

Animal movement depends on what?

Muscle contractions?

What controls the digestive system and other organs?

Smooth muscle

What causes muscles to contract?


The release of chemicals

These are aerobic and require oxygen during movement and therefore do not fatigue.

Slow-twitch fibers

Fluidity of movement depends on what?

Proprioceptors and muscle spindles

Fold Over 

Reflexes are _____, consistent, and automatic responses to stimuli.

Involuntary

A _____ is a particular type of activity in the motor cortex that occurs before any type of voluntary movement.

Readiness Potential

Voluntary decisions appear at first _____

Unconscious

Paths from the cerebral cortex to the spinal cord are called what?

Corticospinal Tracts

The _____ is a structure in the brain often associated with _____ and coordination.

Cerebellum & Balance

The _____ are a group of large subcortical structures in the forebrain responsible for initiating an action not guided by a stimulus.

Basal ganglia

This is a movement disorder characterized by muscle tremors, rigidity, slow movements, and difficulty initiating physical and mental activity.

Parkinson's Disease

What is Huntington's Disease?

Huntington's Disease is a neurological disorder characterized by various motor symptoms

This disease is associated with gradual and extensive brain damage especially in the caudate nucleus, putamen globus pallidus, and the cerebral cortex.

Huntington's Disease

The biology of the _____ is just in our heads.

Clock

These are internal mechanisms that operate on an annual or yearly cycle.

Endogenous Circannual Rhythms

This generates a rhythm slightly longer than 24 hours when it has no external cue to set it.

Human Circadian Clock

This is part of the hypothalamus and the main control center of the circadian rhythms of sleep and temperature.

Suprachiasmatic nucleus (SCN)

This affects many aspects of behavior.

Temperature

_____ refers to temperature regulation and other biological processes that keep certain body variables within a fixed range.

Homeostasis

What is basal metabolism?

Basal metabolism is the energy used to maintain a constant body temperature while at rest.

Body temperature regulation is predominantly dependent upon areas in the _____.

Pre-optic area/anterior hypothalamus (POA/AH)

_____ attack intruders but also stimulate the vagus nerve.

Cytokines

What percentage of the mammalian body is made up of water?

70%

_____ is a hormone released by the posterior pituitary which raises blood pressure by constricting blood vessels

Vasopressin

What is osmotic thirst?

Osmotic thirst is when solutes are more concentrated on one side of the membrane.

This is associated with low volume of body fluids.

Hypovolemic thirst

What is the function of the digestive system?


The function of the digestive system is to break down food into smaller molecules that the cells can use.

What is the sugar found in milk?

Lactose

This increases variation in the gene pool.

Sexual reproduction

Fold Over 

_____ in the gene pool of a species enables quick evolutionary adaptations to change in the environment.

Variation

What is Cortisol?

Cortisol is the stress hormone, which is produced by the adrenal gland and implicated in maintaining homeostasis following a stressful event.

This is a precursor to testosterone?

Androstenedione

_____ include estradiol and others and are referred to as female hormones because women have higher levels.

Estrogens

Sex hormones increase or decrease the rate of _____ in various regions of the brain.

Apoptosis

Sexual differentiation begins with what?

Chromosomes

Females have 2 _____ chromosomes and a male has what?

2 X Chromosomes, Male has X & Y

What are Wolffian ducts?

Wolffian ducts are the precursors to male reproductive organs.

_____ is the inability to maintain an erection?

Impotence

FSH and LH cause the _____ to release ovum.

Follicle

