

# PSYC 51.09: Problem Set 1

## Overview

This problem set is intended to solidify the concepts you learned about in this week's lectures and readings. *After attempting each question on your own*, you are encouraged to work together with your classmates in small groups, consult with ChatGPT or other tools, and/or to post and answer questions on the course's Canvas site.

Please upload your problem set to Canvas (as a Word or PDF file) before the due date. No late submissions will be accepted.

## Readings and ungraded questions

Links to the readings and materials referenced below may be found on the course GitHub page.

1. Read Chapter 1 of *Foundations of Human Memory*. What were your thoughts on the reading? **(Ungraded)**
2. Optional: read Tulving (1972)'s highly influential book chapter on Episodic and Semantic memory **(Ungraded)**
3. Optional: watch the movie Memento (2000). **(Ungraded)**
4. Optional: submit a multiple-choice question based on the materials covered in this week's lectures, readings, and this problem set. You should calibrate the difficulty so that 60–70% of your classmates answer it correctly on an exam. If your question is chosen and you hit your target, you will receive an extra credit point on that exam. **(Ungraded)**

## Graded questions

1. Reflect on your own experience with memory. What is something that you are reasonably certain is true about memory (based on your own subjective experiences and intuitions), but that you don't think could be formally studied, or that isn't generally known by the broader scientific community? Explain your reasoning. **(2-3 paragraphs)**
2. Pretend you're an alien visitor to Earth. Your species maintains a collective "hive" memory that every individual can access at will. As the discoverer of *homo sapiens*, a potentially intelligent species, you are tasked with understanding how it thinks and remembers. Describe how you go about studying the newly discovered species and what you conclude. It's important that you maintain the utmost scientific rigor, since your conclusions will be used to determine whether Earth is a good candidate for decomposing into matter substrates for the Galaxy-Engine. You certainly wouldn't want to wipe out another intelligence! But then again, as you know, feeding the Galaxy-Engine with life-enriching matter substrates is what keeps your own species alive. **(3-4 paragraphs)**
3. About a year ago, you and a close friend had a conversation that has shaped your friendship— and even how you think about the world at large! You both consider that conversation to be a formative event in your lives. But, shockingly, when you brought it up again the other day, it became clear that each of you had very different memories about what the conversation was about, let alone specific details of what was said. How could this be? And is there any way you could resolve the discrepancy? (In resolving the discrepancy, assume there were no formal records or recordings of the conversation.) **(2-3 paragraphs)**