Psychology Knowledge Organiser – Biopsychology

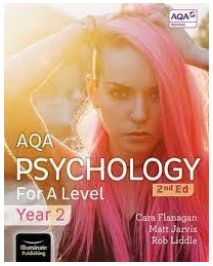
Core knowledge

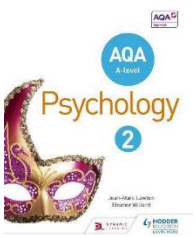
- The divisions of the nervous system: central and peripheral (somatic and autonomic).
- The structure and function of sensory, relay and motor neurons. The process of synaptic transmission, including reference to neurotransmitters, excitation and inhibition.
- The function of the endocrine system: glands and hormones.
- The fight or flight response including the role of adrenaline.
- Localisation of function in the brain and hemispheric lateralisation: motor, somatosensory, visual, auditory and language centres; Broca's and Wernicke's areas, split brain research. Plasticity and functional recovery of the brain after trauma.
- Ways of studying the brain: scanning techniques, including functional magnetic resonance imaging (fMRI); electroencephalogram (EEGs) and event-related potentials (ERPs); post-mortem examinations.
- Biological rhythms: circadian, infradian and ultradian and the difference between these rhythms. The effect of endogenous pacemakers and exogenous zeitgebers on the sleep/wake cycle.

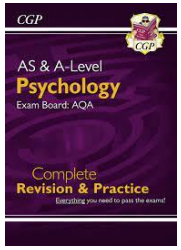
Key words

ACTH
Action potential
Adrenal glands
Adrenaline
Autonomic nervous system
Axon
Axon terminal
Behaviourism
Central nervous system
Chromosome
Cognitive neuroscience
Computer models
Concordance rate
Dendrites
DZ twins
Empirical
Endocrine system
Evolution
Excitation
Fight or flight response
Genotype
Hormones
Hypothalamus
Imitation
Inference
Information processing model
Inhibition
Internal mental processes
Introspection
Learning
Mediating cognitive factors
Modelling
Motor neuron
Myelin sheath
MZ twins
Natural selection
Negative reinforcement
Nervous system
Neuron
Neurotransmitter
Objective
Operant conditioning
Parasympathetic nervous system
Peripheral nervous system
Phenotype
Pituitary gland
Positive reinforcement
Postsynaptic Receptor sites
Punishment
Reciprocal determinism
Relay neuron
Response
Sensory neuron
Somatic nervous system
Structuralism
Subjective
Sympathetic nervous system
Synapse
Synaptic transmission
Theoretical models
Twin study

Wider reading







https://www.simplypsychology.org/a-level-biological.html

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https://www.physicsandmathstutor.com/psychology-revision/a-level-aqa/biopsychology/

Exam Skill

Analyse	Separate information into components and identify their characteristics.
Calculate	Work out the value of something
Choose	Select from a range of alternatives.
Comment	Present an informed opinion.
Compare	Identify similarities and/or differences.
Complete	Finish a task by adding to given information.
Consider	Review and respond to given information.
Describe	Give an account of.
Design	Set out how something will be done.
Discuss	Present key points about different ideas or strengths and weaknesses of an idea.
Distinguish	Explain ways in which two things differ. Provide detail of characteristic that enable a person to know the difference between …
Draw	Produce a diagram.
Evaluate	Judge from available evidence.
Explain	Set out purposes or reasons.
Explain how	Give a detailed account of a process or way of doing something.
Explain why	Give a detailed account of reasons in relation to a particular situation.
Identify	Name or otherwise characterise.
Give	Produce an answer from recall or from given information.
Justify	Provide reasons, reasoned argument to support, possibly provide evidence.
Label	Provide appropriate names on a diagram.
Name	Identify using a recognised technical term.
Outline	Set out main characteristics.
Select	Choose or pick out from alternatives.
State	Express in clear terms.
Suggest	Present a possible case/solution.
Which is	Select from alternatives.
What is meant by	Give a definition.
Write	Provide information in verbatim form.