

2.6 Retrieving Memories

Name: _____ Class: _____ Date: _____ **Total: 18 marks**

KEY WORDS context-dependent 情境依赖 • context-dependent memory 情境依存记忆
• recall 回忆 • retrieval 提取 • recognition 再认

Objective

Build the skills to answer exam questions on **retrieval** 提取 and what makes it succeed.

You must be able to:

- distinguish **recall** 回忆 from **recognition** 再认
- explain how **retrieval cues** 提取线索 work
- describe **context-dependent** 情境依赖 and **state-dependent** 状态依赖 memory
- explain the **serial position effect** 系列位置效应

1 Worked examples

Study these first. Each one shows the method for a task used later.

■ Recall and recognition

Recall requires producing the information unaided; **recognition** requires only identifying it among options. Recognition is easier because the cue is supplied.

■ Retrieval cues

A memory is reached through associations. Any feature encoded with it — a word, a smell, a place — can serve as a route back. More and better cues at encoding means more routes at retrieval.

■ Context and state

Recall is better when the **external context** at retrieval matches encoding (same room, same setting), and when the **internal state** matches (mood, arousal). Both are cue effects.

■ Serial position

In a list, the **first** items are recalled well (rehearsed into long-term memory) and the **last** items are recalled well (still in short-term memory). The middle suffers most.

2 Practice

2.1 State the difference between recall and recognition and say which is easier. [2]

2.2 Explain how a retrieval cue helps. [2]

2.3 A student revises in the room where the exam will be held.

(a) Name the effect being exploited. [1]

(b) State one limitation of relying on it. [1]

3 Exam-style questions

3.1 In a 20-item list, items 9 to 12 are usually recalled [1]

- **A** best of all
- **B** worst of all
- **C** the same as the first items
- **D** the same as the last items

3.2 Remembering an event more easily when in the same mood as when it happened is[1]

- **A** context-dependent memory
- **B** state-dependent memory
- **C** the serial position effect
- **D** recognition

3.3 A multiple-choice test yields higher scores than a short-answer test on the same material.

- (a) State the reason in terms of retrieval. [1]
(b) Explain why a high multiple-choice score may overstate what the student can use. [2]

3.4 Applied research task. Divers learned a word list either on land or underwater, and were later tested either on land or underwater. Those tested in the same environment in which they had learned recalled about 40% more than those tested in the other environment. In a second study, participants who had been made mildly sad recalled more sad memories than happy ones.

- (a) Name the effect shown by the diving study and the effect shown by the second study. [2]

- (b) Explain what both effects show about how retrieval works. [2]

- (c) A student cannot recall a name but is certain she knows it and can say what letter it begins with. Name this experience and explain what it shows about the difference between storage and retrieval. [2]

- (d) State **one** practical recommendation a student could take from the diving study, and explain it. [1]

Solutions

2.1 recall requires producing the information unaided; recognition requires identifying it among options; recognition is easier.

2.2 a cue is a feature associated with the memory at encoding, providing a route back to it.

2.3 (a) context-dependent memory. (b) the effect is modest, and material encoded with meaning transfers across contexts anyway.

3.1 B. middle items are neither rehearsed into long-term memory nor still in short-term memory.

3.2 B. the internal state acts as a retrieval cue.

3.3 (a) recognition supplies the retrieval cue directly. (b) real use usually requires recall, so a score that depends on supplied cues may not predict unaided performance.

3.4 (a) **Context-dependent** memory (1); **mood-congruent** memory (1). (State-dependent memory is also acceptable for the second if the answer refers to the internal state.)

(b) Retrieval works by **cues**: whatever is present at encoding — surroundings, sounds, mood — is encoded alongside the material (1); when those cues are present again they act as a route back to the memory, so recall improves, and memory failure is often a failure to find the route rather than a loss of the trace (1).

(c) The **tip-of-the-tongue** phenomenon (1). The information is clearly still **stored** — she has partial access to it — so the failure is one of **retrieval**, which shows the two are separable processes (1).

(d) Revise in conditions similar to the exam room, or reinstate the study context mentally before recalling, because matching the cues present at encoding makes retrieval more likely (1).