Name: _____

Date: _____ Grade: _____

Precepts of Anatomy & Physiology

CHAPTER 1 TEST

Congratulations on completing this chapter! ***Answer the following questions to test your understanding of the material. When you finish, hand in your test to your teacher for a final grade. Each answer is worth 2.0 points.***

Multiple choice: Choose the correct answer.

1. Which of the following is the correct sequence of the levels of organization from least to most complex? _____
   (a) tissue, system, organ, cell
   (b) tissue, cell system organ
   (c) cell, tissue, organ, system
   (d) cell, tissue, system, organ

2. Which hormone would be released after a large meal when blood glucose is high?
   _____ (a) glycogen (b) insulin (c) glucagon

3. Which hormone would be released during a period of fasting when blood glucose is low?
   _____ (a) insulin (b) glucagon (c) glucose

4. Which of the following glands is included in the HPA axis? _____
   (a) pineal gland
   (b) pancreas
   (c) pituitary gland
   (d) parathyroid

5. Epinephrine has which of the following effects on the body? _____
   (a) pupil constriction
   (b) increased blood pressure
   (c) blood shunted to GI tract
   (d) decreased heart rate

6. At rest, the outside of a neuron is _____ charged and the inside is _____ charged.
   (a) positively; negatively
   (b) positively; positively
   (c) negatively; positively
   (d) negatively; negatively

7. The concept that thick and thin filaments glide past each other and cause the muscle to contract is called the _____ theory.
   (a) releasing filament
   (b) attaching filament
   (c) sliding filament
   (d) linking filament

8. Damage to the pancreas could result in which of the following? _____
   (a) low tolerance for stress
   (b) stunted growth in adolescents
   (c) difficulty controlling blood glucose
   (d) difficulty initiating and maintaining pregnancy

Matching:

9. _____ skeletal system
10. _____ nervous system
11. _____ circulatory system
12. _____ integumentary system
13. _____ somatic nervous system
14. _____ autonomic nervous system
15. _____ cardiac muscle tissue
16. _____ skeletal muscle tissue
17. _____ smooth muscle tissue

(a) transports nutrients and oxygen-rich blood throughout the body
(b) holds the body together and protects it from invading bacteria
(c) part of peripheral nervous system that regulates involuntary movements
(d) supports the body and protects its inward parts
(e) part of peripheral nervous system that controls voluntary movements
(f) interprets and responds to stimuli
(g) striated muscle that is generally attached to bones that can be contracted voluntarily
(h) spindle-shaped, unstriated muscle found in internal organs
(i) muscle found in the heart that is not under direct control of the central nervous system

Use the WORD BANK to label questions #18-24, as to which part of the brain controls which process.

WORD BANK

cerebrum	cerebral cortex	pituitary gland	cerebellum
brainstem	hypothalamus	thalamus	

18. _____ regulation of information to cerebral cortex
19. _____ blood pressure, heart rate, breathing, swallowing
20. _____ regulates body temperature, hunger, and sleep
21. _____ learning, judgement, intelligence
22. _____ balance and coordination of muscle action
23. _____ coordination of nervous and endocrine systems
24. _____ information processing, body movement control

Matching:

25. _____ epidermis
26. _____ dermis
27. _____ compact bone
28. _____ spongy bone
29. _____ red bone marrow
30. _____ yellow bone marrow
31. _____ actin

(a) blood forming tissue that produces red and white blood cells
(b) dense layer of hard bone with spaces for nutrient blood vessels
(c) makes up the thinner filaments of a muscle fiber
(d) outer layer of skin made up of layers of epithelial cells
(e) bone tissue that contains blood vessels, nerves and fat
(f) resilient, supportive bone tissue with an interlaced pattern that withstands stress
(g) inner layer of skin that supports the epidermis and contains nerve endings, blood vessels, smooth muscle and glands

Fill in the blank: Choose the correct word from the WORD BANK.

WORD BANK				
tympanum	axon	cornea	rod	resting potential
dendrites	cell body	lens	pupil	semicircular canals
auditory nerve	optic nerve	cone	cochlea	action potential

32. The _____ is also known as the eardrum.
33. The fluid filled portion of the inner ear that creates pressure waves is called the _____.
34. The _____ transmits nerve impulses to the brain from the cochlea.
35. The _____ enables the nervous system to sense changes in the position of the head.
36. The tough, transparent layer at the surface of the eye that focuses light is called the _____.
37. The opening in the iris that regulates the amount of light that enters the eye is called the _____.
38. The flexible structure behind the pupil filled with a transparent protein that helps adjust eyes to focus to see near or far objects is called the _____.
39. A photoreceptor cell that detects color but is not very sensitive to light is called a(n) _____.
40. A photoreceptor cell that is extremely sensitive to light, but does not detect color is called a(n) _____.
41. The _____ relays visual information to the brain.
42. The largest part of a neuron in which metabolic activity takes place is called the _____.
43. The small, branched extensions of a neuron that carry impulses toward the cell body are called _____.
44. The long, branched, tail-like extension of a neuron that carries impulses away from the cell body is called the _____.
45. The rapid change in voltage on the inside of the axon from negative to positive and then back to negative is called a(n) _____.

True or False: Write the correct answer.

46. _____ The tongue's 4 taste receptors are sweet, salty, sour & bitter.
47. _____ The status of a person's health is impacted beneficially by positive thought processes.

Choose the statement that gives the best meaning of each Life Principle:

48. "*Be careful what you see, for the object of your eye becomes a part of thee.*" _____

_____

(a) That with which you fill your eyes influences who you are and what you become.
(b) That which fills the eyes has very little impact on the life of an individual.
(c) You become just like the people you watch on television.

49. "*Bitterness rots the bones*." _____

_____

(a) Harboring bitterness has unhealthy consequences.
(b) People with bone problems tend to become bitter.
(c) We should become better instead of bitter.

50. "*We are fearfully and wonderfully made.*" _____

_____

(a) We are designed to be fearfully wonderful.
(b) We are made to be wonderful, but end up being fearful about many things.
(c) The human body is an awesome creation.