Chapter 1-4 Review ***Printable***

Multiple Choice
Identify the choice that best completes the statement or answers the question.

1. The tremors of Parkinson's disease result from the death of nerve cells that produce the neurotransmitter
   a. dopamine. b. ACh. c. serotonin. d. GABA. e. acetylcholine.

2. Television sets are able to recreate the entire visible spectrum by additively mixing three primary colors. This process is similar to the view of human color vision called
   a. trichromatic theory b. complementary color theory c. opponent-process theory d. saturation theory

3. Researchers are interested in studying the relationship between poor prenatal nutrition and early cognitive development. Because of ethical concerns, which research method would be most appropriate for researchers to use?
   a. experimentation b. naturalistic observation c. correlational d. case study e. survey

4. If you believe that increasing levels of anxiety are associated with drug abuse, you have just formulated
   a. an epiphenomenon b. a correlation c. a hypothesis d. a variable

5. In University of Utah driving-simulation experiments, students conversing on cell phones were slower to detect and respond to traffic signals. This best illustrates
   a. the phi phenomenon. b. gate-control theory. c. place theory. d. retinal disparity. e. selective attention.

6. Which region of your brainstem plays a role in arousing you to a state of alertness when someone nearby mentions your name?
   a. amygdala b. reticular formation c. hypothalamus d. medulla e. cerebellum

7. According to Wilhelm Wundt, the focus of psychology was on the scientific study of
   a. observable behavior b. the functions of behavior c. unconscious motivation d. conscious experience

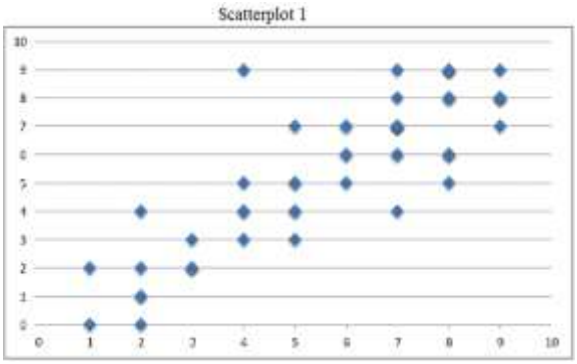
8. The experimental group
   a. consists of the subjects who do not receive the special treatment b. consists of the subjects who receive some special treatment with regard to the dependent variable c. must be chosen so as to be as different from the control group as possible d. consists of the subjects who receive some special treatment with regard to the independent variable

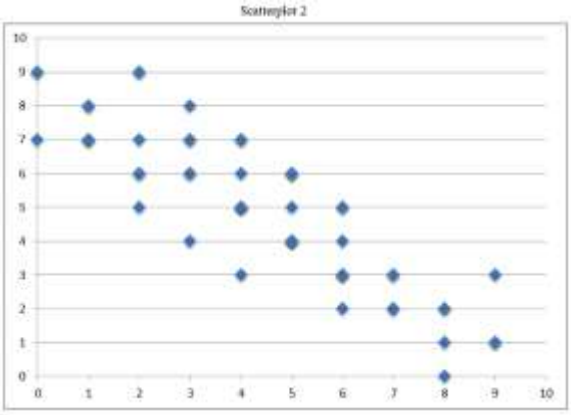
9. Your life would be most immediately threatened if you suffered destruction of the
   a. corpus callosum. b. amygdala. c. hippocampus. d. angular gyrus. e. medulla.

