

Class2 check-in test

Based on:

- Wagner et al., 1998
- Schapiro et al., 2018

1. Which statements refer to event-related design of fMRI memory studies, based on Wagner et al. (1998)?
 - a. Allows a trial-by-trial comparison between specific encoding trials that were later remembered or forgotten
 - b. Allows comparison between encoding conditions that are, on average, better or worse remembered
 - c. Is characterized by worse spatial resolution than event-related ERP studies
 - d. Is characterized by better spatial resolution than event-related ERP studies
2. In Wagner's (1998) study, while participants learnt new words, their brain activity was higher for words that they later remembered compared to words that they later forgot. In which brain areas/regions?
 - a. left inferior frontal gyrus
 - b. motor cortex
 - c. parahippocampal gyrus
 - d. visual cortex
3. What kind of *replay* mechanism was demonstrated by Schapiro et al. (2018)?
 - a. Reactivation of individual satellites in the human hippocampus
 - b. Replay during quiet rest, after a period of sleep
 - c. Replay of strong memories during long periods of sleep
 - d. Sequential replay of the satellites order in hippocampal place cells
4. How can we describe a relationship between replay and memory, according to Schapiro et al. (2018)?
 - a. It adaptively strengthens memories that are the most in need (for example, objects trained least frequently)
 - b. It improves memory, but only in subjects who slept between the sessions of compared memory tasks
 - c. It reflects that the strongest memories are more likely to persist into subsequent rest during which they get replayed
 - d. It would likely prioritize memories which are barely encoded and lack any representation in our memory