



**2016-01-IT02-KA219-024443**  
**C3- 3rd Teaching, Learning and Training Activity,**  
**Geniko Lykeio Diapolitismikis Ekpaidevsis Evosmou**  
**Greece 4-9/2/2018**

**Trail : HEALTHY LIVING-SUSTAINABLE LIVING**

Due to computers, video games, TV and mobile phones, children today are spending more and more time indoors in front of a screen instead of enjoying fresh air and outdoor exercise. With childhood obesity on the increase, activities that inspire kids to get outside, become physically active and explore their surroundings are to be encouraged.

Geocaching is fun and it can be a great way to get out in order to begin getting some physical activity every week, or it can be a great thing to throw into your workout mix to keep it interesting. If you want to use geocaching as a way to get fit, you should:

- Aim to go geocaching at least once a week (or more) for a total of 2.5 hours.
- Work to improve your diet when you're not geocaching by adding fresh fruits, vegetables, whole grains, and lean protein.
- Stay hydrated by taking a bottle of water with you on your geocaching adventures.

Getting active is one of the best things you can do to exercise your brain as well as improve your overall health and wellness. So, next time you and the family are looking for an interesting and healthy activity, why not try a little geocaching?

This trail has been designed in order to depict the importance of a healthy urban living in sustainable environments.

**Cache 1: Save lives**

N 40° 40.406'E022 ° 54.555' **GC7H2G9**

<https://www.geocaching.com/seek/#>

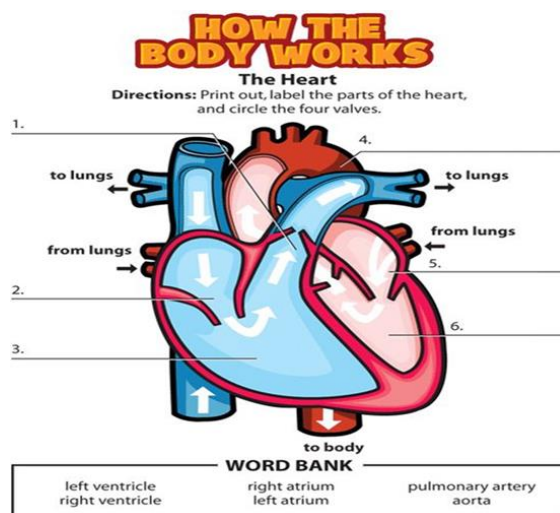
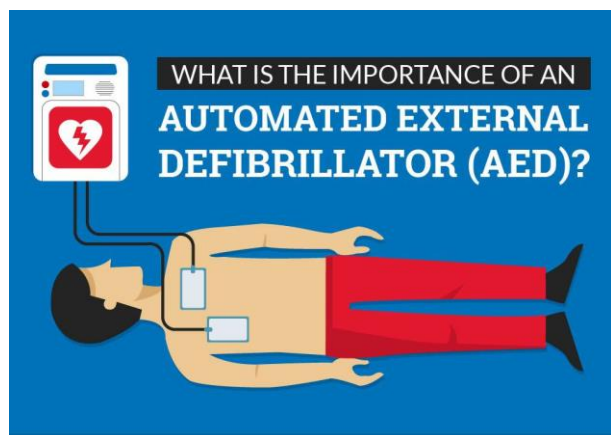
Nowadays many people have an out-of-hospital heart attack. Every year 750,000 people die in Europe and the USA. Therefore, efforts are made to improve the hopelessly low survival rates after out-of-hospital heart attack.

The immediate Basic Life Support by witnesses' present could lead to Cardiopulmonary resuscitation.

The use of an **Automated External Defibrillator (AED)**, where available, can fill the gap between collapse time and arrival of the ambulance.

In Greece, civil education in cardiopulmonary rejuvenation has not yet been compulsory and despite the Ministerial Recommendation on the Location of Defibrillators in every public space (like schools), there are only a few hundreds of them.