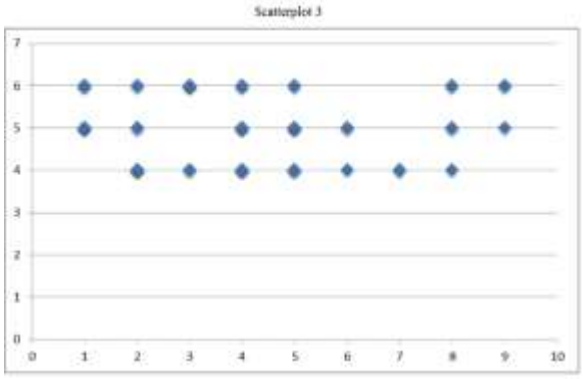
10. Any measurable conditions, events, characteristics, or behaviors that are controlled or observed in a study are called
    a. hypotheses b. variables c. correlations d. confounds

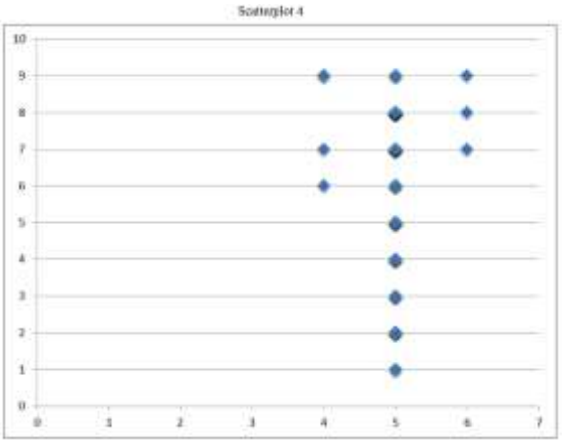
11. Sensory adaptation can explain all of the following <u>EXCEPT</u>
    a. hearing your name spoken in a noisy room b. getting used to the smell of the perfume you are wearing
    c. feeling comfortable in a cold swimming pool after being in for a few minutes d. getting used to the touch of your clothes on your skin

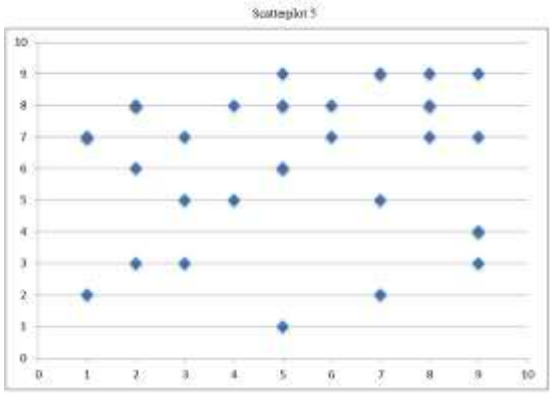
Use the following five scatterplots to answer questions 82-85.











12. Which of the following scatterplots represents a relationship with a correlation coefficient that would be close to positive one (+1)?
a. 1 b. 3 c. 4 d. 2 e. 5

13. Which of the following scatterplots represents a relationship with a correlation coefficient that would be close to negative one (-1)?
a. 1 b. 3 c. 4 d. 2 e. 5

14. A moderate positive correlation has been found between a person's weight and hours of television watched per week. Which of the following scatterplots best shows this relationship?
a. 3 b. 4 c. 1 d. 2 e. 5

15. Which of the following scatterplots represents a relationship with a correlation coefficient that would be close to zero?
a. 1 or 4 b. 3 or 4 c. 1 or 3 d. 2 or 3 e. 1 or 2

16. Which of the following scatterplots represents the strongest negative correlation?
a. 4 b. 2 c. 3 d. 5 e. 1

17. Sensory adaptation helps us to focus our attention on what kind of stimuli?
a. subliminal b. familiar c. novel d. transduced e. intense

18. Which of the following is the best definition of *illusory correlation*?
a. a perceived but nonexistent correlation b. a statistical relationship between two variables c. a predication about the relationship between two variables d. a scatterplot indicating the likelihood that a variable will or will not change e. any independent variable that does not truly cause a dependent variable

19. Which of the following is the component of the limbic system that plays an essential role in the processing of new memories?
a. hypothalamus b. medulla c. thalamus d. hippocampus e. cerebellum

20. The central nervous system consists of
a. the body's sensory and motor neurons b. the sympathetic and parasympathetic nervous systems c. the brain and the spinal cord d. the somatic and autonomic nervous systems

