

# Memory Match Game

## Definitions and terms

1. To study how learning and memory happen in people, brain researchers turned to this “simpler” organism.
  - a. The sea slug *Aplysia californica*
2. When an unpleasant mild shock increases your response to a gentle touch, it’s an example of this learning process.
  - a. Sensitization
3. These proteins turn other proteins on or off by adding a phosphate chemical group to them, a process called phosphorylation.
  - a. Kinases
4. This is a long-lasting increase in the strength of a synaptic response following stimulation.
  - a. Long-term potentiation (LTP)
5. Production of these proteins results in growth of the synapse and an increase in the neuron’s responsiveness to stimulation.
  - a. Neurotrophins
6. Long-term potentiation (LTP) takes place as a result of changes in the strength of synapses involving these receptors.
  - a. N-methyl-d-aspartate (NMDA)
7. The molecular cascade leading to protein is essential for this type of memory.
  - a. Long-term memory
8. As a child, H.M. developed a severe, difficult-to-treat form of this disease.
  - a. Epilepsy
9. H.M. had these parts of his medial temporal lobe removed.
  - a. Hippocampus; parahippocampal region
10. This process enables us to encode and retain the pieces of information that are truly valuable, and it can help us recover from trauma.
  - a. Forgetting
11. According to this theory, recalling stored information can impair our ability to recall similar pieces of information at a later date.
  - a. Retrieval-induced forgetting
12. Some memories are never forgotten. These, whether positive or negative can change the encoding of the memory in ways that make it more permanent.
  - a. Highly emotional events