**This cache is in the park, close to an Automated External Defibrillator (AED) which can save lives.**



Do you know how the heart works? Take the **quiz** to find out.

<https://learningapps.org/display?v=p8iqh49wn17>



# QUIZZZZ!!!!!!!!!!!!!!

## Learn more about the most important muscle in our body

**Q.1. How many chambers does the heart have?**

- F) Six
- G) Five
- H) Four
- I) Three

**Q.2. The beating sound your heart makes comes from:**

- D) Blood going in the wrong direction
- E) Valves closing
- F) The heart skipping beats
- G) Your ears playing tricks on you

**Q.3. The movement of blood through the heart and body is called:**

- A) Circulation
- B) Locomotion
- C) Ventriculation
- D) Heart pump

**Q.4. With circulation, the heart provides your body with:**

- O) Oxygen
- P) Nutrients
- Q) A way to get rid of waste
- R) All of the above

**Q.5. You can keep your heart strong by:**

- S) Eating heart-shaped candy
- T) Doing activities, like playing outside, riding your bike, and swimming
- U) Smoking
- V) Sleeping 18 hours a day

<http://kidshealth.org/en/kids/csquiz.html>

## Cache 2: Healthy mind in a Healthy body

N 40° 40.633'E022 ° 54.617' **GC7HGK0**

<https://www.geocaching.com/seek/#>

***Mens sana in corpore sano*** is a [Latin](#) phrase, usually translated as "a healthy mind in a healthy body". The phrase is widely used in sporting and educational contexts to express the theory that physical exercise is an important or essential part of mental and psychological well-being. The phrase comes from [Satire X](#) of the [Roman](#) poet [Juvenal](#). It is the first in a list of what is desirable in life.

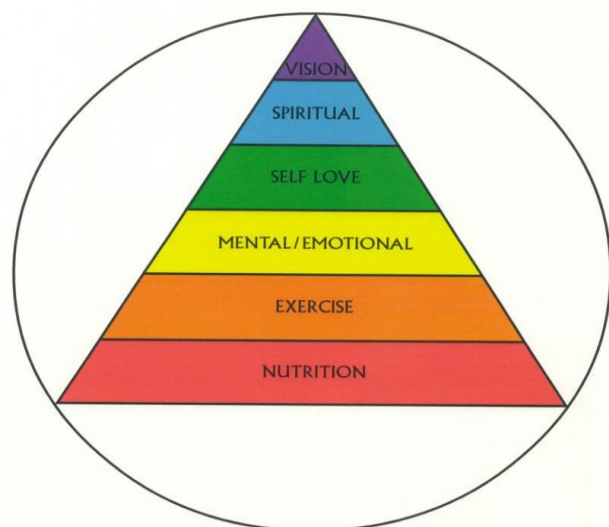
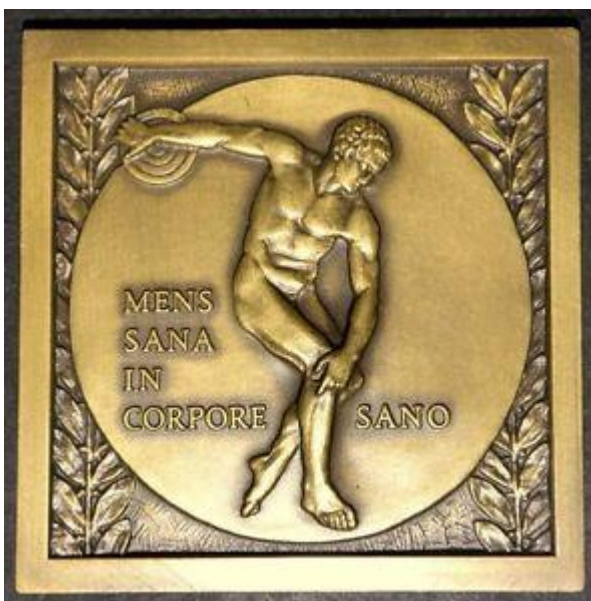
A healthy body sets the stage for your day-to-day well-being. An active lifestyle can improve your quality of life. In addition to looking and feeling better, getting fit can help boost your mental wellness. A healthy body benefits extend to mood elevation and greater mental alertness, as well as reduced chronic disease risk.

