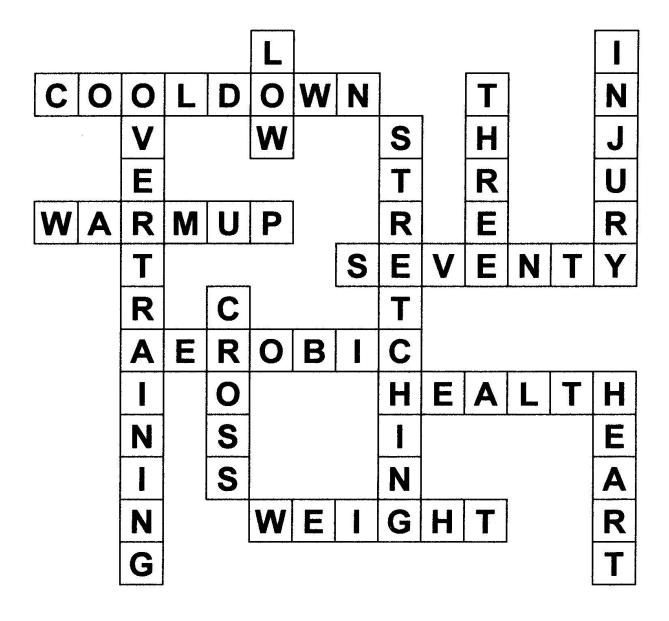
| Across |  |
|--------|--|
|--------|--|

- 3 Always perform a \_\_\_\_\_ after an aerobic exercise.
- 7 A \_\_\_\_ session will prepare the body for a better workout.
- 8 Your Target Heart Rate should be between \_\_\_\_\_ to 85% of your Maximum Heart Rate.
- **10** Blood Pressure can be lowered with exercise.
- 11 Exercising in the Target Heart Rate zone will contribute toward \_\_\_\_\_ benefits.
- 13 More stress is placed on your body if you have excess \_\_\_\_.

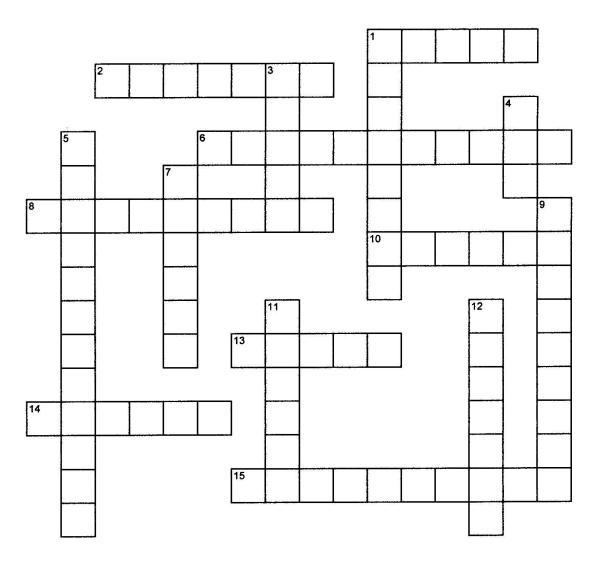
#### Down

- 1 Aerobic exercise is a \_\_\_\_\_ intensity physical activity.
- 2 A warm-up session will reduce the chance of \_\_\_\_\_.
- 4 Exercising too hard is called \_\_\_\_\_.
- 5 You should exercise at least \_\_\_\_\_ times a week.
- 6 is not a warm-up exercise.
- **9** If you like to exercise every day, consider training.
- **12** Aerobic exercisers must work hard enough to elevate their \_\_\_\_ rate.

# **Aerobic Exercise - Level Two Solution**



#### **Aerobic Exercise - Level Three**



#### Across

chance of \_\_\_\_\_.

15 \_\_\_\_ is not a warm-up exercise.

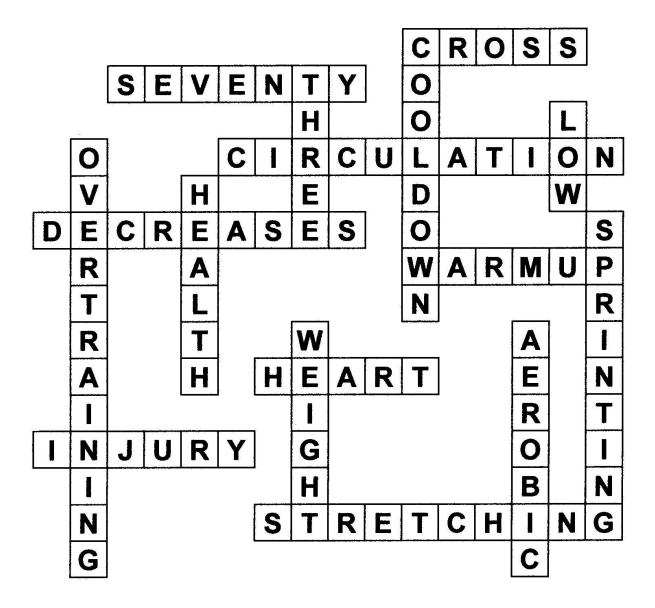
# 1 If you like to exercise every day, consider \_\_\_\_\_ training. 2 Your Target Heart Rate should be between \_\_\_\_ to 85% of your Maximum Heart Rate. 6 Cool-down exercises help the body to maintain adequate \_\_\_\_\_. 8 As you age, your Maximum Heart Rate 10 A session will prepare the body for a better workout. 13 Aerobic exercisers must work hard enough to elevate their \_\_\_\_ rate. 14 A warm-up session will reduce the

