

Solutions

Each answer shows the steps, then the **result**.

2.1

- episodic: a personally experienced event with a time and place, e.g. a birthday;
- semantic: a general fact, e.g. that water boils at 100 degrees

2.2

- repeated stimulation strengthens a specific synaptic connection; so it fires more readily afterwards, which is the leading physical account of storage

2.3

(a)

- the cerebellum (and basal ganglia)

(b)

- explicit and implicit memory depend on different systems, so one can be lost while the other works

3.1 B

- it is a fact without an accompanying memory of the episode

3.2 B

- recent memories were still consolidating and were therefore vulnerable

3.3

(a)

- consolidation

(b)

- sleep supports consolidation directly and also reduces interference from new incoming material

3.4

(a)

- The **spacing effect** — distributed practice beats massed practice (1). Each new session requires the material to be retrieved again after partial forgetting, and that effortful retrieval strengthens the memory trace far more than re-reading it while it is still fresh (1)

(b)

- The **serial position effect** (1), made up of the **primacy** effect for early items and the **recency** effect for late items (1)

(c)

- Primacy — the first words were rehearsed most and had time to be encoded into **long-term memory** (1). Recency — the last words were still in **short-term memory** at the moment of testing, so they could be reported directly (1)

(d)

- The study used one kind of material — an unrelated word list — tested by recall after one week; it does not show that spacing helps equally for skills, comprehension, or over other intervals (1)