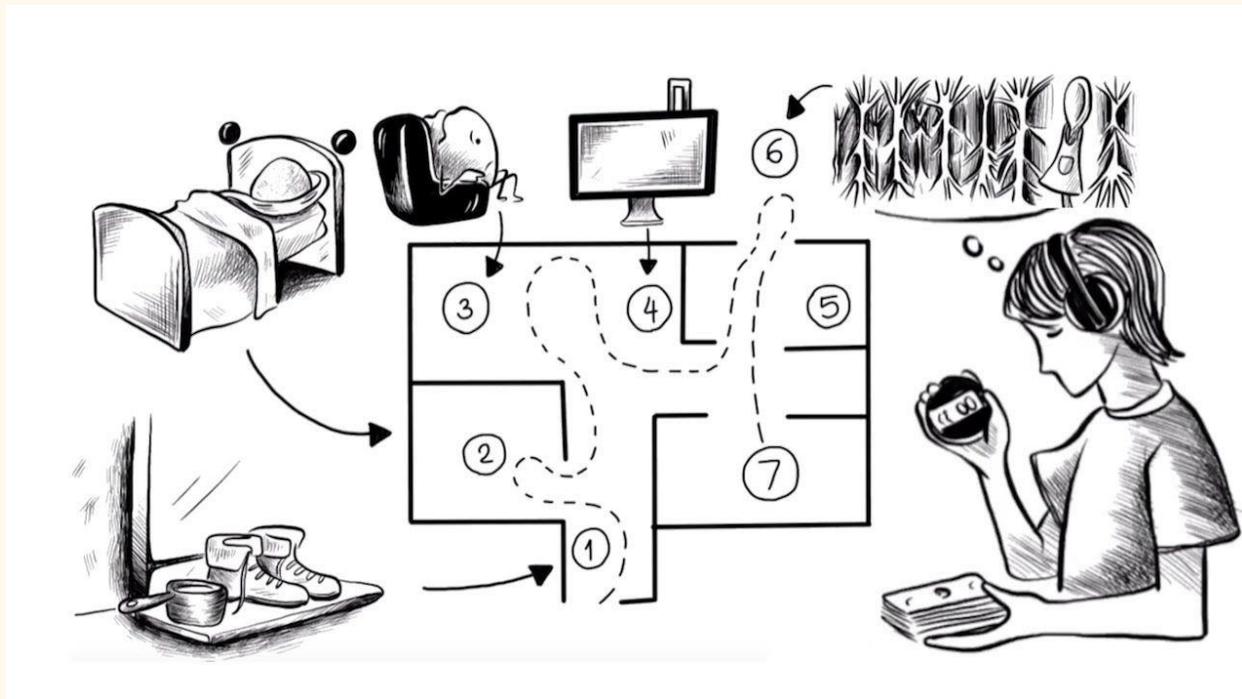


# MEMORY PALACE

## A POWERFUL MNEMONIC DEVICE



### INTRODUCTION

There are various techniques to improve memory. Method of Loci is one of the most efficient and ancient strategies to facilitate memory recollection and learning; it dates back to the 477 BC, and has been used until the present. This Method is a mnemonic strategy to attribute a meaning to information that would appear meaningless, hence harder to recall. It creates associations between information to memorize, and those that are already in the long-term memory. The method of loci aids the recall of memories by making spatial associations between familiar “loci” (i.e. locations) called Memory Palace or on a familiar journey, and information to order and

recollect. A study found that this method helped students recall academic contents, i.e. physiology, by associating information with locations in the palace they mentally build.

## Memory Palaces: How to build it

Although the Memory Palace method could be time consuming, it is effective because it obliges to attend to relevant characteristics of the items or information to be memorized to meaningfully associate it with a space or place's feature, hence resulting in processing them on a deeper level.

The Memory Palace works as follows:

1. Access the visual memory to generate a Memory Palace in your mind. It is usually your house, or any familiar setting, i.e. workplace or a route, e.g. from one's house to the supermarket. You mentally walk around the Palace and visualize a route, not a static scene. This aids the recall of items in a particular order.
2. Practice walking around the space until it is done easily.
3. Visualize a list of distinctive features or items in the familiar space. Analyzing each space while you walk through it, and associate a distinctive item with a specific room, e.g. a big fork in the kitchen.
4. Imprint the route on your mind. Practice several times steps 2 and 3.