Getting fit requires regular exercise. Regular exercise utilizes your healthy bones, muscles, heart and lungs, preparing them to meet daily demands.

This doesn't have to mean doing hours upon hours of exercise and living in the gym. **Exercising in nature is free and can be a part of your regular routine!!!**

In 2018, exercising can be one of the New Year's resolutions.

**This cache is close to the public gym in nature.** We suggest that you should start exercising for twenty minutes and then calculate your heart beats based on the mathematical equation below:



**TYPE FOR THE CALCULATION OF HEART BEATS (H.B.)**

**PER MINUTE**

- HB ( maximum ) = [ 220 – age ( years ) ]

$$\text{HB} = 220 - \text{age}$$

- HB ( heart beats during exercise ) = [ 220 – age ( years ) ] X 0.70

$$\text{HB} = \frac{220 - \text{age}}{100} \cdot 70$$

- HB ( heart beats during exercise ) = [ 220 – age ( years ) ] X 0.85

$$\text{HB} = \frac{220 - \text{age}}{100} \cdot 85$$

**EXAMPLE:**

If you are 40 years old, you will have:  $220 - 40 = 180$  beats per minute. In the next step you will need to identify the target area of your heartbeats. This is determined by counting 75 to 85% of your maximum heart rate limit. So if we continue with the previous case, that is, you are 40 years old you will have:

1. Maximum heart rate limit 180 pulses / minutes.
2. Multiply 0.70 by 180 and you have 126 beats / minute.
3. Multiply 0.85 by 180 and you have 153 beats / minute.

When you are on exercise, your pulses should be between 126 and 153 beats per minute throughout the exercise. It is better to start exercising lightly so that the pulses remain at the low limit of the target area. This will make it possible for you to continue for 20 to 30 minutes without any problems. As time goes by and you become accustomed to exercise, you have the ability to increase your heart rate to the highest limit of your target area.



<https://tinyurl.com/y7qkcd3m>

### **Cache 3: H<sup>2</sup>O**

N 40° 40.659'E022 ° 54.432' **GC7HGNT**

<https://www.geocaching.com/seek/#>

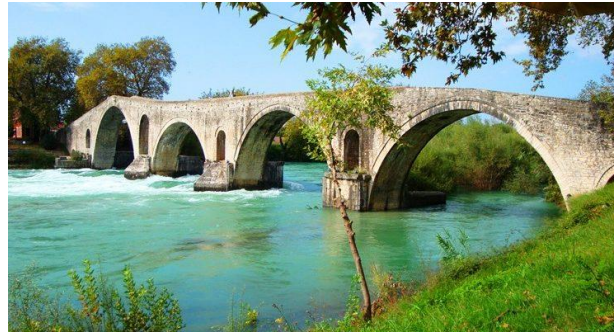
Water molecules were formed in interstellar clouds and came to Earth after the Big Bang. Water has long been taken for granted as being cheap and abundant, but global threats to its quality and availability are reframing water as a finite resource in need of close regulation. Around the world, people and societies are suffering from water scarcity and water pollution.

However, efforts to provide the world with clean and accessible water are made when people try to determine how much water is actually worth. A healthy and rich environment is essential to provide the ecosystem services that support our economy, provide us with a good quality of life and provide resilience to changes in climate. In some countries around the world two out of five women still walk long distances each day to collect water.

Traditionally bridges have been used as a way for water crossing. Nowadays they are considered a short way to reach a destination, and therefore bridges are a way to overcome obstacles.



Inspired by the view of the two bridges, this cache focuses on the aspect on water intake hydration.

