

1. Zachary was born with a rare visual defect. He has no cone photoreceptors in his retina, there are only rods. Assuming that all other aspects of his visual system are normal, which of the following would characterize Zachary's vision?
  - A) poor visual acuity
  - B) an inability to differentiate between black and white
  - C) a difficulty seeing in low light conditions
  - D) colour blindness
  - E) both A) and D)
  
2. Critics of the trichromatic theory of colour vision have indicated that this theory has a major limitation. Which of the following statements **MOST** accurately reflects this limitation?
  - A) Young and von Helmholtz were incorrect in assuming that cone photoreceptors in our retina are maximally responsive to a specific wavelength of light
  - B) The trichromatic theory cannot explain the phenomenon of visual after-effects
  - C) Rod photoreceptors in our retina, not cones, are responsible for the neural coding of colour
  - D) Research has determined that there are actually six types of cones in the retina, rather than three as proposed by Young and Helmholtz
  - E) Trichromatic theory cannot explain sensory adaptation
  
3. Sam is preparing her boyfriend's favorite chili, and as specified in the recipe she has used 18 grams of salt. When her boyfriend tastes the chili, he tells Sam that she needs to add more salt. According to "Weber's Law" what is the minimum amount of salt that Sam needs to add for her boyfriend to notice that she has added more salt? (Note: The last time that Sam made the chili, her boyfriend was able to just notice a difference in the saltiness of the chili when she increased the salt in the recipe from 9 grams to 12 grams).
  - A) 6 grams
  - B) 1 gram
  - C) 9 grams
  - D) 20 grams
  - E) 36 grams

4. Cindy has decided to consult with her optometrist because although she has no problems clearly seeing objects at a distance, she notices that when she tries to read, the print seems blurry and out of focus. After a vision test, her optometrist tells her that the lens in her eye is weak and is focusing the image behind her retina rather than on her retina. Considering these findings, Cindy would most likely be considered to have:
- A) monochromatic vision
  - B) dichromatic vision.
  - C) myopia
  - D) hyperopia
  - E) astigmatism
5. Dark adaptation
- A) takes longer for rods
  - B) produces greater sensitivity in the cones than in the rods
  - C) takes longer when moving from an environment of red light to darkness
  - D) is the process by which photoreceptors are depleted of pigment molecules
  - E) only takes 10 minutes for both rods and cones
6. Which of the following is/are considered to be a stimulus for the perception of movement?
- A) the absolute movement of the stimulus across the retina
  - B) binocular disparity, in which each eye sees a slightly different image
  - C) the relative movement of an object in relation to its background
  - D) the object's height in the horizontal plane
  - E) Both A) and C).
7. According to your textbook, the area of the tongue that has the highest concentration of receptors that are maximally receptive to sweet substances is
- A) the tip of the tongue
  - B) the back of the tongue
  - C) the sides of the tongue at the back
  - D) the sides of the tongue half way up the length of the tongue
  - E) all areas of the tongue about equally

8. The "Place theory of pitch perception" proposes that
- A) the location of a sound is coded using time of arrival cues from both ears
  - B) the specific point on the basilar membrane in the cochlea where the fluid wave peaks and maximally bends the hair cells is used as a frequency cue.
  - C) the number of nerve impulses per second that are sent to the brain match the frequency of the sound
  - D) the nerve impulses per second that are sent to the brain match the amplitude of the sound waves
  - E) the location of a sound is coded in the occipital cortex
9. According to the principles of the "Opponent Process Theory of colour vision", if you stare at a red square for an extended period of time, and then focus on a blank white screen, you will see
- A) an after effect of a blue square
  - B) an after effect of a yellow square
  - C) an after effect of a green square
  - D) an after effect of a black square
  - E) nothing but a blank white screen
10. All of the following are considered to be Gestalt principles except:
- A) the law of proximity
  - B) the law of similarity
  - C) the law of disparity
  - D) the law of continuity
  - E) the law of closure
11. The part(s) of the middle ear that amplifies the sound waves (more than thirty times) is/are the
- A) tympanic membrane
  - B) basilar membrane
  - C) organ of corti
  - D) ossicles
  - E) auditory nerve

