CLASSICAL CONDITIONING

- (A) The conditioned reflex was discovered by Pavlov, a Russian physiologist.
- (B) A dog is placed in a special room, free of extraneous stimuli.
- (C) Under anesthesia, a small opening has been made in the dog's cheek and the duct of a salivary gland is brought to the surface where it remains after healing. A tube fastened to the cheek leads to the next room where the experimenter can count the drops of saliva secreted.
- (D) In a typical experiment, a tone is sounded several times. After an early slight disturbance has passed, the dog does not salivate in response to the tone. The <u>tone is called a neutral</u> <u>stimulus</u> because it is ineffective in eliciting salivation.
- (E) When food powder is dropped nearby, the dog eats the powder and salivation occurs. Food powder in the dog's mouth is an unconditioned stimulus, and the salivation it elicits an <u>unconditioned response</u>.
- (F) The sequence of food-in-mouth and salivation is called an unconditioned reflex.
- (G) Next, a new stimulus, a tone (neutral stimulus), is presented either simultaneously with the food (unconditioned stimulus) or just before the food.
- (H) The two stimuli are presented together, or paired, this way many times.
- (1) When the tone is then presented alone, it elicits salivation.
- (J) Conditioning is said to have taken place. The tone is no longer a neutral stimulus; it is a <u>conditioned stimulus</u>.
- (K) In this conditioned reflex, salivation is the conditioned response, and the tone the <u>conditioned stimulus</u>.
- (L) If the tone is now repeatedly presented but no longer paired with food, it loses its power to elicit salivation. The conditioned reflex is said to have been extinguished. This process is called <u>extinction</u>.

THE LETTERS IN PARENTHESES IN THE ACCOMPANYING SET REFER TO THE LETTERS ABOVE.

CLASSICAL CONDITIONING

- 1. The room in (B) is designed to ______ uncontrolled factors which might affect the experimental result.
- 2. (C) is used to obtain a measurement of the _____ of the response.
- 3. In (D), "neutral stimulus" means a tone which _____ effect on salivation before conditioning.
- 4. Since the tone has no effect on salivation before conditioning, it is a(n) _____
- 6. In (E), salivation elicited by food powder is an unconditioned response because food powder elicits salivation even though no _____ has taken place.
- In (F), the unconditioned reflex has (1) _____ components; an unconditioned (2) _____ and an unconditioned (3) _____.
- 8. When a response is elicited by a stimulus without previous conditioning, the sequence is called a(n) ______.
- 9. According to (G), conditioning will occur only if the two stimuli occur _____ in time.
- 10. If, instead of the procedure described in (G), the tone had followed the food, the conditions required for _____ would not have been present.
- 12. In (G), little or no conditioning would have occurred if the tone had preceded the food by more than a few seconds. The interval between the stimulus-to-be-conditioned and the unconditioned stimulus must be rather _____.
- 13. An important aspect of the conditioning procedure is the _____ between presentation of the initially neutral stimulus and of the unconditioned stimulus.
- 14. The presence of a conditioned reflex is occasionally tested as in (1). It is essential that the unconditioned stimulus, food, _____ presented on these test trials.

CLASSICAL CONDITIONING - CONT.

- 15. In (J), conditioning is said to have taken place because a previously neutral stimulus is now capable of ______ salivation.
- 16. A previously neutral stimulus acquires the power to elicit a response in the process called
- In (K), the tone is called a conditioned stimulus because it elicits the response only after some has taken place.
- Before conditioning, the tone was a(n) (1) ______ stimulus; after conditioning, the tone has become a(n) (2) ______ stimulus.
- 19. A tone elicits salivation as a(n) _____ response.
- 20. The conditioned response, ______, is elicited by the conditioned stimulus, a _____.
- 21. In (L), the conditioned stimulus is frequently presented ______ the unconditioned stimulus.
- 22. In (L), the conditioned reflex has been extinguished in the sense that the stimulus has frequently been presented without being ______ with the unconditioned stimulus and has, therefore, lost its ability to elicit the response.
- 23. In the extinction process, the ______ is presented alone.
- 24. A new neutral stimulus is able to elicit a response after (1) _____ has taken place. It ceases to do so after (2) _____ has taken place.
- 25. In Pavlov's famous experiments on conditioning, _____ was the unconditioned response.
- 26. The process of conditioning was discovered by _____.
- 27. A stimulus able to elicit a response without previous conditioning is called a(n) (1) ______; a stimulus able to elicit a response only after conditioning is called a(n) (2) ______.
- A response elicited by a conditioned stimulus is a(n) (1) _____; a response elicited by an unconditioned stimulus is a(n) (2) _____.
- 29. To condition a reflex, a neutral stimulus is (1) _____ with a(n) (2) ______.