#### Down

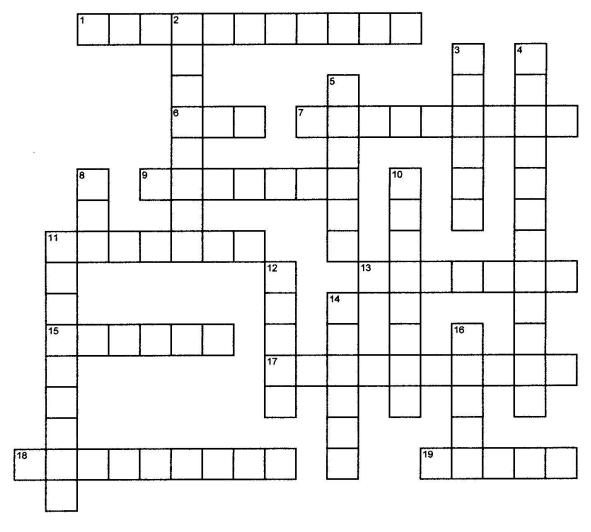
| 1  | Always perform a after an                  |
|----|--|
|    | aerobic exercise.                          |
| 3  | You should exercise at least               |
|    | times a week.                              |
| 4  | Aerobic exercise is a intensity            |
|    | physical activity.                         |
| 5  | Exercising too hard is called              |
| 7  | Exercising in the Target Heart Rate        |
|    | zone will contribute toward                |
|    | benefits.                                  |
| 9  | High-intensity physical activities include |
|    | things like                                |
| 11 | More stress is placed on your body if      |
|    | you have excess                            |
| 12 | Blood Pressure can be lowered with         |
|    | exercise.                                  |
|    | © 2020 Phot Fun St                         |

10

# **Aerobic Exercise - Level Three Solution**



#### Aerobic Exercise - Level Four



#### Across

maintain adequate \_\_\_\_\_. 6 Aerobic exercise is a \_\_\_\_\_ intensity physical activity. 7 As you age, your Maximum Heart Rate 9 Low-intensity physical activities include things like \_\_\_\_\_. 11 Your Target Heart Rate should be between \_\_\_\_\_ to 85% of your Maximum Heart Rate.

1 Cool-down exercises help the body to

- 13 Blood Pressure can be lowered with exercise.
- 15 A warm-up session will reduce the chance of \_\_\_\_\_.
- 17 \_\_\_\_ is not a warm-up exercise.
- 18 Monitor your time and exercise \_\_ when working out.
- 19 Aerobic exercisers must work hard enough to elevate their \_\_\_\_ rate.

#### Down

12

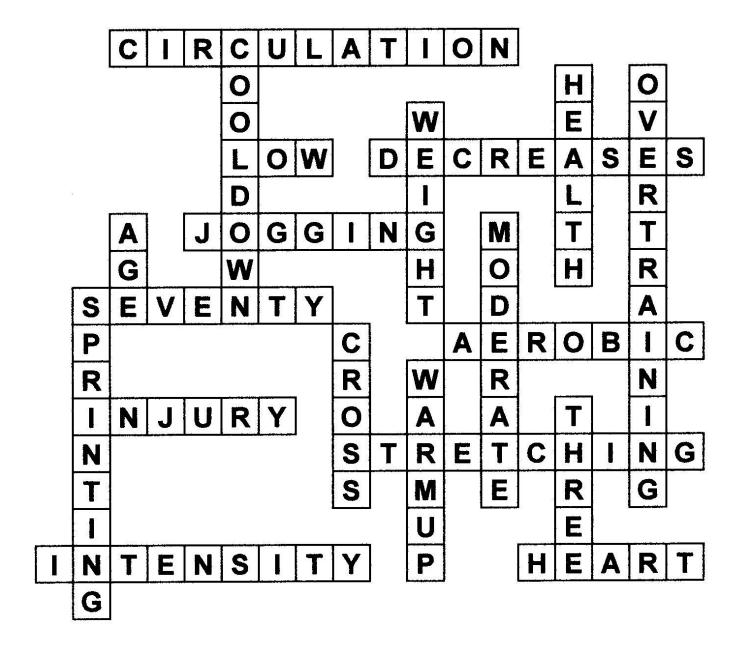
exercise. 3 Exercising in the Target Heart Rate zone will contribute toward \_\_\_\_\_ benefits. 4 Exercising too hard is called \_\_\_\_\_. 5 More stress is placed on your body if you have excess 8 The Target Heart Rate zone varies depending on a person's \_\_\_\_\_. 10 Walking at a pace is a good warm-up activity. 11 High-intensity physical activities include things like \_\_\_\_\_. 12 If you like to exercise every day, consider \_\_\_\_\_ training. 14 A \_\_\_\_ session will prepare the body for a better workout.

16 You should exercise at least \_\_\_\_\_

2 Always perform a \_\_\_\_\_ after an aerobic

times a week. © 2020 Phot Fun Safaris

### **Aerobic Exercise - Level Four Solution**



#### Aerobic Exercise - Level One

0 E R R G C L 0 R E S V Ν В Α T Κ R X В Т X X Ε E S Т Y C 0 В Υ T E R T H E Α В Н K G Т R R J K Х Н Α R R Z X 7 P E X E R C ı S E G C Q G N K V X C Х T E C T R G E T Н Ε A R T R 0 1 C L Α E R В A Т C Т R T E ٧ D Ε R Α G J C Н M Α Х M U M Н A K Ε S G R R S T Y T P C D ١ A В Ε T T E ١ V N N М S E H Т В Н 0 В Ε R Υ R A C Т 1 Υ L F F M M H C S R 0 T Q G C 0 L E Т Ε L R E T C Н ١ N K Н S T C S Ε K R Α E R 0 В ١ С Ε Х Ε R M B D R L D M L R E Q P U L S Ε A P E R T E N S ١ 0 N ٧ R H Υ Т N Z Z R G N Q V 0 X Y G E N Н C 0 0 L D 0 W N J R Y X D Ε R Α Т E A C Т V 1 T Y J T M 0 T G N F В S S T R A N ١ N G C R 0 ١ B Y X Т H T F C S E E A R Y T E M D N M Н E Α R T R Α L R H D ٧ D Z L ١ F E S T Y L E H M G Q R C R K G T R Т B H E R X W T S T R 0 K E W V Κ ı E T T D C A T 1 0 N W N M C 1 R U L G Υ W Α R M U P M L P X B В S Α T U R A Т Ε D F Α T D Q K L Υ L M Т S Ε S Ε S T Y D Α C ٧ G 0 R 0 U C V ı R Y T R F K G M Q R S F A C 0 M G H R K R 0 E R W Ε ı G Н Т C K V T K M R L R Z Z Z D Q Z 0 R E J M M M Н R C A L ı R R G P N D P R E S S U R E E T D B 0 0 Т H H M Т Т C S G P Н E Α R Т Α Т Α C K C X E R N

