

A&P form and function

anatomy	study of biological <i>form</i> of an organism
physiology	study of biological <i>functions</i> an organism performs

coordination contributes to homeostasis

homeostasis	maintenance of internal balance regardless of external environment
--------------------	--

- in humans... temp, blood pH, glucose

achieved by: fluctuations around a set point

stimulus by sensor/receptor

sensor triggers response

A&P organization

cells to tissues to organs to organ systems

digestive system

circulatory system

respiratory system

excretory system

homeostasis: thermoregulation

thermoregulation maintenance of internal temp in a tolerable range

endothermic: generate heat by metabolism

BIRDS AND MAMMALS

ectothermic gain heat from external source

invertebrates, fish, amphibians, reptiles

animal bioenergetics

energy transfer and transformation

metabolic rate amount of energy an animal uses per unit time

basal endotherms

metabolic rate

standard ectotherms

metabolic rate

dependent on: size, activity, environment

A&P tissues

epithelial strat. squamous= mouth

pseudo strat column= esophagus

simp squam= lungs

simp column= intestines

cube= kidneys

connective loose, fibrous, bone, adipose, cartilage, blood

muscle skeletal- "muscles"

cardiac= heart involuntary

smooth= intestines involuntary

nervous neurons and glia

torpor

torpor physiological state of low metabolism

hibernation long term torpor

C

By [katiefocht25 \(katiefocht\)](#)
cheatography.com/katiefocht/

Published 23rd March, 2022.
 Last updated 23rd March, 2022.
 Page 1 of 1.

Sponsored by [Readable.com](#)
 Measure your website readability!
<https://readable.com>