

## Psychology Knowledge Organiser – Paper 2 Psychology in Context

Aim A – Demonstrate understanding of key psychological approaches, including how they are similar/different to one another, and the strengths/limitations of each approach.	Aim B – Assess to what extent brain functioning is localised/lateralised, and whether functioning can be regained following trauma, whilst demonstrating understanding of how neurotransmitters and hormones affect behaviour.	Aim C – Demonstrate knowledge and understanding of research methods, scientific processes and techniques of data handling and analysis, whilst being familiar with their use, and aware of their strengths and limitations.
<p>In this section you will be considering the five psychological approaches in terms of their assumptions, methods of investigation, &amp; attempts to explain &amp; treat behaviour. You will be expected to compare them.</p> <p><b>Origins of Psychology</b></p> <ul style="list-style-type: none"> <li>- Wundt</li> <li>- Emergence of Psychology as a science</li> </ul> <p><b>Learning approaches</b></p> <ul style="list-style-type: none"> <li>- Classical conditioning</li> <li>- Operant conditioning</li> <li>- Social learning theory</li> </ul> <p><b>The cognitive approach</b></p> <ul style="list-style-type: none"> <li>- Internal mental processes</li> <li>- The use of theoretical &amp; computer models</li> <li>- The emergence of cognitive neuroscience</li> </ul> <p><b>The biological approach</b></p> <ul style="list-style-type: none"> <li>- The influence of genes, biological structures &amp; neurochemistry on behaviour</li> <li>- Genotype &amp; phenotype</li> <li>- Genetic basis of behaviour</li> </ul>	<p>In this section you will be considering how biological functions affect behaviour &amp; how we process information in the brain. You will be expected to compare various methods of studying the brain and discuss whether brain functioning is lateralised or localised &amp; if trauma can be overcome.</p> <p><b>The nervous system</b></p> <ul style="list-style-type: none"> <li>- Central</li> <li>- Peripheral</li> </ul> <p><b>Neurons</b></p> <ul style="list-style-type: none"> <li>- Sensory</li> <li>- Relay</li> <li>- Motor</li> </ul> <p><b>Synaptic transmission</b></p> <ul style="list-style-type: none"> <li>- Neurotransmitters</li> <li>- Excitation</li> <li>- Inhibition</li> </ul> <p><b>The function of the endocrine system</b></p> <ul style="list-style-type: none"> <li>- Glands</li> <li>- Hormones</li> <li>- The fight or flight response</li> </ul>	<p>In this section you will be considering how psychologists conduct psychological investigations and the measures they use to ensure scientific processes are conducted in an ethical manner and findings are analysed sufficiently so that hypotheses can be tested and conclusions can be drawn. You will be expected to show confidence in planning investigations and awareness of how investigations can be presented in a way which is fitting with the conventions of a scientific report.</p> <p><b>Experimental method</b></p> <ul style="list-style-type: none"> <li>- Types of experiment, laboratory &amp; field; natural &amp; quasi</li> </ul> <p><b>Observational techniques</b></p> <ul style="list-style-type: none"> <li>- Types of observation: naturalistic &amp; controlled; covert &amp; overt; participant &amp; non-participant</li> <li>- Behavioural categories</li> <li>- Event sampling; time sampling</li> </ul> <p><b>Self-report techniques</b></p> <ul style="list-style-type: none"> <li>- Questionnaires; the use of open &amp; closed questions</li> <li>- Interviews, structured &amp; unstructured</li> </ul> <p><b>Correlations</b></p> <ul style="list-style-type: none"> <li>- Analysis of the relationship between co-variables</li> <li>- The difference between correlations &amp; experiments</li> </ul> <p><b>Content analysis</b></p> <ul style="list-style-type: none"> <li>- Coding</li> <li>- Thematic analysis</li> </ul> <p><b>Case studies</b></p> <p><b>Aims and Hypotheses</b></p> <ul style="list-style-type: none"> <li>- Stating aims; Directional, non-directional &amp; null hypotheses</li> <li>- The difference between aims &amp; hypotheses</li> </ul>