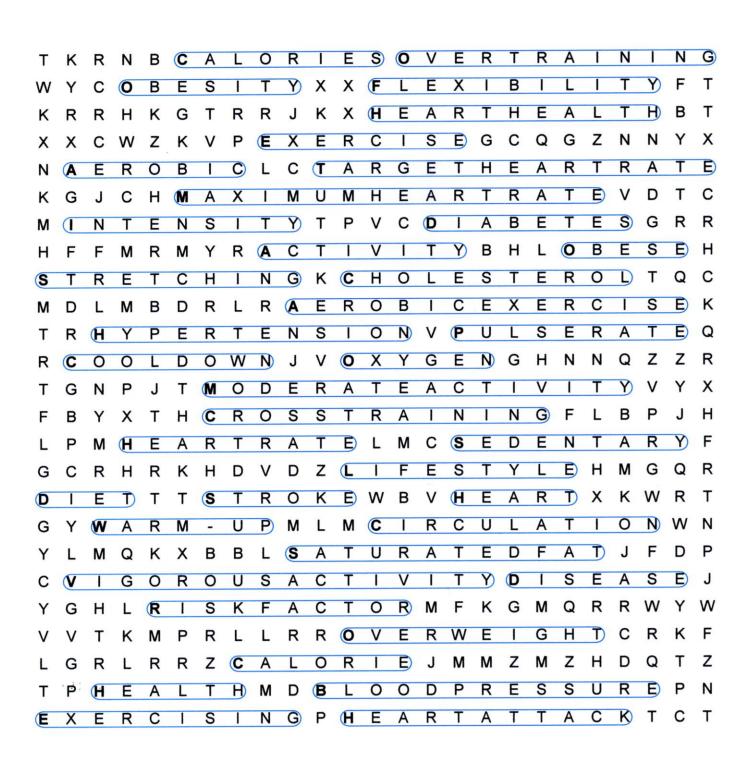
Activity
Aerobic
Aerobic Exercise
Blood Pressure
Calorie
Calories
Cholesterol
Circulation
Cool-down
Cross Training

Diabetes
Diet
Disease
Exercise
Exercising
Flexibility
Health
Heart
Heart Attack
Heart Health

Heart Rate
Hypertension
Intensity
Lifestyle
Maximum Heart Rate
Moderate Activity
Obese
Obesity
Overtraining
Overweight

Oxygen
Pulse Rate
Risk Factor
Saturated Fat
Sedentary
Stretching
Stroke
Target Heart Rate
Vigorous Activity
Warm-up

#### **Aerobic Exercise - Level One Solution**



#### **Aerobic Exercise - Level Two**



C T Т Υ D Υ H T X M V D Α В C Т C Κ N K D Y X C Α L 0 R ı Ε M Т M R Α W T N W J V G E R U S S E R P D 0 0 L B L H N R F G W W L M Х 0 A C R T E R T S M Х S E I R L Y G N Н C T K ı Z R G C S G В G K N N G L N T N T Ε Х E R Ν D W T C Α E T A R Ε D 0 M K R D W K C K Q G B T Υ Z S S P C N C Q Z D E E L N Н Q L ١ Α W В J M R E R T R A N 1 N G D T W M K G T R N 0 ٧ ı M F S K F A C T 0 R E Т Α R E S U P M H Κ R ١ Т N M E В 0 В E S E Q T K F В L N T C В X T S 0 W M Υ Х Z S F Z C F R T N B T Α F D E T Α R U T A K Υ N G M W C R C S T R 0 K E J Z N 0 I Т Α L U L Х W N L W R S E D E T A R Y E S E R 0 G N J N Ν C T L Н 0 C P F T ١ N 1 Α R T S S 0 R C P D В L P D M X C G Ν C E E R C S E F X J T D E R 0 В X R P V Н M N Α P Y H N K В T R Α E Н Q D K R C N S E T R E Ν 0 N X T T E Α R T A T Т Α C K T K M N D K Н J W Н U M E Α R T R A T K R H D M A X M H Н W Х N P G Ε T X 1 Α В E T E S X H E Α L T H 0 Х Υ Ν D T E G 0 E A C K E Т R T R Α E Н R A T N C 1 В R N Α T S T F K Ν R Κ Q C W Ε S C R E Х E 1 N Ε N I Υ ٧ I Ε F C 0 D 0 W N C F H Т L Α E Н Т R A Н L W D 0 L Т F 0 R 0 U S A C T ١ ٧ I Y В P M C G C M L V G V Т В F K G R E ٧ 0 L Υ ١ L ١ Х E C W L T H ١ E W R R Т Ε P Q W M K T E D H R M Н D Н Ε Α Α T S Ε F X W K M M M E Υ В

Activity
Aerobic
Aerobic Exercise
Blood Pressure
Calorie
Calories
Cholesterol
Circulation
Cool-down
Cross Training

Diabetes
Diet
Disease
Exercise
Exercising
Flexibility
Health
Heart
Heart Attack
Heart Health

Heart Rate
Hypertension
Intensity
Lifestyle
Maximum Heart Rate
Moderate Activity
Obese
Obesity
Overtraining
Overweight

Oxygen
Pulse Rate
Risk Factor
Saturated Fat
Sedentary
Stretching
Stroke
Target Heart Rate
Vigorous Activity
Warm-up