Figure 1: Diagram of a familiar place (Memory Palace) and the route through it.

## Memory Palaces: How to use it for memory recall

Now, meaningful associations have to be made to recall information not necessarily related to the house. The relationships between familiar environments and information to memorize are made as follows:

1. Mentally visualize the Memory Palace. Identify the first thing seen, e.g. the front door could be a good start.
2. Think of something to memorize, and associate it with a particular feature or room in the Memory palace. For instance, to memorize who invented the light bulb, Thomas Edison, the individual could visualize him in the bathroom, where there is an extremely bright light bulb. Or, for instance, one could picture a bizarre scene taking place in a room, e.g. to memorize a shopping list and remember to buy carrots, one could visualize a bunch of carrots dancing in the kitchen.
3. Walk through familiar environments and the associated items once again or multiple times, until all items come to the mind as soon as you walk into the room and identify the previously distinctive features. Walk from the start to the end, then walk back to the beginning. It could be helpful to physically walk through the familiar environment.

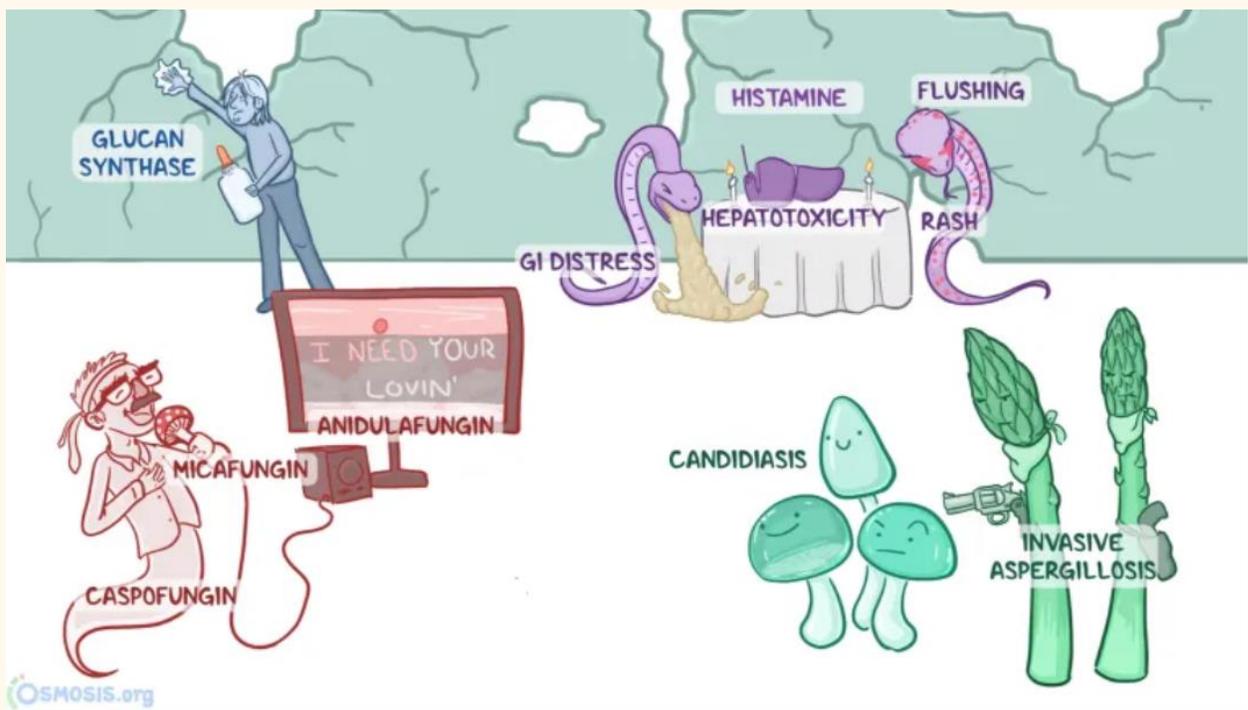


Figure 1: Diagram of a fun story created through a Memory Palace.

## **Materials for Children to build a Memory Palace**

The Method of Loci could be taught to children improve their learning. The following materials could be used:

- 10 words to memorize and recall without Memory Palace (control condition)
- 10 words to memorize and recall using Memory Palace
- Pencils
- Stickers as a reward upon completion of both sets of words

# MEMORY PALACE

## LEARNING HAS NEVER BEEN SO FUN

Today you are going to use your creativity and imagination to learn and memorize things more easily. You will need just your own imagination! You now will experience two ways of learning.