21. Nature is to nurture as
a. heredity is to environment b. behavior is to doing c. learning is to knowing d. experience is to environment

22. Akira believes that her son has become a good student because she always praises his learning efforts. Her belief best illustrates a _____ perspective.
a. biopsychosocial b. psychodynamic c. behavioral d. structural e. biological

23. Which brain structure receives information from all the senses except smell?
a. hippocampus b. amygdala c. pons d. medulla. e. thalamus

24. The wavelength of light mainly affects our perception of
a. brightness b. light purity c. saturation d. color

25. While mapping the motor cortex, researchers Foerster and Penfield found that
a. if one part of the brain is damaged, the brain will compensate by putting other areas to work. b. body areas requiring the greatest control occupied the greatest amount of cortical space. c. our brain processes most information out of our awareness. d. although the mind's subsystems are localized in specific brain regions, the brain acts like a unified whole. e. damage to a specific area in the left frontal lobe disrupted speech ability.

26. After having your picture taken with a yellow flash, you momentarily see blue spots floating before your eyes. This phenomenon is best explained by
a. additive color mixing b. subtractive color mixing c. trichromatic theory d. opponent process theory

27. The structure of the ear that transduces sound vibrations into nerve impulses is the
a. oval window b. stirrup c. cochlea d. temporal lobe

28. Alison believes that individuals learn to be either aggressive or non-aggressive as a result of the experiences they have. Alison's views are most consistent with the
a. psychoanalytic view of psychology b. structuralist view of psychology c. behaviorist view of psychology d. functionalist view of psychology

29. In order to maximize visual acuity at night, you should
a. look directly at the object you wish to see b. turn your head at a slight angle to the object c. close one eye d. blink your eyes several times to hasten dark adaptation

30. The structure that controls the size of the pupil is the
a. iris b. vitreous humor c. cornea d. lens

31. Giulio's bag of marbles is twice as heavy as Jim's. If it takes 5 extra marbles to make Jim's bag feel heavier, it will take 10 extra marbles to make Giulio's bag feel heavier. This best illustrates
a. sensory adaptation. b. the McGurk effect. c. Weber's law. d. the opponent-process theory. e. accommodation.

32. The specialist most likely to have a medical degree is a(n)
a. psychiatrist. b. developmental psychologist. c. clinical psychologist. d. biological psychologist. e. industrial-organizational psychologist.

33. Molecules that are similar enough to a neurotransmitter to bind to its receptor sites on a dendrite and block that neurotransmitter's effects are called what?
a. antagonists b. action potentials c. agonists d. endocrines e. endorphins

34. The research psychologists who are most likely to conduct research studies using animals are those who have
a. a behavioral or psychoanalytic perspective b. a biological or psychoanalytic perspective c. a behavioral or biological perspective d. a psychoanalytic or cognitive perspective

35. Sonja put on a new watch this morning and found it uncomfortable because it was so much heavier than her old watch. However, at noon, when a friend asks her if she knows what time it is, Sonja finds she has forgotten she is even wearing the watch. The change in Sonja's sensitivity to the pressure of the watch illustrates the process known as
a. perceptual assimilation b. sensory adaptation c. adjusting just noticeable differences d. perceptual invariance

36. Professor Seif conducts research on the relationship between the limbic system and sexual motivation. Her research interests best represent the psychological speciality known as
a. behavior genetics. b. biological psychology. c. psychoanalysis. d. behaviorism. e. myelin.

37. The threadlike structures that contain genes are called
a. synapses. b. neurons. c. genomes. d. chromosomes. e. hormones.

38. The registration of sensory input without conscious awareness refers to
a. a just noticeable difference b. a false alarm c. a superimposed stimulus d. subliminal perception

39. A perceptual set is a
a. mental predisposition that influences what we perceive. b. conditioned response to a perceived event. c. tendency to fill in gaps to perceive a complete, whole object. d. readiness to perceive an object in an unfairly negative fashion. e. tendency to view objects higher in our field of vision as closer.