#### **Aerobic Exercise - Level Two Solution**



D LA C V Т D C Х M ٧ P U M R Α O R E) M T -S S 0 0 G E R U B G Х w w М S Χ S R 0 C R M Z S W В G Κ Ν N G G N R C Ν G D C A E Α R Ε D 0 M K R D W K C K Q G В В Z Z S Ε Α S E P C C Q L V M Ν Н Q L D R R Α N N G D T M R 0 V Ε Т Μ W Т N S K F С 0 S P F M H K R Α Т R Œ T Α R Е U S S E Q Т F В Ν T C В X M Y E В 0 0 В Ε K Z F G Z Α R U T A S K Y C N R A D E U С R C S R O K E W Z 0 Α X Ν (N Н S R 0 G R S Ε D Ε N R 0 L) S S P D В C P D F M X G N N Α R 0 R C C Ε A R 0 С E R C S F P T Н M Ν D В Ε Х E) J P H K В R Ε Q D R N (N 0 S N E R E Ν Α H) Κ R Α С K T Κ X M Ν Т Ν T J E Α Т Т Α A Χ U Α R R Α R W N Н D M M M Н E E) Х Н P S H Α H X G N X E 0 E Х D В В 0 R C Ν Κ Œ Α R R Α Н Ε G N S ٧ Κ N R Κ Q S C R Ε 0 0 W N C F H Α Ε R H C 0 D Н A Ε D S ٧ C R Α В P C M V G 0 0 U С K W Н G E W R Ε 0 L T В E F) T Α R R T E) K E D Н R М Н L D H Ε Α S E F V X M K В M Œ Υ L) L W Μ

#### **Aerobic Exercise - Level Three**



E R C S E R K Х E 1 L M Z K Х C D Т Z Y K H X Т D T K D V Q C M R F F P E T N В M R Α N Н 1 G H Y R E N S C E Z R 0 Α Н Т J A Z Т J Υ W N M J L L V V M W X Т S В Q E Х N Y T T L W J D M В N Y G Z Y N N В E G Т Z T R E Ε Ε A Q M F Т Q R Т C K Q N 0 X C X D S T Q 0 R A R L Н Ε 1 N R N R X C X Ε Ε Т E M X L S N В 0 E Y Α N 0 Q Н N Ε S Н Z N Α T В T K N R G W S T В T R C R E T V U В L Н Е E E C E E Y 0 0 G Т T C S 1 Α E H E A 0 N P R N M N E T Α R D F V N S S Т G R T Y F P 1 S X F Т Z T G R Q U E L R Y Z X ٧ В Q V D 1 E R K S 0 X Υ C Т T E 0 В Α G Υ P X T R T S C R Α V K 0 Υ E Т A E S T Y C R K C Z J Α C Q A R 0 Q H E A R T W K L Y K W Α R C B M R E 0 G S T U R Ε D F S E K Α Α T T Y W В H G T E E G T H V L H L 1 L 0 R W 1 Н X E X P H Q C V N D E R T E T M В Υ L K M 0 Α Α C Т R N 1 Y P M U C Α Е R 0 В ı C W J E R U S S E R P D 0 0 В M G D В В W K W C T C R T K K N 0 Α L F T R В Z E L Y Т S E C E S D L Α L 0 R M C K G F G R Х R M N K K H B H T A E R E Н G Ε S Ε R Ν Α Y T 1 В ı X L F Y T I B 0 T D L Z M Υ K T T F N J R C R 0 S S Т R Α 1 N G K Z R Т D E Y В M G C S K K Y 1 D Ν 1 Н Т E T

Activity
Aerobic
Aerobic Exercise
Blood Pressure
Calorie
Calories
Cholesterol
Circulation
Cool-down
Cross Training

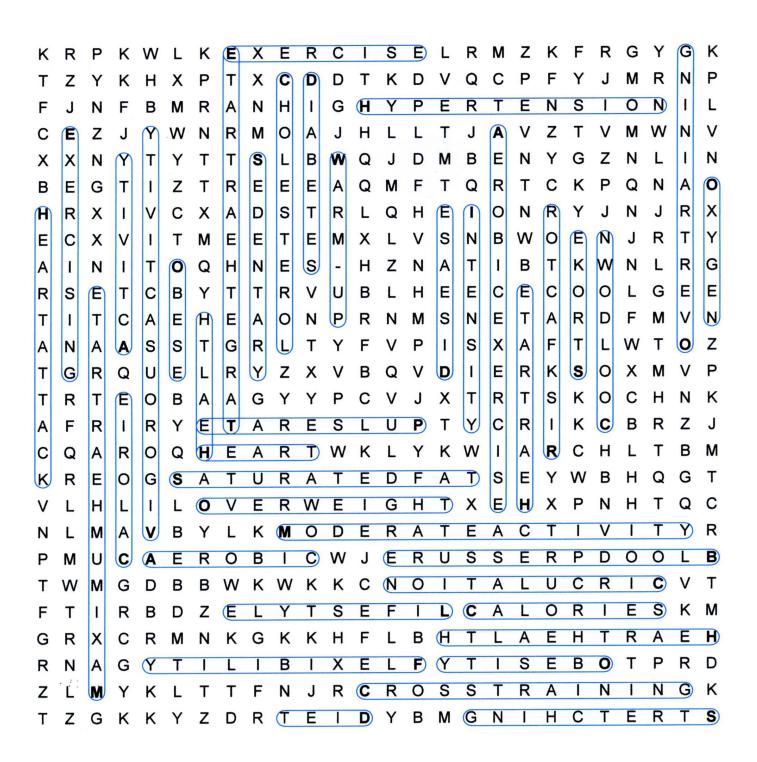
Diabetes
Diet
Disease
Exercise
Exercising
Flexibility
Health
Heart
Heart Attack
Heart Health

Heart Rate
Hypertension
Intensity
Lifestyle
Maximum Heart Rate
Moderate Activity
Obese
Obesity
Overtraining
Overweight

Oxygen
Pulse Rate
Risk Factor
Saturated Fat
Sedentary
Stretching
Stroke
Target Heart Rate
Vigorous Activity
Warm-up