### FIRST EXERCISE

1. First, memorize the following words in 45 seconds:

- Apple
- Laptop
- George Bush
- Sock
- Twenty
- Guitar
- Charles The Great
- Bacon
- Haircut
- River

2. When time is up, count back to 15.

3. Write down the words you remember:

## SECOND EXERCISE

1. Imagine a familiar place, such as your house, route from your house to your friends'.
2. Now, try to imagine yourself walking through your familiar place and visualize it as you walk, multiple times. For instance, think of how many doors or windows there are in your living room, bedroom and so on.
3. Then, while walking, try to picture the items in your place that catch your attention. Do this for each room. For example, in the kitchen you might notice a green bright spoon on the table.
4. Walk through each room and imagine the items you noticed before a few more times until you feel confident. Make sure you can clearly visualize the items, and that you know the route.

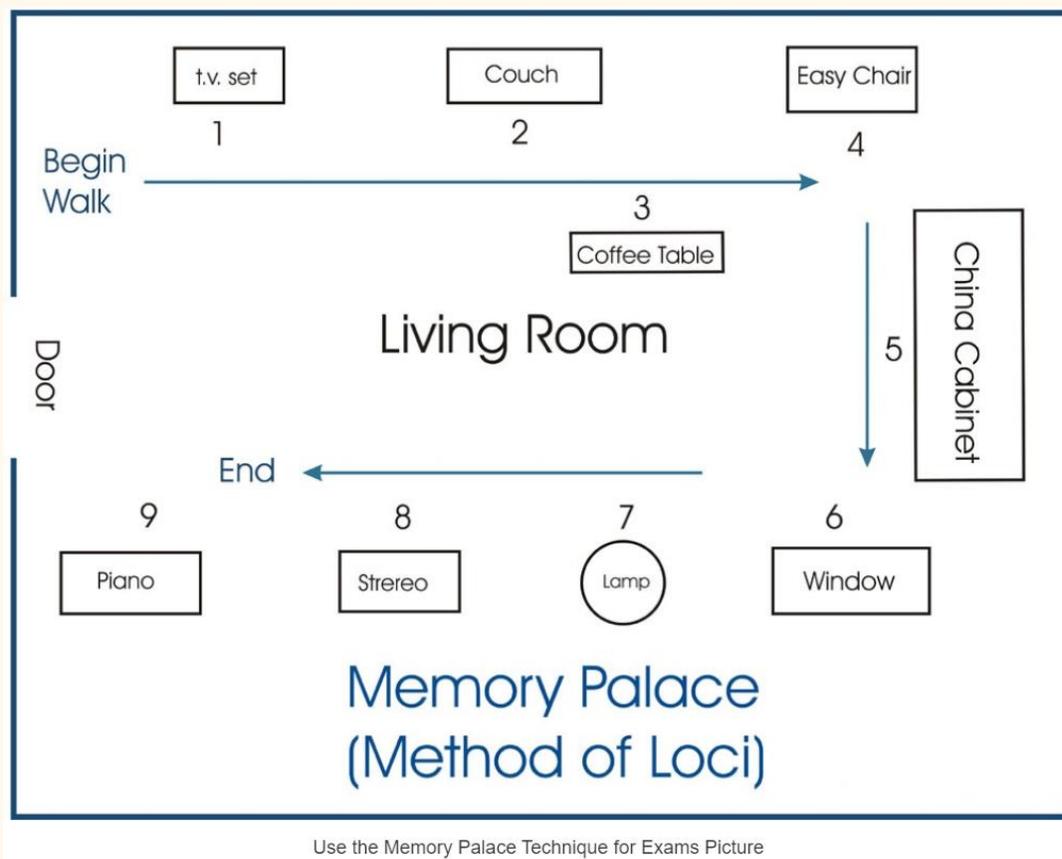


Figure 3: Example of a Memory Palace and a route through it.

5. Look at the following words/item:

- Cucumber
- Bag
- Harry Styles
- Boot
- Seventy
- Flower
- George Washington
- Lion
- Balloon
- Hammer

6. Try to transport yourself inside the familiar place and walk through it once again.

7. Now, you have 1 minute and 30 seconds to imagine each word in a specific location, and make up a funny story by combining the word and a location. You could imagine a potato (item) sunbathing in the balcony (place) interrupted by a dog (item) eating lasagna using cutlery (item) in the kitchen (place).

