**Chapter 5**

Multiple Choice

1. When uniform colors appear to have a gradient at the border between light and darker shades, this is called:

A) Change blindness

B) Sensory deprivation

\*C) A Mach Band

D) Colorblindness

(Reference Page 130)

2. Various parts of the retina communicate through the use of:

A) Horizontal cells

\*B) Both horizontal cells and amacrine cells

C) Retinal ganglion cells

D) Amacrine cells

(Reference Page 132)

3. In humans, sensory transduction is accomplished by the use of:

A) Pressure-sensitive receptors

B) Taste buds and hair cells

C) Photoreceptors and stretch receptors

\*D) All of the above

(Reference Page 132)

4. 30% of the human brain is dedicated to this sense:

A) Audition

B) Olfaction

C) Taste

\*D) Vision

(Reference Page 132)

5. The constricting of the iris will result in:

\*A) Less light entering the eye

B) More light entering the eye

C) Images focusing right side-up on the retina

D) Change in color of the iris

(Reference Page 132)

6. Areas of the retina communicate with each other through the:

A) Retinal ganglion cells

\*B) Horizontal cells and amacrine cells

C) Bipolar cells

D) None of the above

(Reference Page 132)

7. Once light passes through the cornea, it is restricted by the:

A) Lens

B) Retina

\*C) Iris

D) Retinal ganglion cells

(Reference Page 132)

8. The retina is located:

A) In the back of the eye, infront of the lens and cornea

B) In the front of the eye, in the center of the iris

C) In the front of the eye, next to the pupil

\*D) In the back of the eye, behind the cornea, iris, and lens

(Reference Page 133)

9. The Mach Band illusion works on the principle of:

\*A) Contrast enhancement

B) The blind spot

C) Change blindness

D) Recurrence

(Reference Page 134)

10. An object that is located in your left visual field will be processed in your:

A) Left hemisphere

\*B) Right hemisphere

C) Optic nerve

D) Recurrence

(Reference Page 137)

11. The nerve bundles of the eyes are referred to as optic tracts once they have been:

A) Connected together

B) Rerouted back to the eyes

C) Connected to the occipital lobe

\*D) Sorted into two visual fields

(Reference Page 137)

12. Optic radiations move information from the LGN to the:

A) Secondary visual cortex

\*B) Primary visual cortex

C) Retinas

D) Optic chiasm

(Reference Page 137)

13. Scientists David Hubel and Torsten Weisel made ground-breaking characterizations of cells in the:

A) Optic nerve

\*B) Primary visual cortex

C) Retina

D) LGN

(Reference Page 137)

14. The cells of the primary visual cortex are arranged into:

\*A) Columns

B) Groups of 10

C) Pairs

D) Clusters

(Reference Page 138)

15. The Kanizsa figure shows how the neurons in the secondary visual cortex respond to perceived:

A) Circles

B) Movement

\*C) Lines

D) Size differences

(Reference Page 140)

16. A primary function of the ventral visual stream is to decipher \_\_\_ objects are.

A) How fast

\*B) What

C) How large

D) Where

(Reference Page 141)

17. For familiar stimuli, visual neurons tend to use a \_\_\_\_\_ code.

A) Population

B) Rate

\*C) Sparse

D) Retinotopic

(Reference Page 142)

18. An individual with Balint's syndrome would look at a photograph of a family eating dinner and describe:

A) A blank rectangle

\*B) The individual people and objects, but not the scene as a whole

C) A nonsensical scene filled with imaginary objects

D) None of the above

(Reference Page 146)

19. Lesions on the dorsal stream would cause what type of difficulty?

\*A) Knowing how and where to interact with objects

B) Distinguishing between similar visual objects

C) Distinguishing different shades of colors

D) Recognizing the faces of loved ones

(Reference Page 147)

20. If you are able to see objects, but unable to interact with them, you may have damage to your:

\*A) Dorsal stream

B) Ventral stream

C) Retina

D) Cornea

(Reference Page 147)

21. Damage to \_\_\_\_ is the most likely to cause scotomas (areas of diminished vision or blindness).

\*A) V4

B) V3

C) V2

\*D) V1

(Reference Page 147)

22. In binocular rivalry, the competition is between:

A) the left and right hemispheres

\*B) Higher-level percepts or representations

C) The rods and cones

D) The primary visual cortex and the secondary visual cortex

(Reference Page 150)

23. Change blindness can be described as:

A) Blindness due to a lesion on the retina

\*B) Failing to notice a change in the environment

C) Failure to see objects in one visual field

D) 50% blindness in one eye

(Reference Page 152)

24. A description of a feedback loop would be:

A) The eyelid blinking after dust is blow into the eye

B) The pupil dilating after exposure to bright light

C) Dreams interrupted by an alarm clock

\*D) The higher parts of the visual system sending information back to the lower parts

(Reference Page 155)

25. Feedback systems allows humans to form \_\_\_\_\_ about the external environment.

A) Inaccurate assumptions

B) memories

\*C) Predictions

D) descriptions

(Reference Page 155)