#### **Aerobic Exercise - Level Three Solution**





#### Aerobic Exercise - Level Four



CWMHVLDBKGH M Z L O W E G F H L K Y N W L T C Υ Т G N Т K H M P R Α X Q L M W G R Ε M D L R 0 M X E L C P N G E E R E J V Q H 0 R L T R В R T В S R U Α V M N Н 0 R M Q Х E G S E S P J Н Α Α T C V C T M D M T T G S C Q E 1 L Н E G E Т U 1 Z C M В Н G L E C A T R Q Ε R Ε S 1 A ٧ R N E E G D Υ T A O R 1 Х N Α Y Ε Α W В S G M T X R F Q X 0 Q V P S В 1 N Р G E M C S Н Е K Q R Н В ٧ В 1 E G N В D L R U T T Т Т 0 D K C F T E 0 0 C E R C G G Q D Y P E W 1 C 1 1 C E T R 0 S S Ε L D 1 N 1 Ν M В Α L G J L Ν S E E Y N X L K J T 0 K Α R P G C J D C В E T T M E R N U P N Т Т S R T ٧ M P T A Y P X R P T D 1 L 1 Q Υ T T T X L M E С C N D C R K J J S H R R A T Ε K U R C L N T P K Α 0 J V T J R L T R Α C E W R L Ε T S E L Z Y R N A P Α 0 K K C S E 1 H R 0 L Х E Z В S E Ε E R E ٧ R N E M В D 0 C 1 S 1 D V L H P U N T В N X В R U В L ı L Υ Z Т 0 0 J X D T R Z 0 E T T T N E Α T X K M N K R N 0 S 0 M D Ε 0 K K Z E N Α L N T C R L 1 T S D Z C C M В F K R L L R M G В S T K Z K Q Α M K F R K В 1 Α M F D T H D E 0 C T C TWVAWF Т K R R В M S J Н M N Υ L EWPHWYLNTWPNYKYC QY TJWGK

Activity
Aerobic
Aerobic Exercise
Blood Pressure
Calorie
Calories
Cholesterol
Circulation
Cool-down
Cross Training

Diabetes
Diet
Disease
Exercise
Exercising
Flexibility
Health
Heart
Heart Attack
Heart Health

Heart Rate
Hypertension
Intensity
Lifestyle
Maximum Heart Rate
Moderate Activity
Obese
Obesity
Overtraining
Overweight

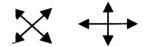
Oxygen
Pulse Rate
Risk Factor
Saturated Fat
Sedentary
Stretching
Stroke
Target Heart Rate
Vigorous Activity
Warm-up

#### **Aerobic Exercise - Level Four Solution**



M Z L C W M H V L D B K G H L S В F W K M KHM G M P N Q O X C R M M M/D E Z R H G C Q G M B G E M D R R Q O) G S O T Q V B G X B F B G D В C K Q D Y (C) D E) M B T N D B T QY D T V M X M C C 0 Х S M B В S Z Z H P N Υ X B B ZOXE D Z M N/MXT 0 **(0)** X W (E) K K Z OXS) **O** M D 0 E) N В C/M K/R R M G **(S)** S D Z R/KZ H D/E/K Q/O/A MK (F) B M F K D T M M H M S N W V/A/W F R T В Y E W P H W Y L N T W P N Y K Y C Q T

## **Aerobic Exercise - Level Five**



M S N E Ε M Q QWPH RNВ L H В M V Y Т N -G D M Z R T G B X D N Z X Q M D M В C C X L G E V В W Q M T 0 N N T Υ Z R P L 0 R W F G R K C T Т R S Q D 0 K Y Υ L В M C V Z X P B H G P T 0 E M M T T C D V T Н K V E R K C X K N 1 N G B S M T K Z H Y M R S V P G C R X 0 J E E P Z L В V G E E F 1 H R Р T N D X K N T K A Y R 0 В C E X E R C 1 S E T E H 1 R Y J N E Z G E K G R B NWC P X S R C Α E G A W E E S S F D Ε N T A R Y D T U R Α A B W T G N 1 S 1 C R E X E E V Т R N E R F N P Q N N Q S T C E A T T В R X C T K K R T L D P S S R E Α C В S X D 1 N V T T F 0 Q B X M 0 T D K R W E Ε A K Q G E R В R R R 0 N 1 R 0 Z M K 0 T R X T X Α D E В P Z 0 C R L J R Α T L N U E H G E D S Z Q F K P D U M Α E G Н E D G F T E B Α B T Y D H G R Z T Н S В U B G S 0 В E S T Y L Α 1 N P S F C 0 E G C N Q Q N J B X L K 0 Ν R G T C QWR L E Q G M D R T Q M X A L C Q W T T Q T Q V L C Z C R 0 R F R M Н E Α T Α T T Α K K T Z R C G T R R Z F V 0 Т В K N N L Y V J Z R E T R E S C R R A L P D R 1 H V M H N V S 0 R E T S E В E E Н L E P K J MKMZZCSE TARTRA E HT E Z M

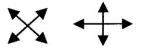
Activity
Aerobic
Aerobic Exercise
Blood Pressure
Calorie
Calories
Cholesterol
Circulation
Cool-down
Cross Training