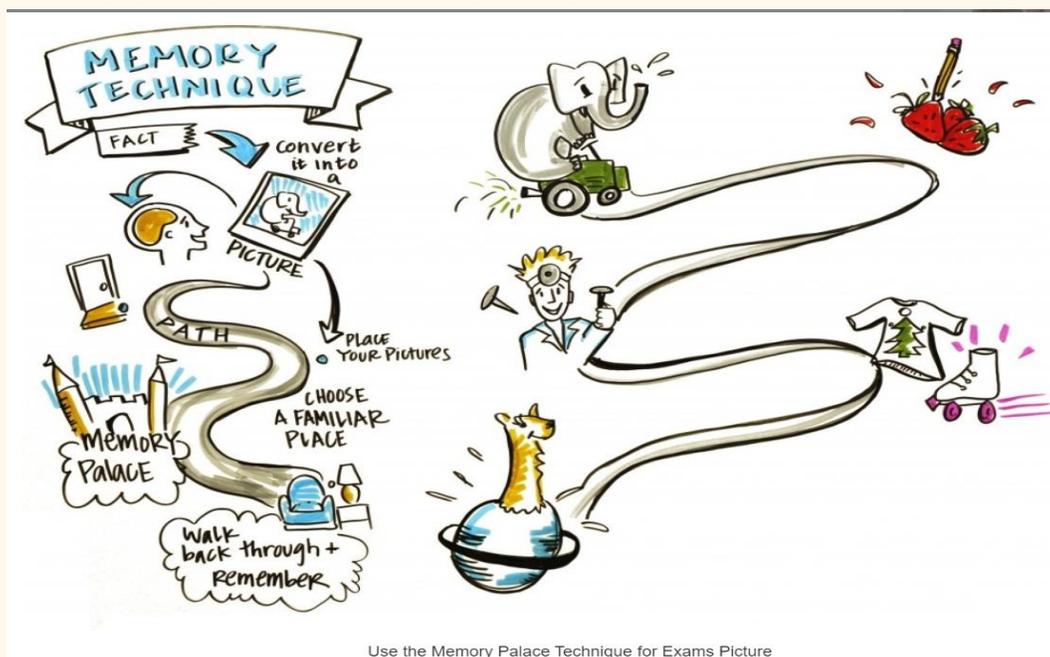


Figure 3: Example of a Memory Palace Technique and a bizarre story created through it.

8. Walk through the place and tell yourself the story multiple times.
9. When time is up, count back to 15.
10. Write down the words you remember by walking through the place while recalling the story:

# GOOD JOB!

# YOU JUST BUILT A MEMORY PALACE

You might have noticed you recalled more items during the second exercise. You might have found it also funnier!

You have just learnt one of the oldest and most effective methods used to learn! It is called the Method of Loci, and it helps you remember information by associating familiar locations with things to remember. Specifically, you built a Memory Palace: a familiar place filled with information (items/words) combined with fun stories. The stories facilitate the recall due to their unique nature.

You can use this strategy to easily memorize any school concept, by associating them with familiar environments. It also helps detective solve cases. For instance, Sherlock Holmes!

The more you practice, the easier it gets!

## References:

Anita. (n.d.). Use the Memory Palace Technique for exams. Retrieved March 19, 2020, Retrieved from <http://www.oldschoolasc.com/use-the-memory-palace-technique-for-exams.html>

Huttner, J., & Robra-Bissantz, S. (2017). An Immersive Memory Palace: Supporting the Method of Loci with Virtual Reality. AMCIS.

OOsmosis. (2019, February 28). How to Improve Information Recall with a Memory Palace • Student Doctor Network. Retrieved from <https://www.studentdoctor.net/2018/08/28/memory-palace/>

Qureshi, A., Rizvi, F., Syed, A., Shahid, A., & Manzoor, H. (2014). The method of loci as a mnemonic device to facilitate learning in endocrinology leads to improvement in student performance as measured by assessments. *Advances in physiology education*, 38(2), 140-144. doi: 10.1152/advan.00092.2013

wikiHow. (2019, December 12). Come Costruire un Palazzo della Memoria. Retrieved March 19, 2020, from <https://www.wikihow.it/Costruire-un-Palazzo-della-Memoria>