12. The reason we cannot see things that fall on our blind spot is because
- A) the cones in that area do not contain photopigments
  - B) there are no receptors in the optic disk
  - C) the image is inverted and reversed
  - D) the lens cannot bend the incoming light rays enough to focus the image
  - E) the pupil cannot dilate enough to allow sufficient light to focus the image on this point of the retina
13. In signal detection theory
- A) a false alarm is when the stimulus was present and the participant said "absent"
  - B) a miss is when the stimulus was present and the participant said "absent"
  - C) a correct rejection is when the stimulus was present and the participant said "absent"
  - D) a hit is when the stimulus was absent and the participant said "absent"
  - E) none of the above
14. Which of the following is NOT true?
- A) To fully taste something, one needs the sense of smell
  - B) Because there are taste buds on the roof and back of the mouth, a person without a tongue could still experience taste
  - C) The centre of the tongue is a relatively insensitive area with respect to taste
  - D) The perception of taste results from the stimulation of a particular area on the tongue
  - E) A taste bud consists of more than one receptor cell
15. Circadian rhythms can be described as a
- A) repetition of physiological events such as a heartbeat
  - B) sequence of brain activity following stimulation
  - C) monthly behaviour or physiological cycle
  - D) weekly behaviour or physiological cycle
  - E) daily behaviour or physiological cycle

16. Juan is experiencing a sleep disorder. For no reason at all, he suddenly falls into sleep whether it is day or night. If he is standing at the time, he falls down due to loss of muscle tone. EEG recordings indicate that he cycles directly into REM. Most likely, Juan is suffering from
- A) insomnia
  - B) sleep apnea
  - C) night terrors
  - D) narcolepsy
  - E) REM-sleep behaviour disorder
17. As you go from being alert, to being relaxed, to being asleep, your EEG wave patterns progress from
- A) alpha waves to beta waves to delta waves
  - B) alpha waves to delta waves to beta waves
  - C) beta waves to alpha waves to delta waves
  - D) beta waves to delta waves to alpha waves
  - E) delta waves to alpha waves to beta waves
18. Sandra returns to her dorm room to find her roommate Anne taking an afternoon nap. Sandra is planning to make a snack and tries to wake Anne to see if she is hungry. Sandra has difficulty awakening Anne and has to call her name several times and touch her shoulder. Anne was most likely in which level of sleep?
- A) REM
  - B) Stage 1
  - C) Stage 2
  - D) Stage 4
  - E) Theta wave
19. The cognitive theory of dreaming asserts that dreams
- A) help dissipate problematic aggressive energy
  - B) allow us to fulfil our true wishes and desires
  - C) are only the random firing of neural networks
  - D) are used to review daily events and help us problem solve
  - E) include both manifest and latent content

20. Sleepwalking takes place during:
- A) stage 1 sleep
  - B) stage 2 sleep
  - C) REM sleep
  - D) Stages 1 or 2 of sleep
  - E) Stages 3 or 4 of sleep
21. Antipsychotic medications used to treat schizophrenia act by binding with and blocking dopamine receptor sites, thus reducing the effects of abnormally high levels of this neurotransmitter. Such medications would be classified as
- A) antigens
  - B) agonists
  - C) antagonists
  - D) inhibitors
  - E) depressants
22. It is surprising that alcohol is technically a \_\_\_\_\_ since most users state that they need a few drinks to get the party started. It appears that this reaction actually results from \_\_\_\_\_ the inhibitory control centres in the brain.
- A) hallucinogen; exciting
  - B) opiate; depressing
  - C) stimulant; exciting
  - D) depressant; depressing
  - E) depressant; exciting
23. If a drug changes a bodily function in a certain way, the brain will try to adjust by producing
- A) slower reactions leading to tolerance
  - B) faster reactions to avoid withdrawal
  - C) opposite reactions called compensatory responses
  - D) opposite reactions called antagonistic responses
  - E) more enzymes to more quickly break down the chemicals in the blood
24. According to research, the risk of fatal drug overdose by addicts increases
- A) when the drug is taken in an unfamiliar setting
  - B) when the drug is taken in the presence of others
  - C) when the drug is taken in isolation
  - D) as physical tolerance increases
  - E) none of these; the risk of overdose is constantly high with addiction

25. Which of the following is Tammy **NOT** likely to do under hypnosis?
- A) Smell or taste something that is not there
  - B) Fail to see or hear something that is currently occurring
  - C) Engage in behaviour that she would find morally and ethically wrong
  - D) Become more suggestible
  - E) Regress to an earlier stage of behaviour
26. Two weeks of final exams filled with stress and too much caffeine has caused you to suffer from the inability to fall asleep, or \_\_\_\_\_.
- A) Insomnia
  - B) Nonsomnia
  - C) Narcolepsy
  - D) Somnambulism
  - E) Sleep apnea
27. Following an intense, 4 hour exam, sleep is usually deeper and lasts somewhat longer. This supports the \_\_\_\_\_ theory of sleep.
- A) peripheral feedback
  - B) circadian rhythm
  - C) preservation and protection
  - D) restoration
  - E) evolution
28. According to the division of awareness theory of hypnosis, one stream of consciousness responds to the hypnotist's suggestions, while the other stream
- A) monitors behaviour while remaining in the background
  - B) ignores behaviour while remaining in the background
  - C) monitors behaviour while not remaining in the background
  - D) ignores behaviour while not remaining in the background
  - E) monitors behaviour while competing with the other stream
29. Four year old Louise injured a small puppy while she was playing with it. Later on when other small children are near the puppy he becomes very upset and barks loudly. This illustrates
- A) operant conditioning
  - B) extinction
  - C) stimulus generalization
  - D) negative reinforcement
  - E) higher-order conditioning