40. According to ____, the ability to detect a stimulus depends not only on the intensity of the stimulus but also on other variables such as the level of noise in the system and your expectations.
a. subliminal perception b. Gustav Fechner c. signal detection theory d. Weber's Law

41. The chemical messengers released into the spatial junctions between neurons are called
a. synapses. b. motor neurons. c. sensory neurons. d. neurotransmitters. e. hormones.

42. Psychologists' personal values and goals
a. have very little influence on the process of scientific observation. b. lead them to avoid experiments involving human participants. c. can bias their observations and interpretations. d. affect their work only if they are different from the norm. e. are carefully tested by means of observation and experimentation.

43. The minimum amount of stimulation a person needs to detect a stimulus 50 percent of the time is called the
a. absolute threshold. b. difference threshold. c. subliminal threshold. d. change threshold. e. adaptation threshold.

44. The survival of organisms best suited to a particular environment is known as
a. structuralism. b. functionalism. c. natural selection. d. introspection. e. humanism.

45. Researchers use experiments rather than other research methods in order to distinguish between
a. causes and effects. b. facts and theories. c. hypotheses and operational definitions. d. random samples and representative samples. e. case studies and surveys.

46. The notion that all behavior is fully governed by external stimuli is most consistent with
a. structuralism b. functionalism c. humanism d. behaviorism

47. The optic disk, also called the blind spot, is
a. where the optic nerve exits the retina b. where light enters the eye c. another term for the lens d. the brain structure responsible for the merging of visual fields from both eyes

48. The largest and most complex part of the human brain is the
a. cerebrum b. limbic system c. medulla d. cerebellum

49. Manipulating a variable under carefully controlled conditions and observing the changes in a second variable defines
a. the experimental approach b. the testing approach c. the survey approach d. naturalistic observation

50. An area at the rear of the frontal lobes that controls voluntary movements is called the
a. motor cortex. b. reticular formation. c. frontal association area. d. hypothalamus. e. angular gyrus.

51. Which neural center in the limbic system plays a central role in emotions such as aggression and fear?
a. medulla b. dendrite c. amygdala d. thalamus e. cerebellum

52. As you are reading this question, the cells in your eyes are firing in response to the light coming from this paper. Which type of neuron is carrying this message to the brain?
a. presynaptic b. sensory c. efferent d. interneuron e. motor

53. In one experiment, most of the participants who viewed a videotape of men tossing a basketball remained unaware of an umbrella-toting woman sauntering across the screen. This illustrated
a. blind spot. b. visual cliff. c. opponent-process theory. d. inattentional blindness. e. figure-ground.

54. ____ receive information from other neurons; ____ transmit information to other neurons.
a. Axons; dendrites b. Synapses; dendrites c. Axons; synapses d. Dendrites; axons

55. Which theory can best explain why people respond differently to the same stimuli?
a. frequency theory b. bottom-up theory c. opponent-process theory d. the Young-Helmholtz theory
e. signal detection theory

56. The idea that Freud's theory was based, in part, on prevailing values during his lifetime implies that psychology's development is influenced by the
a. social context b. sociohistorical context c. historical context d. empirical context

57. The difference between the highest and lowest scores in a distribution is the
a. range. b. standard deviation. c. mean. d. median. e. correlation coefficient.

58. People who have hormonal imbalances have problems with their
a. left brain/right brain communication b. endocrine system c. limbic system d. reticular formation

59. The stronger your expectation that a signal is present, the greater the likelihood that you will
a. be aware of background noise b. report a false alarm c. miss a signal d. correctly reject a signal when it appears

60. The minimum level of stimulation required to trigger a neural impulse is called the
a. refractory period. b. action potential. c. synapse. d. threshold. e. reflex.

61. When Jason briefly turned to summon the waiter, his wife quickly switched her glass of red wine with his glass of white wine. Jason's failure to notice that his chosen wine had been replaced best illustrates
a. figure-ground. b. parallel processing. c. place theory. d. change blindness. e. sensory interaction.

