Chapter 9
Memory

Review 9.1: Information Processing
Elizabeth is studying for a psychology exam on learning. First, information must be detected in her (1) sensory memory, which consists of the words in her text (visual sensory memory, called (2) iconic memory) and her instructor’s lectures (auditory sensory memory, called (3) echoic memory). If Liz pays attention to the information, she will encode it, so that the (4) episodic buffer can begin processing the information in (5) working memory, which is managed by a (6) central executive that integrates incoming information with stored memories. During this stage, information is processed by two subsystems: auditory (7) rehearsal, where Liz repeats US, UR, and so on until the concepts stay with her, and the (8) visual-spatial sketchpad, which allows Liz to visualize the Chapter 8 text pages where classical conditioning is discussed. In order to encode the information, Liz uses a variety of techniques: processing the (9) meaning of UR, by associating the term unconditioned responses with the word involuntary, picturing a dog drooling at the sight of food, or using (10) visual imagery, and (11) organizing the information by noting the sequence of events in classical conditioning, either by (12) chunking, or grouping the concepts, by stages or by creating a flow chart that places the events in a (13) hierarchy. Assuming that Liz’s efforts have enabled her to store the information, she must now get the information out of storage. She must (14) retrieve it from the relatively limitless, permanent storehouse of information called (15) long term memory, which includes conscious recall. Her declarative or (16) explicit memory consists of (17) facts, such as the definitions of US, CS, UR, and CR, and (18) personally experienced events, such as having actually seen a dog drooling over food. Her memory also includes unconscious recollection. Her procedural or (19) implicit memory consists of (20) motor and cognitive skills, such as knowing how to take notes, and things she’s learned by way of (21) classical and (22) operant conditioning effects, such as associating a fresh cup of coffee and her desk with study time.

Review 9.2: Forgetting
As a senior member of her high school swim team, Melissa is rewarded with a large locker. She learns the new combination, but then she can’t remember the code for the old padlock on her bike; this is an example of (1) retroactive interference. After practice, while Melissa is struggling with the padlock, two new team members pass by. She says, “Hi, Rebecca,” but realizes she’s now the victim of (2) proactive interference, because Rebecca is the name of a teammate who graduated last year. Both of these reasons for forgetting are forms of (3) retrieval failure, because in both cases, the information was in long-term memory. An alternative explanation for Melissa’s memory problems is that she never actually (4) encoded the new information into long-term memory. During practice, the coach referred to a pep talk, which she said Melissa had given before last year’s championship meet. But, in fact, Rebecca had given the pep talk. Melissa’s coach is suffering from (5) source amnesia, possibly because Melissa had provided (6) misleading information by referring to her ability to urge her teammates on. Melissa’s Aunt Kate is so fearful of water that she can’t even attend her niece’s swim meets, but she doesn’t know why she is fearful. Sigmund (7) Freud might have suggested that Kate has (8) repressed a traumatic childhood incident, which left her with this disruptive fear. Contemporary researchers (9) disagree with the psychoanalytic view of forgetting.