Honor policy: For this quiz, you must work alone, and may not use any resources other than your
own brain and body, the pencil or pen you use to write your answers, and this sheet of paper.

1. Chapter 1 of Gleick’s *The Information* is about communicating over long distances using (circle
one answer):

   - Drums
   - Optical fibers
   - Smoke signals
   - Vuvuzelas

2. As described in Chapter 2 of *The Information*, Donald Knuth found an Old Babylonian tablet that
described a:

   - Data structure
   - Procedure
   - Tax code
   - Writing system

3. As described in Chapter 3 of *The Information*, Cawdrey’s book of English words published in
1604 was organized:

   - Alphabetically
   - By Meaning
   - Phonetically
   - By Word Type

4. What kind of expression is
   (make-rotundasaic "mosaic.html" closer-color?)

   - Application Expression
   - Primitive Expression
   - Procedure Expression

5. What does (if (> 3 4) (* + +) 7) evaluate to? __________________

6. According to Chapter 4 of the course book, the first step in the general recursive problem
solving strategy is (check one):

   - Be happy! At least it doesn’t involve calculus.
   - Be optimistic! Assume you can solve it.
   - Be positive! All problems can be solved recursively.
   - Be resourceful! Use DuckDuckGo to see if anyone has already solved the problem.
   - Be scared! Recursive definitions are hard.

This is the end of the graded part of the quiz.
If you have more time, go on to the ungraded questions on the back.
7. (ungraded) How is the pace of the class so far?
   Too slow     A little too slow     A little too fast     Too fast     Way too fast

8. (ungraded) How many of the exercises in the book have you done?
   ___ Many of them, and I read the solutions after to check my answers.
   ___ Many of them, but I didn’t look at the solutions.
   ___ At least a few of them, and I have also read the solutions.
   ___ At least a few of them, but I didn’t know there are solutions available.
   ___ None.

9. Do you prefer to have more standard lectures, or more classes like last Friday where we work in small groups on problems?
   ___ Prefer Only Lectures
   ___ Prefer Mostly Lectures (3 Lectures most weeks and occasional group work)
   ___ Prefer Mix of 2 Lectures and Group Work once a Week
   ___ Prefer Mostly Group Work (1 Lecture, Group Work twice a week)
   ___ Prefer Only Group Work

10. Any other comments about the class so far?

11. (ungraded) What is a List?

12. (ungraded) Define a procedure, is-list?, that takes as input any value and evaluates to true if the input value is a List, and false otherwise. For example, (is-list? 37), (is-list? (cons 1 2)) and (is-list? (cons 1 (cons 2 3))) should all evaluate to false, and (is-list? null) and (is-list? (cons 1 (cons 2 null))) should both evaluate to true. You may use the built-in procedures null? (which takes one input and outputs true if that input is null and false otherwise), and pair? (which takes one input and outputs true if that input is a Pair, and false otherwise).