2.1 Cognition, language and learning: evidence and transfer

Name: _____ Class: _____ Date: _____ **Total: 8 marks**

KEY WORDS negative reinforcement • morpheme

Objective

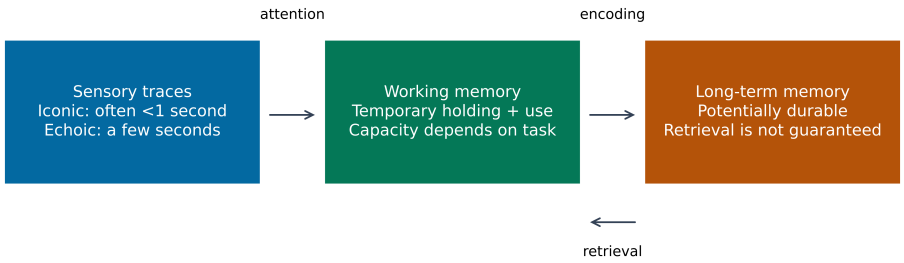
Distinguish classical and operant conditioning; Analyse memory systems, retrieval and forgetting; Use language units and theories of thinking and problem solving. Original practice and authored marking guidance.

1 Key knowledge and worked examples

negative reinforcement : Removing an aversive condition to increase behaviour. **morpheme** : A smallest meaningful language unit.

Identify what changes before naming a learning process. In classical conditioning, a cue predicts another event and evokes a response. In operant conditioning, a consequence follows an action and changes its future frequency. Memory tasks differ in their retrieval cues: recognizing an answer supplies information that free recall does not. A language task may require sound contrasts, meaningful word parts or sentence structure; identify the level rather than using language as one undivided ability. See LR.1, ME.1, LG.1, TH.1 and ME.2 for detailed teaching.

Memory functions: approximate times, task-dependent limits



Worked case. A child hears a tune before lunch and later salivates to it. Separately, a child earns a token after reading and reads more often. Explain the different processes.

The tune predicts food; salivation to the cue fits classical conditioning. Reading produces a token and subsequently increases; adding that consequence fits positive reinforcement. A pleasant event is not automatically reinforcement: the evidence must include a change in the target action.

2 Practice

2.1 Food following a lever press that increases pressing is: [1]

A. positive reinforcement B. negative punishment C. classical extinction

2.2 The smallest meaningful unit is a: [1]

A. phoneme B. morpheme C. neuron

2.3 Revisit the worked case. State one conclusion its evidence supports and one stronger conclusion it does not support. Explain the difference. [2]

3 Exam-style questions

3.1 Students remember a definition when shown its first letter but fail to recall it unaided. One claims the memory never existed. Evaluate and propose a comparison. Give the interpretation, supporting reasoning, a relevant alternative or limitation, and an appropriate check. [4]