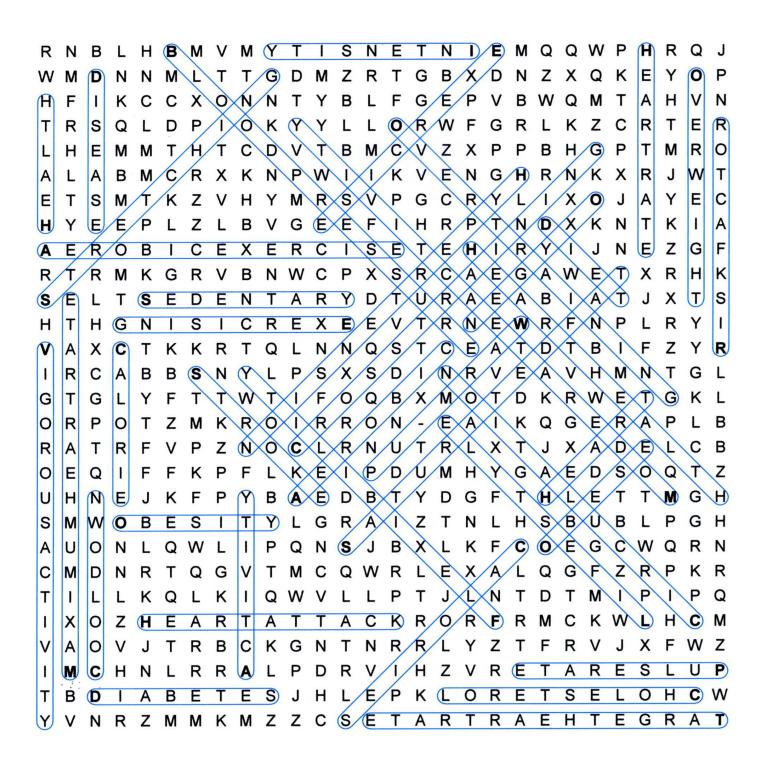
Diabetes
Diet
Disease
Exercise
Exercising
Flexibility
Health
Heart
Heart Attack
Heart Health

Heart Rate
Hypertension
Intensity
Lifestyle
Maximum Heart Rate
Moderate Activity
Obese
Obesity
Overtraining
Overweight

Oxygen
Pulse Rate
Risk Factor
Saturated Fat
Sedentary
Stretching
Stroke
Target Heart Rate
Vigorous Activity
Warm-up

# **Aerobic Exercise - Level Five Solution**





| Name | class | grade |
|------|-------|-------|

# True or False Test - Level One Aerobic Exercise

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. Aerobic exercises are high-intensity physical activities.
   T F 2. Your Maximum Heart Rate is the maximum number of times that your heart will beat per minute.
   T F 3. Your Maximum Heart Rate increases as you age (get older).
- **T F** 4. To gain health benefits, you need to exercise at least three times per week.
- **F** 5. If you like to exercise aerobically every day, you should consider cross training.
- **T F** 6. Walking at a vigorous pace can be a good selection of a warm-up activity.
- **T F** 7. Stretching is one of the better warm-up exercises.
- **T F** 8. Cool-down exercises help the body to maintain adequate circulation (blood flow).
- **F** 9. For most healthy individuals, the cool-down period can be stopped when their heart rate goes below 100 beats per minute.
- **T F** 10. Step aerobic exercises improve heart health but they decrease bone strength.

| Name | class | grade |
|------|-------|-------|

# Test or Questions for Review - Level One Aerobic Exercise

| 1. | Most experts agree that aerobic exercises should last at leastcontinuous minutes.          |                    |
|----|--|--------------------|
| 2. | The aerobic exercise zone is referred to as theHeart Rate zone.                            | _ or Training      |
| 3. | The maximum number of times that your heart will beat per minute is called y Maximum Heart | our                |
| 4. | The most common way to estimate your Maximum Heart Rate is to subtract                     |                    |
|    | your from 220.   |                    |
| 5. | Exercising in the Target Heart Rate zone will contribute towardbenefits.                   |                    |
| 6. | The common term for exercising too hard is   |                    |
| 7. | More stress is placed on your body if you have excess                                      | ·                  |
| 8. | A warm-up session will reduce the chance of  | during the workout |
| 9. | is not a good warm-up exercise.  |                    |
| 0. | Aerobic exercise helps to lower both systolic and diastolicpressures.                      |                    |

| Name   | class | grade |
|--------|-------|-------|
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# Test or Questions for Review - Level Two Aerobic Exercise

| 1. | Most experts agree that aerobic exercises should last at leastcontinuous minutes. |                     |
|----|---|---------------------|
| 2. | The aerobic exercise zone is referred to as theHeart Rate zone.                   | or Training         |
| 3. | The maximum number of times that your heart will beat per minute is called        | our/our/            |
|    | Maximum Heart   |                     |
| 4. | The most common way to estimate your Maximum Heart Rate is to subtract            |                     |
|    | your from 220.  |                     |
| 5. | Exercising in the Target Heart Rate zone will contribute towardbenefits.          |                     |
| 6. | The common term for exercising too hard is  |                     |
| 7. | More stress is placed on your body if you have excess                             | ·                   |
| 8. | A warm-up session will reduce the chance of                                       | during the workout. |
| 9. | is not a good warm-up exercise.   |                     |
| 0. | Aerobic exercise helps to lower both systolic and diastolicpressures.             |                     |
| 1. | Aerobic exercisers must work hard enough to                                       | _ their heart rate. |
| 2. | As you age (get older), your Maximum Heart Rate                                   |                     |
| 3. | Walking at a moderate pace can be a good selection of a                           | activity.           |
| 4. | For most healthy individuals, the cool-down period can be stopped when the        | ir heart rate       |
|    | goes below beats per minute.  |                     |
| 5. | Aerobic exercise helps to lower the bad   |                     |

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class

# Test or Questions for Review - Level Three Aerobic Exercise

grade

| 1.  | Most experts agree that aerobic exercises should last at leastcontinuous minutes. |                     |
|-----|---|---------------------|
| 2.  | The aerobic exercise zone is referred to as theHeart Rate zone.                   | or Training         |
| 3.  | The maximum number of times that your heart will beat per minute is called y      | our our             |
|     | Maximum Heart   |                     |
| 4.  | The most common way to estimate your Maximum Heart Rate is to subtract            |                     |
|     | your from 220.  |                     |
| 5.  | Exercising in the Target Heart Rate zone will contribute towardbenefits.          |                     |
| 6.  | The common term for exercising too hard is  |                     |
| 7.  | More stress is placed on your body if you have excess                             | ·                   |
| 8.  | A warm-up session will reduce the chance of                                       | during the workout. |
| 9.  | is not a good warm-up exercise.   |                     |
| 10. | Aerobic exercise helps to lower both systolic and diastolicpressures.             |                     |
| 11. | Aerobic exercisers must work hard enough to                                       | _ their heart rate. |

