

# PHIL/PSYCH 256

## INTRODUCTION TO COGNITIVE SCIENCE

Week 8: Review



**PLEASE PUT AWAY ALL ELECTRONIC DEVICES**

# Comparison

| Rules    | Concepts | Analogies | Images    |
|----------|----------|-----------|-----------|
| general  | general  | specific  | specific  |
| sentence | word     | story     | sensation |

Rule, logic: If dog then furry.

Concept: Dog

Analogy: Lassie go home

Image:



# Evaluation: How to Proceed?

1. Pick one approach (e.g. rules, connectionism) as the RIGHT way to do cognitive science.
2. Produce hybrid models, combining approaches.
3. Develop new unified theory, e.g. based on theoretical neuroscience.
4. Reject all computational approaches to mind in favor of dualism, mysticism, embodiment.

# Challenges to Cognitive Science

1. Brain.
2. Emotion.
3. Consciousness.
4. Body.
5. World.
6. Dynamic systems.
7. Social.

# Mind-body problem

- Dualism: person = mind + body
- Materialism: mind is matter
  - Identity theory: mind = brain
  - Eliminativism: reject commonsense
  - Mysterion: mind too complicated to understand
- Functionalism: mental states are functional input-output states, independent of hardware

# Discussion Question

- Which approaches to understanding mental representation and computation do you find most plausible?

# One-minute Essay

- What is a hybrid model?
  1. Please write your name clearly in the top right corner.
  2. In a LARGE BLOCK letter, place the first letter of your last name at the top left.