UNIVERSITY OF CAMBRIDGE

TAKE YOUR PLACE

Activity 3: How Does Memory Work?

So, now that you have explored the structure and basic workings of the brain, we will begin to explore how this results in one of the greatest complexities of the brain – memory.

Memory

The exact nature in which we are able to recall a childhood holiday or the name of our first pet, is still an area of ongoing research. There have been a number of theories about how memory is encoded in the brain.

Memory is enabled by:

The strengthening of synapses (long-term potentiation)
Creating new neurons (neurogenesis)

Finally, memory storage or retrieval can go wrong in disease. Memory is heavily affected in conditions such as Alzheimer's Diseases. Whilst we won't discuss this here, there is a wealth of information on neurological disorders available online, if you would like to find out more.

Task

1. Watch this introductory video to the topic of memory: How does your memory work?

2. Read this brief article about memory: How are memories formed?

3. Why might an older person have a different memory of something compared to a younger person?

4. Why is sleep important in the formation of memories?

Explore More...

Research into memory, like most areas of science, is rapidly evolving as new theories are brought forward. Read this recent article to be introduced to an exciting new theory about memory: Rules of memory beautifully rewritten