30. Ralph is attempting to use classical conditioning to train his dog to salivate when he hears a click. To do this he gives the dog some food and then activates his clicker 5 seconds later. So far Ralph is disappointed because his dog is not learning to salivate at the sound of the clicker. The reason why the dog is not learning is that

- A) the 5 second delay is too long
- B) the clicker should be activated after he feeds the dog
- C) the dog is learning, but its performance does not yet reflect it
- D) it is only possible to train dogs with operant conditioning
- E) there is not enough information given to determine why the dog is not learning

31. Your task is to teach a dog to ring a door bell with its nose. Place the steps given below in the order that you would reinforce them to best represent the process of “shaping” the dog to perform this behavior.

- 1. The dog is standing next to the bell button
- 2. The dog is pushing the bell button
- 3. The dog is 5 feet from the bell button
- 4. The dog is sniffing at the bell button
- 5. The dog is 1 and ½ feet from the bell button

- A) 2, 1, 4, 5, 3
- B) 2, 4, 1, 5, 3
- C) 3, 5, 4, 1, 2
- D) 3, 5, 1, 4, 2
- E) 1, 2, 3, 5, 4

32. You have just returned to the dentist to have the first of several cavities filled. As you wait, with some fear, for the dentist to begin drilling you hear a Rolling Stones tune come on the radio in the background. By sheer coincidence when you return to have more drilling and filling you hear the same song playing while you are in the waiting room. Several days later you hear the same song playing while you are driving home and you again feel scared. What is the “conditioned stimulus” in this example?

- A) the dentist’s drill
- B) the Rolling Stones song
- C) fear of the drill
- D) fear of the song
- E) driving

33. George was a British helicopter pilot in Iraq. His helicopter was shot down during a mission and crashed in the desert. After he recovered he developed a strong fear reaction to flying and could not approach any helicopter. His therapist attempted to treat George by extinguishing the fear reaction. This was successful and George returned to flying. But one day when he approached his helicopter, he felt the full intensity of fear once again. Most likely, this reflects
- A) the law of effect
  - B) the use of systematic desensitization
  - C) slow acquisition of the fear response
  - D) spontaneous recovery
  - E) the limited use of extinction
34. A therapist teaches a client to relax while imagining giving a speech to his managers. This is part of a technique known as
- A) selective forgetting
  - B) repression
  - C) creative imagination
  - D) systematic desensitization
  - E) observational learning
35. Master tobacco blenders learn their job by looking at, smelling and sampling hundreds of different tobacco mixtures while trying to discern smaller and smaller differences in their appearance, flavours and aromas. This is an example of
- A) second-order conditioning
  - B) latent learning
  - C) generalization
  - D) discrimination training
  - E) chaining
36. A lawyer escapes an unhappy family situation by going to a tavern. Soon she is stopping by the tavern on her way home from work every day. Avoiding her family by going to the tavern is an example of behaviour maintained by
- A) punishment
  - B) classical conditioning
  - C) extinction
  - D) positive reinforcement
  - E) negative reinforcement

37. Sarah discovers that reading her text over the course of several evenings prior to a test in her chemistry class is a very effective study strategy. She decides to try the same tactic in preparing for her psychology exam. Her study behavior has
- A) been put under control of a discriminative stimulus
  - B) been extinguished
  - C) generalized
  - D) been classically conditioned
  - E) been produced as a result of learning through observation
38. Dr. Rashinji investigates the strategies students use to solve complex physics problems. He is especially interested in what students are thinking at various stages in reaching a solution. Dr. Rashinji is studying
- A) classical conditioning
  - B) prepared learning
  - C) operant conditioning
  - D) learning via modelling
  - E) cognitive learning
39. A government bureaucrat is paid a weekly salary of \$2800.00. This is a:
- A) fixed ratio reinforcement schedule
  - B) variable ratio reinforcement schedule
  - C) fixed interval reinforcement schedule
  - D) variable interval reinforcement schedule
  - E) CR 2800 schedule
40. Zack and his mom are baking cookies together for the first time. The first time the oven timer goes off, Zack shows no particular response. Then Zack gets to eat one of the cookies from the cookie tray that his mom pulls out of the oven, causing his mouth to water. From then on, every time Zack hears the oven timer, Zack's mouth begins to water. This is best described as
- A) operant conditioning, with the sound of the oven timer as the negative reinforcer
  - B) operant conditioning, with mouth watering as the negative reinforcer
  - C) classical conditioning, with mouth watering as the conditioned stimulus
  - D) classical conditioning, with the sound of the oven timer as the unconditioned stimulus
  - E) classical conditioning, with the sound of the oven timer as the conditioned stimulus

