Concept Pair Dataset

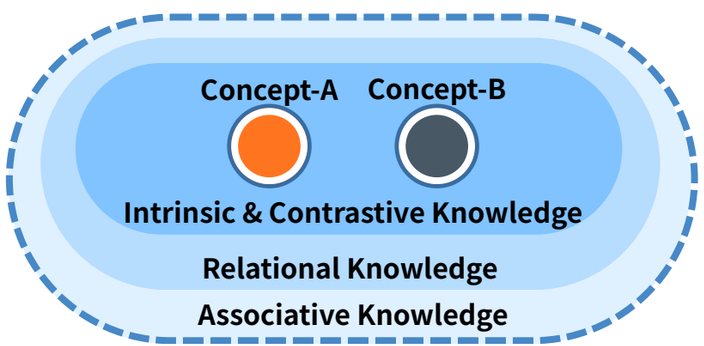
Selected 220 daily-life concept pairs grouped into 12 categories

Food · Landforms · Animals · Artifacts

Tools · People Social · Plants · Sports

Stationer · Electronic · Clothing · Sundries

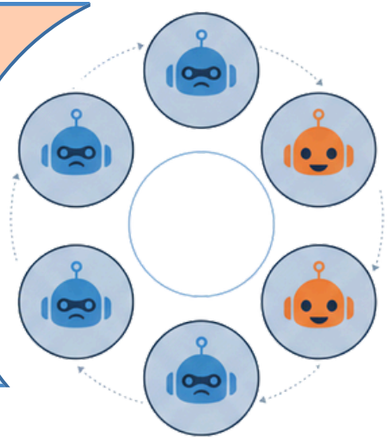
Knowledge involved in the evaluation:

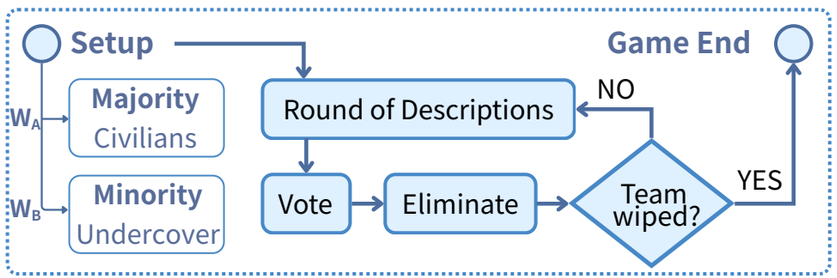


Multi-Agent Game:Undercover

Players do not know:
Specific win condition
Another concept
Identity

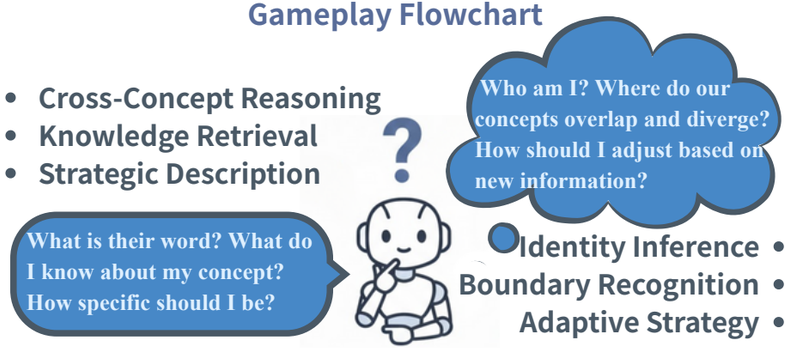
Players know:
Game rules
Assigned concept





Gameplay Flowchart

- Cross-Concept Reasoning
- Knowledge Retrieval
- Strategic Description



- Identity Inference
- Boundary Recognition
- Adaptive Strategy

LLM capabilities under evaluation

Snapshot QA benchmark

Outlier Statement Detection

Compared to *LAKE*, which sentence may describe *RIVER*?
A. You can often hear the sound of gurgling water first, and then see the water surface again. ✓
B. Coastal areas support diverse ecosystems and are widely distributed.
C. Both natural and artificial environments can occur.

Cross-Concept Inference

Your concept is ***ELEPHANT***, and there is someone described their concept like this: "This animal is known for its ability to reach leaves in tall trees, which is crucial for its diet." What is their concept?
A: It must be ***GIRAFFE***. ✓

Fine-Grained Comparison

Which concept does the statement "This is a place where you might encounter sand dunes and sparse vegetation." better describe, ***DESERT*** or ***SANDBEACH***?
A: I choose ***DESERT***. ✓