

Name _____

Anatomy and Physiology

Test Study Guide – Chemical Constituents of Cells and Metabolism

Know the following vocabulary terms – more than just a definition, use the reading from your textbook and notes from lecture to learn as much about each of these as possible.

Acetyl coenzyme A
Active site
Aerobic
Amino acids
Anabolic steroids
Anaerobic
ATP
Carbon
Catalyst
Electrolytes
Enzymes
Fats
Metabolic pathway
Nucleic acids
Oxidation
Proteins
Pyruvic acid
Steroids
Substrate
Triglycerides
Water

What parts of cellular respiration are anaerobic and aerobic?

Where in the cell do glycolysis, the citric acid cycle, and electron transport chain occur? Also, know the order of these events during ATP production.

How many ATP can be made during the entire sequence of cellular respiration?

What is the chemical structure of ATP?

What are the byproducts of each step and what is formed during each event?

Fats and proteins are broken down into what substances prior to entering a metabolic pathway?

How much of the human body weight is composed of water?

What are the three types of carbohydrates?

Know the different organic and inorganic substances and characteristics of each.

What substances make up 95% of the human body?

What function do genes carry out in the body and where are they found?

Know the definition of organic chemistry.

During what processes is carbon dioxide created in the body?

When ATP loses a phosphate, what does it become?

What type of energy do metabolic processes require?