

GCSE Psychology

Full Specification - Spec Cheat Sheet · Papers 1 & 2

AQA Psychology (8182)

Papers 1 & 2

153 spec points

Every specification point for **Full Specification**, in spec order - tick each one off as you revise. Codes match the official AQA specification. Nothing here is optional.

1. Memory (3.1)

- 3.1.1** Memory as a process: encoding (input), storage (holding) and retrieval (recovering) of information.
- 3.1.1** Encoding can be acoustic (by sound), visual (by image) or semantic (by meaning).
- 3.1.2** Three memory stores: sensory, short-term memory (STM) and long-term memory (LTM).
- 3.1.2** Features of each store: coding/format, capacity (how much) and duration (how long).
- 3.1.2** Sensory register: brief duration, large capacity, modality-specific coding.
- 3.1.2** STM: limited capacity (about 5-9 items), short duration (around 18-30 seconds), mainly acoustic coding.
- 3.1.2** LTM: potentially unlimited capacity, very long duration, mainly semantic coding.
- 3.1.3** Memory is an active process: we reconstruct memories rather than store exact copies.
- 3.1.3** Bartlett's War of the Ghosts study: memory distorted to fit existing schemas (reconstructive memory).
- 3.1.3** Effects of reconstructive memory: omissions, transformations, familiarisation and rationalisation of detail.
- 3.1.3** The theory of reconstructive memory and the role of effort after meaning.
- 3.1.4** Interference theory: forgetting happens when memories disrupt one another.
- 3.1.4** Proactive interference (old learning disrupts new) and retroactive interference (new learning disrupts old).
- 3.1.4** Interference is more likely when memories are similar.
- 3.1.5** Context affects accuracy of memory: cues from the environment can aid or hinder retrieval.
- 3.1.5** False memories: recollections of events that did not happen or are inaccurate.
- 3.1.6** How the brain may affect memory, including the brain damage that can cause memory loss (amnesia).
- 3.1.7** Apply research methods (e.g. lab experiments, recall tests) to the study of memory.

2. Perception (3.2)

- 3.2.1** Sensation is detecting raw information through the senses; perception is interpreting and making sense of it.
- 3.2.1** The difference between what the eye sees (sensation) and how the brain understands it (perception).
- 3.2.2** Monocular depth cues: height in plane, relative size, occlusion (superimposition) and linear perspective.
- 3.2.2** Binocular depth cues: retinal disparity (slight difference between the two eyes' images) and convergence.
- 3.2.3** Gestalt approach: we perceive whole patterns, organising sensory input into meaningful wholes.
- 3.2.3** Gestalt laws: figure-ground, similarity, proximity, continuity and closure.
- 3.2.4** Visual illusions show perception can differ from reality and is not always accurate.

- 3.2.4 Explanations of illusions: ambiguity, misinterpreted depth cues, fiction and size constancy.
- 3.2.4 Named illusions: the Ponzo, the Muller-Lyer, the rotating snakes, the Ames Room, the Kanizsa triangle and the Necker cube.
- 3.2.5 Gibson's direct theory: perception is bottom-up, using rich information directly from the environment.
- 3.2.5 Gregory's constructivist theory: perception is top-down, built using inference and prior knowledge.
- 3.2.5 Compare and evaluate the strengths and weaknesses of the two theories of perception.
- 3.2.6 Perceptual set: a tendency to perceive things in a certain way, shaped by past experience.
- 3.2.6 Factors affecting perceptual set: culture, motivation, emotion and expectation.
- 3.2.6 Gilchrist and Nesberg study of motivation (food deprivation) on perception.
- 3.2.6 Bruner and Minturn study of perceptual set (ambiguous figure interpreted by expectation).
- 3.2.7 Apply research methods to the study of perception, including the use of illusions and figures.

3. Development (3.3)

- 3.3.1 Early brain development before and just after birth, and the role of nature and nurture.
- 3.3.1 Brain development in the womb and in the first years; how genes and environment interact.
- 3.3.2 Piaget's theory: intellectual development happens in stages as children form and adjust schemas.
- 3.3.2 Assimilation (fitting new information into existing schemas) and accommodation (changing schemas).
- 3.3.2 Piaget's four stages: sensorimotor, pre-operational, concrete operational and formal operational.
- 3.3.2 Key features: object permanence, conservation, egocentrism and reversibility.
- 3.3.2 Piaget and Inhelder's three mountains study of egocentrism.
- 3.3.2 Piaget's conservation studies (number, volume, mass) and the appearance of conservation.
- 3.3.2 Hughes' policeman doll study showing egocentrism can be reduced with familiar tasks.
- 3.3.2 The application of Piaget's theory to education and how it changed teaching practice.
- 3.3.3 Dweck's mindset theory: fixed mindset versus growth mindset and the effect on learning.
- 3.3.3 The role of praise (effort versus ability) and self-efficacy in motivation and learning.
- 3.3.3 Willingham's learning theory: ideas about memory, practice and the limits of learning styles.
- 3.3.3 The role of learning styles and the lack of evidence that matching styles improves learning.
- 3.3.4 Apply research methods to the study of development, including studies with children.