<ul style="list-style-type: none"> <li>- Evolution &amp; behaviour</li> </ul> <p><b>The psychodynamic approach</b></p> <ul style="list-style-type: none"> <li>- The role of the unconscious</li> <li>- The structure of personality</li> <li>- Defence mechanisms</li> <li>- Psychosexual stages</li> </ul> <p><b>Humanistic Psychology</b></p> <ul style="list-style-type: none"> <li>- Free will</li> <li>- Self-actualisation</li> <li>- Maslow's hierarchy of needs</li> <li>- Focus on the self</li> <li>- Congruence</li> <li>- The influence on counselling Psychology</li> </ul> <p><b>Comparison of approaches</b></p>	<p><b>Localisation/Lateralisation of function in the brain</b></p> <ul style="list-style-type: none"> <li>- Hemispheric lateralisation</li> <li>- Broca's &amp; Wernicke's areas</li> <li>- Split brain research</li> <li>- Plasticity</li> <li>- Functional recovery</li> </ul> <p><b>Ways of studying the brain</b></p> <ul style="list-style-type: none"> <li>- Scanning techniques</li> <li>- Post-mortems</li> </ul> <p><b>Biological rhythms</b></p> <ul style="list-style-type: none"> <li>- Circadian</li> <li>- Infradian</li> <li>- Ultradian</li> <li>- Endogenous pacemakers &amp; exogenous zeitgebers on the sleep/wake cycle</li> </ul>	<p><b>Sampling</b></p> <ul style="list-style-type: none"> <li>- The difference between population &amp; sample</li> <li>- Techniques: random, systematic, stratified, opportunity &amp; volunteer</li> <li>- Implications of sampling techniques, including bias &amp; generalisation</li> </ul> <p><b>Experimental designs</b></p> <ul style="list-style-type: none"> <li>- Repeated measures</li> <li>- Independent groups</li> <li>- Matched pairs</li> </ul> <p><b>Variables and Control</b></p> <ul style="list-style-type: none"> <li>- Manipulation &amp; control of variables</li> <li>- Operationalisation of variables</li> <li>- Random allocation</li> <li>- Counterbalancing</li> <li>- Randomisation</li> <li>- Standardisation</li> <li>- Demand characteristics &amp; investigator effects</li> <li>- The aims of pilot studies</li> </ul> <p><b>Ethics</b></p> <ul style="list-style-type: none"> <li>- Ethical issues in the design &amp; conduct of psychological studies</li> <li>-</li> </ul> <p><b>The role of peer review in the scientific process</b></p> <p><b>The implications of psychological research for the economy</b></p> <p><b>Reliability across all methods of investigation</b></p> <ul style="list-style-type: none"> <li>- Test-retest &amp; inter-observer reliability</li> <li>- Improving reliability</li> </ul> <p><b>Types of validity across all methods of investigation</b></p> <ul style="list-style-type: none"> <li>- Face, concurrent, ecological &amp; temporal validity</li> <li>- Improving validity</li> </ul> <p><b>Features of science</b></p> <ul style="list-style-type: none"> <li>- Objectivity &amp; the empirical method</li> <li>- Replicability &amp; falsifiability</li> <li>- Theory construction &amp; hypothesis testing</li> <li>- Paradigms &amp; paradigm shifts</li> </ul>
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**Reporting psychological investigations**

- Sections of a scientific report

**Quantitative and qualitative data**

- The distinction between qualitative & quantitative collection techniques
- Primary & secondary data, including meta-analysis

**Descriptive statistics**

- Measures of central tendency & dispersion
- Calculation of percentages

**Presentation and display of quantitative data**

- Graphs
- Tables

**Distributions**

- Normal & skewed distributions

**Analysis and interpretation of correlation**

- Positive, negative & zero correlations
- Correlation coefficients

**Levels of measurement**

- Nominal
- Ordinal
- Interval

**Introduction to statistical testing**

- The sign test
- Probability & significance
- Use of statistical tables & critical values in interpretation of significance
- Type I & Type II errors
- Factors affecting the choice of statistical test
- When to use the following tests: Spearman's rho, Pearson's r, Wilcoxon, Mann-Whitney, related t-test, unrelated t-test & Chi-Squared test

## Psychology Knowledge Organiser – Paper 2 Psychology in Context

Key Words	Career Paths	Skills & Assessment Objectives
<p>Introspection Association Reinforcement Role model Mediational processes Schemas Genotype Phenotype Neurotransmitters Hormones Iceberg Analogy Unconscious Id/Ego/Superego Repression/Denial/Displacement Hypnosis/Psychoanalysis/Dream analysis Oedipus Complex Self-actualisation Congruence Unconditional positive regard Client centred therapy Central nervous system Peripheral nervous system Fight or flight Adrenaline Neurotransmitters Electrical impulse Localisation/lateralisation Plasticity/Functional Recovery Brain scan/Post mortem Internal &amp; external pacemakers Validity Reliability Experiments Observations Correlations Descriptive statistics/Inferential statistics Ethics</p>	<ul style="list-style-type: none"> <li>• Psychologist (occupational; forensic; educational; clinical)</li> <li>• Lawyer</li> <li>• Police officer</li> <li>• Prison officer</li> <li>• Teacher</li> <li>• Psychiatrist</li> <li>• Mental health nurse/support worker</li> <li>• Many more.....</li> </ul>	<p>Knowledge &amp; understanding of psychological concepts, theories, research studies, research methods &amp; ethical issues</p> <p>Apply psychological knowledge &amp; understanding in a range of contexts</p> <p>Analyse, interpret &amp; evaluate psychological concepts, theories, research studies &amp; research methods</p> <p>Evaluate therapies &amp; treatments including in terms of their appropriateness &amp; effectiveness</p> <p><b>AO1:</b> Demonstrate knowledge &amp; understanding of scientific ideas, processes, techniques &amp; procedures</p> <p><b>AO2:</b> Apply knowledge &amp; understanding of scientific ideas, processes, techniques &amp; procedures:</p> <ul style="list-style-type: none"> <li>- in a theoretical context</li> <li>- in a practical context</li> <li>- when handling qualitative data</li> <li>- when handling quantitative data</li> </ul> <p><b>AO3:</b> Analyse, interpret &amp; evaluate scientific information, ideas &amp; evidence, including in relation to issues, to:</p> <ul style="list-style-type: none"> <li>- make judgements &amp; reach conclusions</li> <li>- develop &amp; refine practical design &amp; procedures</li> </ul>
	<h3 style="text-align: center; margin: 0;">Key Questions</h3> <p>Is Psychology a science? What are the main psychological approaches? How do these approaches compare? How do hormones and brain activity affect behaviour? How can we investigate the brain? Is the brain lateralised and/or localised in terms of functioning? Can the brain overcome trauma? Is the sleep/wake cycle controlled internally or externally? What methods do psychologists use to investigate behaviour/the brain? How do psychologists ensure reliability and validity? How do psychologists analyse their findings? What ethical considerations must be made when planning and conducting psychological research? How should psychological research be written up?</p>	