

Aerobic Performance

Name _____

Use the web page *Aerobic Performance* on our class web page site to answer the questions below.

World-champion cyclist Lance Armstrong seems to have discovered the key to using his body's energy stores with maximum efficiency, thanks to aerobic conditioning. The worksheet below will help you understand how aerobic conditioning affects your body.

1. To comprehend the grueling nature of the Tour de France, check out the [race's route](#). Read the information under the small map, and then click on it to see an enlarged version.

a. How many kilometers is the route?

b. How many miles is the route? Use the [metric conversion calculator](#) to convert the kilometers to miles. Round to the nearest mile.

c. Describe the terrain that riders cover.

2. Read the first six paragraphs of this [article](#) about how Lance Armstrong was able to continue to improve his performance through training and dedication.

a. According to Dr. Coyle's study, what aspects of Armstrong's cycling improved the most between 1992-1999?

b. How did researchers measure Armstrong's efficiency in the lab?

3. What is aerobic exercise? To find out, read [How Your Body Responds to Exercise](#).

a. Muscles need energy to contract. How do muscle cells obtain this energy?

b. Describe what happens to the organs listed in the table below during an aerobic activity such as running, cycling, or playing tennis.

Organ	Response to Aerobic Activity
Heart	
Blood Vessels	
Lungs	
Your metabolic rate	

4. Read about Aerobic Exercise (<https://www.healthatoz.com/portal/Atoz/hl/fit/card/aroexcer.jsp>). What are examples of aerobic exercise?

a. What are some of the health benefits of a cardiovascular, or aerobic, workout?

b. Read through Add Action to your Day, Years to Your Life, (<https://www.healthatoz.com/portal/Atoz/hl/fit/star/alert09282004.jsp>). What reasons for exercise seem appealing to you?

c. Based on the amount of time you exercise each day, how would you rate your current level of fitness?

d. Enter your age into the *Target Heart Rate Calculator* (<https://www.healthatoz.com/portal/Atoz/tl/cl/thr/one.jsp>) and then click *Calculate!* What is your target heart rate?

e. Your target heart rate is the number of times your heart should beat each minute when you exercise. List some activities that will help you reach your target heart rate.