

Body Systems Part 2 Study Guide

- Definitions:
 - Arteries: blood vessels that carry blood away from the heart
 - Veins: blood vessels that carry blood towards the heart
 - Capillaries: tiny blood vessels that connect veins and arteries
- What does plasma contain? water, minerals, nutrients, sugars, proteins
- Definitions:
 - White blood cells help fight infection by attacking disease-causing organisms
 - Red blood cells takes oxygen to every cell in your body
 - Platelets helps blood to clot
- High blood pressure is unhealthy because it causes your heart to work harder
- The component of blood that takes oxygen to the cells in your body red blood cells
- After the blood leaves the left atrium, it flows into the left ventricle
- Which chamber of the heart pumps oxygen-poor blood into the lungs? right ventricle
- What is the function of white blood cells? destroy foreign organisms
- How does the immune system respond to foreign bodies? producing antibodies
- What are the 4 types of pathogens and an example of each? Bacteria - Strep throat
virus - Chicken pox Fungi - athlete's foot protist - lice
- Active immunity: person's own immune system produces antibodies
- Passive immunity: when antibodies come from another source rather than person's own body
- What is the function of histamines? responsible for symptoms of allergies:
sneezing, watery eyes, swelling, redness or heat
- What makes up the integumentary system? skin, hair, and nails
- Fatty tissue below the dermis protects the body from cold temperatures
- What are the functions of the skin? repels water, guards against infection, maintain homeostasis, senses the environment
- Which structure of the skin helps control body temperature? sweat gland
- Which structure is found in the epidermis layer? pores
- The outer surface of your body is covered with epithelial tissue
- What is regulated by hormones? production of white blood cells, physical growth, sexual development

21. What are the importance and function of each of the following glands:
- Thyroid: releases hormone necessary for growth / metabolism
 - Pituitary gland: hormones control growth, sexual development; absorption of
 - Pineal gland: hormones necessary for ~~growth~~ sleep, body temperature, reproduction and aging
22. What does the endocrine system use feedback mechanisms for? to maintain homeostasis
23. What is the purpose of the pancreas in regards to the endocrine system? to regulate glucose in your blood
24. What is the function of nerve tissue? carry electrical signals through the body
25. What voluntary actions/behaviors are controlled by the brain? speaking, walking, thinking
26. What conserved energy and responds quickly to change? Autonomic nervous system
27. What do the following examples of nervous systems consist of?
- Central nervous system brain and spinal cord
 - Peripheral nervous system: sensory and motor nerves
 - Autonomic nervous system: controls involuntary movements (breathing)
 - Voluntary nervous system: controls voluntary movements (muscles) heart (beat)
28. A sedentary lifestyle is associated with more sitting and less moving
29. Which nutrients are the main sources of energy for the body? fats and carbohydrates
30. What happens in each of these phases of growth?
- Adolescence: stage of life where body begins to mature sexually
 - Puberty: process in which the body matures sexually
 - Adulthood: stage in life where growth and sexual maturity is completed