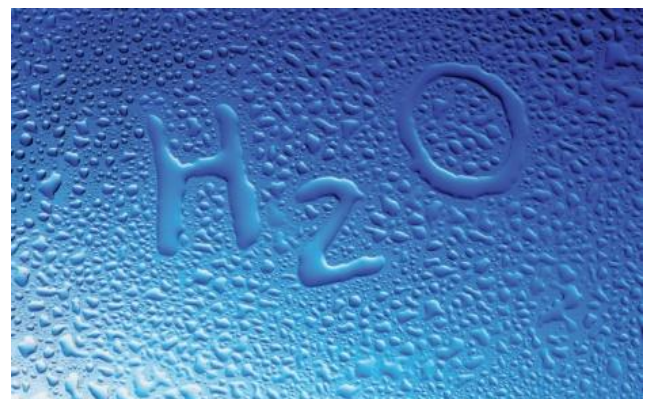
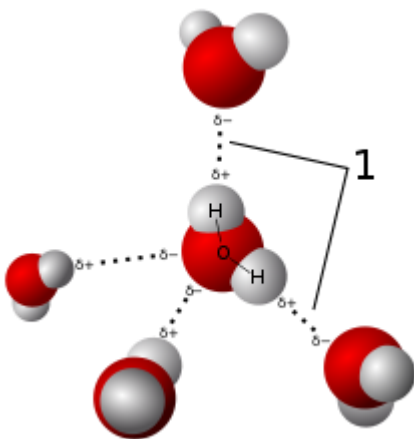


Our brains depend on proper hydration to function optimally. Brain cells require a delicate balance between water and various elements to operate, and when you lose too much water, that balance is disrupted. Your brain cells lose efficiency.

Are you drinking enough water daily? You need water, not only for your physical health but for your mental health as well. In fact, studies show that drinking lots of water can boost your mood and alter your emotions.

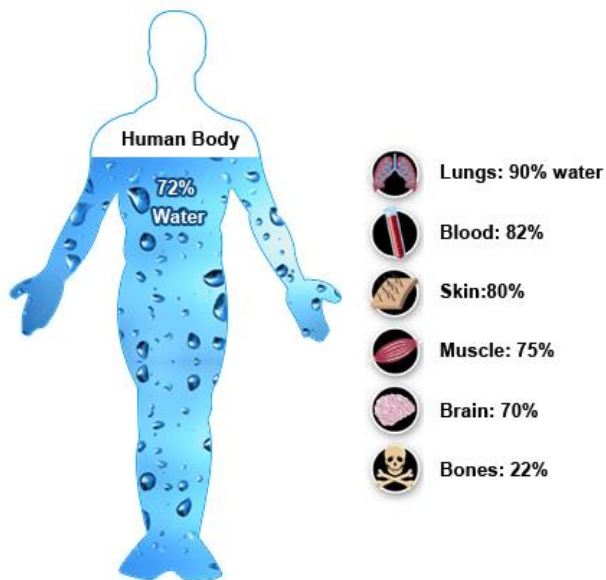
Keeping the body hydrated helps the heart more easily pump blood through the blood vessels to the muscles. And, it helps the muscles work efficiently.

Dehydration can be a serious condition that can lead to problems ranging from swollen feet or a headache to life-threatening illnesses such as heat stroke.

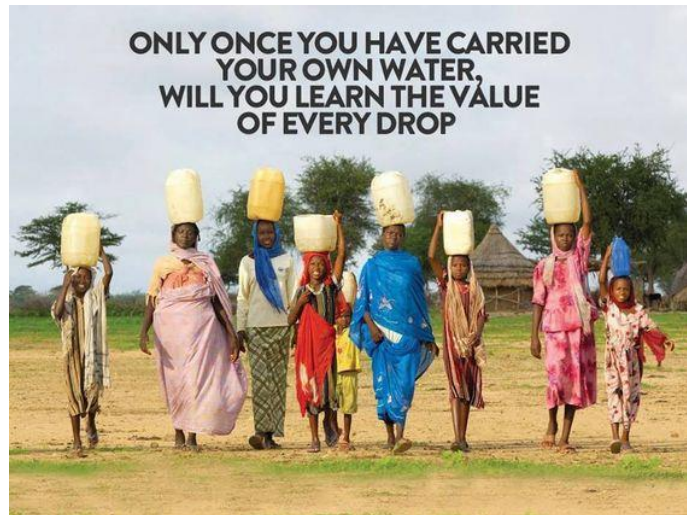


<https://tinyurl.com/ybtzi8oq> (H<sub>2</sub>O)