# Test or Questions for Review - Level Three (continued) Aerobic Exercise

| 12. | As you age (get older), your Maximum Heart Rate  |            |
|-----|--|------------|
| 13. | Walking at a moderate pace can be a good selection of a  | _activity. |
| 14. | For most healthy individuals, the cool-down period can be stopped when their heart rate                          |            |
|     | goes below beats per minute.   |            |
| 15. | Aerobic exercise helps to lower the bad  |            |
| 16. | For most healthy individuals, your Training Heart Rate should be betweento 85 percent of the Maximum Heart Rate. |            |
| 17. | If you like to exercise every day, consider  |            |
| 18. | Cool-down exercises help the body to maintain adequate   |            |
| 19. | After reaching your desired weight, aerobic exercise will assist inthat weight.                                  |            |
|     | Aerobic exercise helps to increase strength if the exercis   | es are     |

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

- 1. Aerobic exercises are high-intensity physical activities. **False** Aerobic exercises are low-intensity physical activities.
- 2. Your Maximum Heart Rate is the maximum number of times that your heart will beat per minute. **True**
- 3. Your Maximum Heart Rate increases as you age (get older). **False** Your Maximum Heart Rate decreases as you age (get older).
- 4. To gain health benefits, you need to exercise at least three times per week. True
- 5. If you like to exercise aerobically every day, you should consider cross training. True
- 6. Walking at a vigorous pace can be a good selection of a warm-up activity. **False** Walking at a moderate pace can be a good selection of a warm-up activity.
- 7. Stretching is one of the better warm-up exercises. **False** Stretching is not a good warm-up exercise.
- 8. Cool-down exercises help the body to maintain adequate circulation (blood flow). True
- 9. For most healthy individuals, the cool-down period can be stopped when their heart rate goes below 100 beats per minute. **True**
- Step aerobic exercises improve heart health but they decrease bone strength.
   False Aerobic exercise helps to increase bone strength.

## **Answer Key - Tests and Review Questions**

(Note: This solution applies to all three levels)

- 1. Most experts agree that aerobic exercises should last at least **thirty** continuous minutes.
- 2. The aerobic exercise zone is referred to as the **Target** or Training Heart Rate zone.
- 3. The maximum number of times that your heart will beat per minute is called your Maximum Heart Rate.
- 4. The most common way to estimate your Maximum Heart Rate is to subtract your age from 220.
- 5. Exercising in the Target Heart Rate zone will contribute toward **health** benefits.
- 6. The common term for exercising too hard is **overtraining**.
- 7. More stress is placed on your body if you have excess weight.
- 8. A warm-up session will reduce the chance of **injury** during the workout.
- 9. Stretching is not a good warm-up exercise.
- 10. Aerobic exercise helps to lower both systolic and diastolic blood pressures.
- 11. Aerobic exercisers must work hard enough to elevate their heart rate.
- 12. As you age (get older), your Maximum Heart Rate decreases.
- 13. Walking at a moderate pace can be a good selection of a warm-up activity.
- 14. For most healthy individuals, the cool-down period can be stopped when their heart rate goes below **100** beats per minute.
- 15. Aerobic exercise helps to lower the bad **cholesterol**.
- 16. For most healthy individuals, your Training Heart Rate should be between **seventy** to 85 percent of the Maximum Heart Rate.
- 17. If you like to exercise every day, consider cross training.
- 18. Cool-down exercises help the body to maintain adequate circulation.
- 19. After reaching your desired weight, aerobic exercise will assist in maintaining that weight.
- 20. Aerobic exercise helps to increase **bone** strength if the exercises are weight-bearing activities such as step aerobics.

## Teacher Lesson Plan

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 Four crossword puzzle is recommended.

| Name | class | grade |
|------|-------|-------|

#### Worksheet - Level One Aerobic Exercise

| 1. | Most experts agree that aerobic exercises should last at least continuous minutes.            |
|----|---|
| 2. | This aerobic exercise zone is referred to as the or Training Heart Rate zone.                 |
| 3. | The maximum number of times that your heart will beat per minute is called your Maximum Heart |
| 4. | The most common way to estimate your Maximum Heart Rate is to subtract yourfrom 220.          |
| 5. | Exercising in the Target Heart Rate zone will contribute toward benefits.                     |
| 6. | The common term for exercising too hard is  |
| 7. | More stress is placed on your body if you have excess   |
| 8. | A warm-up session will reduce the chance of during the workout.                               |
| 9. | is not a good warm-up exercise.   |
| 0. | Aerobic exercise helps to lower both systolic and diastolic pressures.                        |

| Name | class | grade |
|------|-------|-------|

#### Worksheet - Level Two Aerobic Exercise

| 1.  | Most experts agree that aerobic exercises should last at leastcontinuous minutes.   |                   |
|-----|---|-------------------|
| 2.  | Aerobic exercisers must work hard enough to the   | eir heart rate.   |
| 3.  | This aerobic exercise zone is referred to as the described to | or Training       |
| 4.  | The maximum number of times that your heart will beat per minute is called your   |                   |
|     | Maximum Heart   |                   |
| 5.  | As you age (get older), your Maximum Heart Rate   |                   |
| 6.  | The most common way to estimate your Maximum Heart Rate is to subtract your from 220.   | ·                 |
| 7.  | Exercising in the Target Heart Rate zone will contribute toward   | benefits          |
| 8.  | The common term for exercising too hard is  |                   |
| 9.  | More stress is placed on your body if you have excess   | <del>-</del>      |
| 10. | A warm-up session will reduce the chance of du  | ring the workout. |
| 11. | Walking at a moderate pace can be a good selection of a   | activity.         |
| 12. | is not a good warm-up exercise.   |                   |
| 13. | For most healthy individuals, the cool-down period can be stopped when their he   | eart rate         |
|     | goes below beats per minute.  |                   |
| 14. | Aerobic exercise helps to lower both systolic and diastolic   | pressures.        |
| 15  | Agrabic evergica halps to lower the had   |                   |

|      | <del></del> |       |
|------|-------------|-------|
| Name | class       | grade |