62. The Ames room, in which people are seen to get small or enlarge as they move about, demonstrates that our perception of the world depends strongly on
a. the proximal stimulus elements b. the assumptions we make about it c. the actual, distal stimuli
d. bottom-up processing

63. Which makes finding statistical significance more likely?
a. skewed distributions b. operational definitions c. small sample size d. random sampling e. large sample size

64. If you look at a sheet of notebook paper set on a table, the distal stimulus is the ____, and the proximal stimulus is the ____.
a. projection on the retina; sheet of paper b. square shape; square shape c. sheet of paper; projection on the retina d. trapezoidal shape; square shape

65. Perceptual constancy refers to
a. visual fields in the retina that allow our perception of the world to remain stable b. the same thing as functional fixedness c. the existence of schemas that guide our perceptions d. our perception of objects remaining stable despite the fact that sensory information changes

66. If a subject is presented with a series of pairs of light bulbs of different wattages and is asked whether the members of each pair differ in brightness, which of the following is being measured?
a. the subject's visual acuity b. the physical intensity difference between the two lights c. the subject's absolute threshold for brightness d. the subject's just noticeable difference for brightness

67. The arithmetic average of a distribution of scores is the
a. standard deviation. b. mode. c. range. d. mean. e. median.

68. If one is subjected to prolonged stimulation, eventually
a. perceptual inversion will occur b. sensory adaptation will occur c. perceptual agnosia will occur
d. sensory overload will occur

69. Stressing that psychology should study the purpose of consciousness rather than its structure is associated with the school of psychology known as
a. functionalism b. Gestalt psychology c. psychoanalysis d. structuralism

70. According to psychologists, the minimum stimulus intensity of any sensory input that an organism can detect is
a. the just noticeable difference (JND) b. the absolute threshold c. subject to sensory adaptation d. it's sensory memory

71. The task of passing a message from one neuron to another is actually carried out by:
a. the glia cells b. the action potential c. neurotransmitters d. the myelin sheath

72. The function of dendrites is to
a. control pain through the release of opiate-like chemicals into the brain. b. transmit signals to other neurons. c. receive incoming signals from other neurons. d. release neurotransmitters into the spatial junctions between neurons. e. coordinate the activation of the parasympathetic and sympathetic nervous systems.

73. Overall, it appears that we perceive
a. stimuli that are steady in the environment b. long-acting better than short-acting stimuli c. changing stimuli better than constant ones d. constant stimuli better than changing ones

74. French psychiatrist Joseph Capgras described a patient who reported that imposters had replaced her husband, children, and herself. Her inability to recognize the faces of her close family members or herself suggests that the
a. thalamus in the brainstem is not functioning properly. b. angular gyrus was compromised leading to aphasia. c. corpus callosum had been severed. d. right hemisphere of her brain was damaged. e. left temporal lobe was injured.

75. The purpose of the control group is to
a. make the experiment more complex b. isolate the effect of the dependent variable on the independent variable c. make statistical significance more likely d. isolate the effect of the independent variable on the dependent variable

76. Who used the method of introspection to scientifically identify basic elements of mind?
a. Aristotle b. Socrates c. John Locke d. John Watson e. Edward Titchener

77. José has just played a long, bruising football game but feels little fatigue or discomfort. His lack of pain is most likely caused by the release of
a. glutamate. b. dopamine. c. insulin. d. acetylcholine. e. endorphins.

78.