For most people, water is the best thing to drink to stay hydrated. Sources of water also include food, such fruits and vegetables which contain a high percentage of water. Sports drinks with electrolytes, may be useful for people doing high intensity, vigorous exercise in very hot weather, though they tend to be high in added sugars and calories.



<https://tinyurl.com/y997jdc2>



<https://tinyurl.com/ya7b5daf>

This cache is somewhere on the pavement along the ring road viewing the bridges.

Take the following **quiz** to find out more about the Organ that keeps you hydrated:

**Q.1. Which organ removes waste from blood?**

- H) Heart
- I) Lungs
- G) Eyes
- K) Kidneys

**Q.2. What's kidneys No. 1 job?**

- I) Get rid of waste
- G) Keep you hydrated
- K) Control your temperature

**Q.3. Each kidney is about the size of:**

- C) A kidney bean
- D) A fist



E) A football

**Q.4. About how much blood do they filter every day?**

L) 1 gallon

M) 50 quarts

N) 200 quarts

**Q.5. If this happens, something may be wrong with your kidneys:**

D) Constipation

E) Peeing a lot

F) A barking cough

<https://www.webmd.com/a-to-z-guides/rm-quiz-kidneys>

#### **Cache 4: The 3 Rs of being Green**

N 40° 40.635' E022° 54.024' **GC7HGPB**

<https://www.geocaching.com/seek/#>

Keeping our environment clean is a very important part of our lives in these days. It is important to focus on this as we have to make sure that the environment is preserved for future generations. Water pollution and litter are considered to be two of the main causes of the environment being dirty. The management and disposal of this waste is a major challenge for our cities and towns.

Recycling is the process of converting waste materials into new materials and objects. It is an alternative to "conventional" waste disposal that can save material and help lower greenhouse gas emissions. Recycling can prevent the waste of potentially useful materials and reduce the consumption of fresh raw materials, thereby reducing: energy usage, air pollution and water pollution.

**Make a Difference by Recycling:** It's important to keep in mind that when discarded items are placed in a regular trash can, they will be used to cover landfills. When items are placed in the recycling containers, they will be reused to make new products. The resources involved in the production of these items will still be available, which makes all the difference on a societal level.



[http://greenliving.lovetoknow.com/Benefits\\_of\\_Recycling](http://greenliving.lovetoknow.com/Benefits_of_Recycling)

**This cache is close to a rewarding recycling machine!**

How much do you know about environmental issues? Take the **quiz** to find out what is **the most important thing in our lives**.

<https://learningapps.org/display?v=pigg0udrt17>

**1. What do most scientists agree will happen to the world's oceans in the near future due to climate change?**

- h. Ocean levels will rise.*
- i. There will be less water in the oceans*
- j. Most sea life will be wiped out.*



**2. Which of the following can't be recycled?**

- d. aluminium cans*
- e. empty crisp packets*
- f. old newspapers*

**3. CO<sup>2</sup> is the chemical symbol for a gas that is partly responsible for climate change. CO<sup>2</sup> is**

- y. carbon monoxide*
- z. methane*
- a. carbon dioxide*

**4. Which is the most polluted city in the world according to the World Health Organisation?**

*j. Los Angeles, USA*

*k. London, UK*

*l. Delhi, India*

**5. What is a hybrid car?**

*t. a car with a normal engine and an electric motor*

*u. a car which doesn't produce any pollution*

*v. a car which doesn't run on the normal petrol.*

**6. The '3 Rs of being green' are 'reduce, recycle and**

**g.** *reheat*

**h.** *reuse*

**i.** *repeat*