# Worksheet - Level Three Aerobic Exercise

| 1.  | Most experts agree that aerobic exercises should last at least  | continuous minutes.          |
|-----|---|------------------------------|
| 2.  | Aerobic exercisers must work hard enough to   | their heart rate.            |
| 3.  | This aerobic exercise zone is referred to as the  | or Training Heart Rate zone. |
| 4.  | The maximum number of times that your heart will beat per minute is   | called your                  |
|     | Maximum Heart   |                              |
| 5.  | As you age (get older), your Maximum Heart Rate   |                              |
| 6.  | The most common way to estimate your Maximum Heart Rate is to su from 220.  | btract your                  |
| 7.  | For most healthy individuals, your Training Heart Rate should be between to 85 percent of the Maximum Heart Rate. | reen                         |
| 8.  | Exercising in the Target Heart Rate zone will contribute toward   | benefits.                    |
| 9.  | The common term for exercising too hard is  |                              |
| 10. | If you like to exercise every day, consider   |                              |
| 11. | More stress is placed on your body if you have excess   |                              |
| 12. | A warm-up session will reduce the chance of   | during the workout.          |
| 13. | Walking at a moderate pace can be a good selection of a   | activity.                    |
| 14. | is not a good warm-up exercise.   |                              |
| 15. | Cool-down exercises help the body to maintain adequate  |                              |
| 16. | For most healthy individuals, the cool-down period can be stopped wh  | en their heart rate          |
|     | goes below beats per minute.  |                              |
| 17. | Aerobic exercise helps to lower both systolic and diastolic   | pressures.                   |
| 18. | Aerobic exercise helps to lower the bad   |                              |
| 19. | After reaching your desired weight, aerobic exercise will assist in   | that weight                  |
| 20. | Aerobic exercise helps to increase str weight-bearing activities such as step aerobics.                           | ength if the exercises are   |

## Worksheet Answer Key - Level One

- 1. Most experts agree that aerobic exercises should last at least **Thirty** continuous minutes.
- 2. This aerobic exercise zone is referred to as the **Target** or Training Heart Rate zone.
- The maximum number of times that your heart will beat per minute is called your Maximum Heart Rate.
- 4. The most common way to estimate your Maximum Heart Rate is to subtract your **Age** from 220.
- 5. Exercising in the Target Heart Rate zone will contribute toward **Health** benefits.
- 6. The common term for exercising too hard is **Overtraining**.
- 7. More stress is placed on your body if you have excess Weight.
- 8. A warm-up session will reduce the chance of **Injury** during the workout.
- 9. **Stretching** is not a good warm-up exercise.
- 10. Aerobic exercise helps to lower both systolic and diastolic **Blood** pressures.

## Worksheet Answer Key - Level Two

- 1. Most experts agree that aerobic exercises should last at least **Thirty** continuous minutes.
- 2. Aerobic exercisers must work hard enough to **Elevate** their heart rate.
- 3. This aerobic exercise zone is referred to as the **Target** or Training Heart Rate zone.
- The maximum number of times that your heart will beat per minute is called your Maximum Heart Rate.
- 5. As you age (get older), your Maximum Heart Rate Decreases.
- 6. The most common way to estimate your Maximum Heart Rate is to subtract your **Age** from 220.
- 7. Exercising in the Target Heart Rate zone will contribute toward **Health** benefits.
- 8. The common term for exercising too hard is **Overtraining**.
- 9. More stress is placed on your body if you have excess Weight.
- 10. A warm-up session will reduce the chance of Injury during the workout.
- Walking at a moderate pace can be a good selection of a warm-up activity.
- 12. **Stretching** is not a good warm-up exercise.
- 13. For most healthy individuals, the cool-down period can be stopped when their heart rate goes below 100 beats per minute.
- 14. Aerobic exercise helps to lower both systolic and diastolic **Blood** pressures.
- 15. Aerobic exercise helps to lower the bad **Cholesterol**.

## Worksheet Answer Key - Level Three

- 1. Most experts agree that aerobic exercises should last at least **Thirty** continuous minutes.
- 2. Aerobic exercisers must work hard enough to **Elevate** their heart rate.
- 3. This aerobic exercise zone is referred to as the **Target** or Training Heart Rate zone.
- The maximum number of times that your heart will beat per minute is called your Maximum Heart Rate.
- 5. As you age (get older), your Maximum Heart Rate Decreases.
- 6. The most common way to estimate your Maximum Heart Rate is to subtract your **Age** from 220.
- 7. For most healthy individuals, your Training Heart Rate should be between **Seventy** to 85 percent of the Maximum Heart Rate.
- 8. Exercising in the Target Heart Rate zone will contribute toward **Health** benefits.
- 9. The common term for exercising too hard is **Overtraining.**
- 10. If you like to exercise every day, consider **Cross Training**.
- 11. More stress is placed on your body if you have excess Weight.
- 12. A warm-up session will reduce the chance of **Injury** during the workout.
- 13. Walking at a moderate pace can be a good selection of a warm-up activity.
- 14. **Stretching** is not a good warm-up exercise.
- 15. Cool-down exercises help the body to maintain adequate Circulation.
- 16. For most healthy individuals, the cool-down period can be stopped when their heart rate goes below 100 beats per minute.
- 17. Aerobic exercise helps to lower both systolic and diastolic **Blood** pressures.
- 18. Aerobic exercise helps to lower the bad **Cholesterol**.
- 19. After reaching your desired weight, aerobic exercise will assist in **Maintaining** that weight.
- 20. Aerobic exercise helps to increase **Bone** strength if the exercises are weight-bearing activities such as step aerobics.