4. Research methods (3.4)

- 3.4.1 Aims and testable hypotheses; difference between an aim and a hypothesis.
- 3.4.1 Directional (one-tailed) and non-directional (two-tailed) hypotheses, and when to use each.
- 3.4.1 Independent variable, dependent variable, operationalisation and the null hypothesis.
- 3.4.2 Population, sample, target population and the idea of representativeness and generalisation.
- 3.4.2 Sampling methods: random, opportunity, systematic and stratified, with strengths and weaknesses.
- 3.4.2 Sources of bias in sampling and how unrepresentative samples limit conclusions.
- 3.4.3 Experimental designs: independent groups, repeated measures and matched pairs.
- 3.4.3 Counterbalancing, randomisation and the use of control to deal with order effects and confounding variables.
- 3.4.3 Extraneous and confounding variables and how they reduce validity.

3.4.3	Designing observations: naturalistic vs controlled, covert vs overt, participant vs non-participant.
3.4.3	Behavioural categories, structured and unstructured observation, and inter-observer reliability.
3.4.3	Designing self-report: questionnaires and interviews (structured, unstructured); open and closed questions.
3.4.3	Writing good questions: avoiding leading questions, ambiguity and social desirability bias.
3.4.3	Case studies: in-depth study of one person or small group, with strengths and weaknesses.
3.4.3	Correlation: relationship between two co-variables; positive, negative and zero correlation.
3.4.3	Correlation does not show cause and effect; distinction between correlation and experiment.
3.4.4	Interpreting scatter graphs and correlation coefficients; recognising the strength and direction of a relationship.
3.4.5	Reliability as consistency; ways to assess and improve reliability (e.g. standardisation, test-retest).
3.4.5	Validity as measuring what was intended; internal and external (ecological) validity.
3.4.5	How extraneous variables, demand characteristics and investigator effects threaten validity.
3.4.6	Features of science: replicability, objectivity, and the use of empirical evidence.
3.4.7	Ethical issues: informed consent, deception, protection from harm, privacy, confidentiality and right to withdraw.
3.4.7	How psychologists deal with ethical issues, including the role of ethical guidelines and committees.
3.4.8	The use of computer-based technology to collect, present and analyse data in research.
3.4.9	Quantitative data (numerical) versus qualitative data (descriptive); primary versus secondary data.
3.4.9	Strengths and weaknesses of quantitative and qualitative data and their methods of collection.
3.4.10	Measures of central tendency: mean, median and mode, and when each is appropriate.
3.4.10	Measures of spread: the range, and an awareness of normal distribution.
3.4.10	Tables, frequency tables, and calculation of percentages, ratios and fractions.
3.4.10	Graphs and charts: bar charts, histograms, frequency diagrams and scatter graphs; choosing and drawing them correctly.
3.4.10	Estimating and interpreting results, and writing conclusions from data.
3.4.11	Arithmetic and numerical computation: decimals, fractions, percentages, ratios and standard form.
3.4.11	Significant figures, estimating results, and using an appropriate number of decimal places.
3.4.11	Handling data: order of magnitude calculations and interpreting mathematical symbols (=, <, >, much greater than).

5. Social influence (3.5)

3.5.1	Conformity: yielding to group pressure (majority influence) and changing behaviour to match others.
3.5.1	Asch's study of conformity using line judgements, and the level of conformity found.
3.5.1	Factors affecting conformity: group size, anonymity and task difficulty.
3.5.2	Obedience: following the direct orders of an authority figure.
3.5.2	Milgram's agency theory: people shift to an agentic state and act as agents of authority.
3.5.2	Factors affecting obedience: culture, authority, proximity and the use of uniform.
3.5.3	Bystander behaviour: factors that affect whether people help (or fail to help) others.
3.5.3	Influences on bystander intervention: presence of others, cost of helping, and similarity to victim.
3.5.3	Piliavin's subway study of bystander behaviour and the factors affecting helping.
3.5.4	Crowd and collective behaviour: how being in a crowd can change individual behaviour.

