

## **PSYCO 354 Quiz 3**

**Define the term 'physical symbol system'. Why is this term important to cognitive science?**

**Name:**

**ID #:**

**According to Newell and Simon, a physical symbol system is a class of systems or machines that 1) manipulate symbols, and 2) are "realizable within our physical universe". For instance, a modern digital computer belongs to this class, because it is a physical device that manipulates symbols. Other systems that belong to this class is the a production system and a universal Turing machine.**

**This idea is important to cognitive science for a number of reasons. First, its physical nature points to a way out of Ryle's regress. Second, it is an example of a system that can mechanize the infinite, and therefore deal with Cartesian dualism. Third, cognitive science's working hypothesis is that human cognition is the product of a physical symbol system – the human brain.**