41. A child doesn't hesitate to run into a room whenever he smells the perfume his mom wears, but not when he smells other perfumes. This phenomenon would be considered an example of
- A) stimulus discrimination
  - B) habituation
  - C) extinction
  - D) generalization
  - E) observational learning
42. Whenever your sister plays her drums, you bang on the wall between your and her room to get her to stop. Given the fact that she stops playing her drums, which makes you likely to bang on the wall the next time she plays, your behaviour is under the influence of
- A) positive reinforcement
  - B) negative reinforcement
  - C) positive punishment
  - D) negative punishment
  - E) operant extinction
43. I tell you 3 numbers and then ask you to count backwards by fours before asking you to recall the 3 numbers. What am I trying to demonstrate?
- A) proactive interference
  - B) retroactive interference
  - C) iconic interference
  - D) release from interference
  - E) limitations of LTM
44. Pausing in the letter string FBITWACIAIBM to form familiar groups allows people to take advantage of
- A) absolute judgement
  - B) chunking
  - C) acoustic codes
  - D) paraphrases
  - E) referential connections

45. Jon was told to study the following words: book, chair, calendar, alarm, phone, lamp, pencil, and desk. Later Jon recalled book, chair, pencil and desk. This result is best explained as

- A) the primacy effect
- B) the recency effect
- C) the serial position effect
- D) the proactive interference effect
- E) the retroactive interference effect

46. In a task where subjects were to decide if a string of letters was a real word or if it was a non-word subjects found it was easier to decide that nurse was a real word if it was preceded by doctor than if it was preceded by yacht. This is an example of

- A) interference
- B) encoding
- C) analysis
- D) priming
- E) mnemonics

47. The short term memory span of 7 plus or minus 2 refers to

- A) the number of items that can be passed from iconic memory to STM
- B) the number of chunks that can be held in long term memory
- C) the length of time information can be held in memory
- D) the length of time to transfer information into long term memory
- E) the numbers of items lost in transfer from the sensory store to STM

48. All things being equal, we would predict that you should do better on this exam if you are writing in the same room where you had the lectures. This is due to

- A) flashbulb memory
- B) retrieval congruence
- C) state-dependent memory
- D) context-dependent memory
- E) prospective memory

49. At 75 years of age Lisa is trying very hard to recall the events of a family trip that occurred when she was two but is only able to remember that the family took a trip and cannot recall any of the details. She is experiencing
- A) retrograde amnesia
  - B) antergrade amnesia
  - C) infantile amnesia
  - D) global amnesia
  - E) alzheimer's amnesia
50. Ellen was asked to listen to several lists of words and immediately after each list to recall as many of the words as she could. Given what we know about STM which of the following lists should present the greatest difficulty for Ellen to recall?
- A) old, late, thin, wet, hot
  - B) big, huge, broad, long, tall
  - C) justice, cow, truth, chair, peace
  - D) man, map, cap, can, mad
  - E) dirt, soil, loam, peat, plants
51. We are likely to have a more difficult time encoding the word list honesty, fellowship, integrity as compared to the word list refrigerator, automobile, television. Why?
- A) the first list generates more interference
  - B) the second list generates primacy making it easier to remember
  - C) it is difficult to generate a visual image for the first list
  - D) it is easy to generate a visual image for the second list
  - E) C and D above
52. One disadvantage of showing people mugshots (to identify a criminal) is that it
- A) produces retroactive interference
  - B) produces proactive interference
  - C) increases the probability of not recognizing a subject
  - D) increases the probability of false recognition
  - E) both A and C

53. You drive down a familiar stretch of road that you travel daily. Despite the fact that none of the road signs have changed you find that you read them all each time you see them. This is an example of
- A) procedural memory
  - B) effortful processing
  - C) maintenance rehearsal
  - D) automatic processing
  - E) retrieval from LTM
54. Remembering your first grade teacher's name and which school you attended are examples of
- A) declarative memories
  - B) context memories
  - C) procedural memories
  - D) iconic memories
  - E) echoic memories
55. Hypnotic therapy often involves having the patient first remember the emotions involved with the forgotten memories and then recalling the details of the event. This technique demonstrates the power of
- A) episodic memories
  - B) declarative memories
  - C) state-dependent memories
  - D) flashbulb memories
  - E) emotional memories
56. As you study for the Christmas exam, which of the following would be the **worst** strategy to use in order to get the best grade?
- A) using massed practice
  - B) using elaborative rehearsal
  - C) overlearning the material
  - D) using imagery
  - E) linking new material to information already in memory