Listen to the recorded lecture of Dr. Erik Kandal at <http://youtu.be/MCkji-0aqHo> and answer each question below. Please submit as an attachment in the assignment forum.

1. What is learning and memory?  
   Learning is the process by which humans acquire new information about the world. Memory is the method by which we hold that information over time.
2. What are the two parts to the study of memory?  
   The *systems* (where in the brain are memories stored)and the *molecular* (what mechanisms are involved) problems of memory.
3. T or F: the brain is bilaterally symmetrical?  
   True, it has a right and a left hemisphere.
4. What is the difference between sulci and gyri?  
   Sulci are infoldings of the brain while gyri are the crests of the brain.
5. What are the four lobes of the brain?  
   The frontal, temporal, occipital, and parietal lobes.
6. What are the problems with *phrenology*?  
   The brain is not directly organized into different specific structures that correspond to the human’s mind of categories of behavior. (Not phrenology of bumps on the head)
7. What area of the brain is responsible for speech?  
   Broca’s area, named after the founder
8. What is aphasia?  
   Disorder of language or the loss of ability to understand or express speech.
9. Describe Wernicke’s great insight? How does this contrast with earlier beliefs about memory and language?  
   The different complex mental functions are not localized to a single region in the brain; rather they involve interconnected brain regions. This contrasts with earlier beliefs about memory and language in that the recognition and production of those are localized in different areas of the brain even though they are part of the same complex function, language.
10. Describe Lashley’s experiment? What were problems with his research?  
    He would run a rat through a maze several times and then begin taking various parts of the rat’s cerebral cortex and see its effects on the rat’s ability to accomplish the maze. Some problems included that he only inflicted lesions on the cerebral cortex and rats could compensate running the maze with different senses rather than just memory.
11. How was patient H.M.’s memory affected by removal his temporal lobe and hippocampus?   
    Not much occurred to his memories that he had preceding the removal surgery.
12. What role does Brenda Milner have in the psychological research of memory? What symptoms did she find in H.M.?  
    She found that all pre-existing memories were all intact and that he was able to focus on specific things such that he still had short term memory. But she found that H.M. had trouble converting new short term memory into new long term memory except new motor tasks.
13. Describe the difference between explicit and implicit memory?  
    Explicit is for specific facts and event s and requires conscious recall and involves the hippocampus, while implicit is for motor and perceptual skills and requires unconscious recall.
14. T or F: memory involves different brain regions?  
    True, memory does in fact involve different brain regions including the temporal lobe, hippocampus, etc.