Study hours	Test grades
4	75
5	85
3	70
6	70
7	75
1	45
2	60
7	90
1	35
7	100

Based on the information provided in the chart above, which scatterplot best represents the relationship between study hours and test grades. (In the scatterplots below, the x-axis is hours of study and the y-axis is test grades.)
a. 1 b. 5 c. 4 d. 2 e. 3

79. A dependent variable in an experiment refers to the variable
a. held constant across the experimental conditions b. that changes value because of the systematic manipulation in the experiment c. deliberately manipulated by the experimenter d. that the experimenter is depending on to cause something to happen in the experiment

80. If the human eye was not responsive to differences in the amplitude of light waves, we would not be able to perceive differences in
a. brightness b. color c. purity d. saturation

81. Your grandmother recently had a small stoke that left her unable to move her right side. In which lobe of the cerebrum did the stroke most likely cause damage?
a. frontal lobe b. parietal lobe c. thalamic lobe d. occipital lobe

82. Who was the American philosopher who authored a textbook in 1890 for the emerging discipline of psychology?
a. Mary Calkins b. Sigmund Freud c. Wilhelm Wundt d. William James e. John B. Watson

83. Dr. Lopez is a psychologist who evaluates, diagnoses, and treats people with everyday problems of moderate severity. What type of psychologist is Dr. Lopez?
a. a school psychologist b. an educational psychologist c. a counseling psychologist d. an industrial psychologist

84. The first woman to serve as President of the American Psychological Association was
a. Anna Freud b. Margaret Washburn c. Mary Calkins d. Leta Hollingworth

85. The lens in the eye
a. bends entering light rays and focuses them onto the retina b. is the part of the eye that gives it its color
c. controls the amount of light entering the eye d. converts light energy into neural energy

86. In order to keep focusing on an object as it moves closer to your face, you must
a. rotate your eyes inward b. look straight ahead c. focus at a point some distance beyond the approaching object d. rotate your eyes outward

87. You enter a room and notice a distinctive new smell. After a bit of time you no longer smell the odor. This illustrates the phenomenon of
a. progressive desensitization b. sensory novelty c. sensory contrast d. sensory adaptation

88. An action potential is
a. the small gap that exists between adjacent neurons b. an electrical signal that travels along the dendrites of a neuron c. the tiny electrical charge that exists when a neuron is neither receiving nor sending information d. an electrical signal that travels along the axon of a neuron

89. Night and peripheral vision depend mainly on ____, while daylight and acute vision depend mainly on ____.
a. bipolar cells; cone cells b. rod cells; cone cells c. rod cells; bipolar cells d. cone cells; rod cells

90. The hindsight bias refers to people's tendency to
a. exaggerate their ability to have foreseen the outcome of past events. b. overestimate the extent to which others share their opinions. c. dismiss the value of replication. d. reject any ideas that cannot be scientifically tested. e. assume that correlation proves causation.

91. Which of the following correlation coefficients expresses the weakest degree of relationship between two variables?
a. –0.50 b. –0.12 c. –0.99 d. +0.25 e. +1.00

92. The “little brain” attached to the rear of the brainstem is called the
a. limbic system. b. thalamus. c. corpus callosum. d. reticular formation. e. cerebellum.

93. The insulating material that encases some axons is referred to as the
a. corpus callosum b. dendritic tree c. myelin sheath d. soma

94. Three people look at the same sketch and report seeing three different things. This illustrates the contribution to perception of
a. cognitive dissonance b. cognitive interpretation c. sensory readiness d. stimulus ambiguity

95. The healing power of positive expectations is best illustrated by
a. overconfidence. b. replication. c. hindsight bias. d. illusory correlation. e. the placebo effect.

96. A brief electrical charge that travels down the axon of a neuron is called the
a. myelin sheath. b. refractory period. c. agonist. d. synapse. e. action potential.

97. In an experiment, the variable that is controlled or manipulated by the researcher is called the
a. independent variable b. dependent variable c. control variable d. stimulus variable

98. The primary visual cortex is located in the
a. occipital lobes b. frontal lobes c. temporal lobes d. parietal lobes

99. The master gland of the endocrine system is the
a. thyroid gland. b. pancreas. c. pituitary gland. d. hypothalamus. e. adrenal gland.

100. The longest part of a neuron is likely to be the
a. dendrite. b. cell body