- 3.5.4 Deindividuation: loss of personal identity and reduced self-restraint in a crowd.
- 3.5.4 Pro-social and anti-social behaviour in crowds, and social loafing (reduced effort in groups).
- 3.5.5 Apply research methods to the study of social influence, including ethics of obedience research.

6. Language, thought and communication (3.6)

- 3.6.1 The possible relationship between language and thought, and how the two may be linked.
- 3.6.1 Piaget's view: language depends on (and reflects) thought, which develops first.
- 3.6.1 The Sapir-Whorf hypothesis: language determines or influences thought (linguistic relativity).
- 3.6.1 Variation in recall of events and recognition of colours as evidence about language and thought.
- 3.6.1 Von Frisch's bee study and the dance as a system of animal communication.
- 3.6.2 How language and thought shape our view of the world, including how words affect perception.
- 3.6.3 Differences between human and animal communication and the features that make human language unique.
- 3.6.3 Limited functions of animal communication: survival, reproduction, territory and food.
- 3.6.4 Non-verbal communication: communicating without words through body language.
- 3.6.4 Functions and forms of eye contact: regulating flow, signalling attraction and expressing emotion.
- 3.6.4 Body language: open and closed posture, postural echo and touch.
- 3.6.4 Personal space and the factors affecting it: culture, status and sex differences.
- 3.6.5 Non-verbal behaviour as innate: evolutionary value, neonate (newborn) behaviour and findings in non-human primates.
- 3.6.5 Yuki's study of emoticons and the cross-cultural interpretation of facial expressions.
- 3.6.5 Non-verbal behaviour as learned: cross-cultural differences and the role of nurture.
- 3.6.6 Apply research methods to the study of language, thought and communication.

7. Brain and neuropsychology (3.7)

- 3.7.1 Divisions of the nervous system: central (brain and spinal cord) and peripheral nervous systems.
- 3.7.1 Autonomic nervous system and somatic nervous system, and their roles.
- 3.7.1 The function of the nervous system in coordinating behaviour and responding to the environment.
- 3.7.2 Types of neuron: sensory, relay and motor neurons, and their roles.
- 3.7.2 Structure of a neuron: cell body, dendrites, axon, myelin sheath and terminal buttons.
- 3.7.2 Synaptic transmission: the synapse, neurotransmitters and how messages pass between neurons.
- 3.7.3 The autonomic nervous system: sympathetic and parasympathetic branches.
- 3.7.3 The fight or flight response, the role of adrenaline and physical changes in the body.
- 3.7.3 James-Lange theory of emotion: physical arousal comes first and emotion follows.
- 3.7.4 The structure and function of the brain, including the four lobes of the cerebral cortex.
- 3.7.4 Functions of the cerebellum (balance and movement) and other key structures.
- 3.7.4 Localisation of function: the idea that specific areas of the brain do specific jobs.
- 3.7.5 Neuropsychology: the study of how brain structure and function relate to behaviour.
- 3.7.5 Hemispheric lateralisation: the two hemispheres have different functions and control opposite sides.
- 3.7.5 Penfield's study of the interpretive cortex using electrical stimulation of the brain.

- 3.7.6 Brain-scanning techniques to study brain function, including CAT, PET and fMRI scans.
- 3.7.6 Strengths and weaknesses of scanning techniques for investigating the brain.
- 3.7.6 Tulving's gold memory study using PET scans to locate types of long-term memory.
- 3.7.7 Apply research methods to the study of the brain and neuropsychology.

8. Psychological problems (3.8)

- 3.8.1 What is meant by mental health and the idea that it sits on a continuum.
- 3.8.1 Changing attitudes to mental health over time and increasing recognition of mental health problems.
- 3.8.1 Incidence of significant mental health problems and how this changes over time and across cultures.
- 3.8.1 The effects of mental health problems on individuals (e.g. damage to relationships, difficulty coping at work).
- 3.8.1 The effects of mental health problems on society (e.g. need for care, cost, less productivity).
- 3.8.1 Reasons for the increase in mental health problems, including the challenges of modern living and a lessening of social stigma.
- 3.8.2 Characteristics of clinical depression as defined by the International Classification of Diseases (ICD).
- 3.8.2 Symptoms of unipolar depression: low mood, loss of interest, sleep and appetite changes, and effects on behaviour.
- 3.8.3 Theories of depression: the biological explanation, including the role of low levels of serotonin.
- 3.8.3 Theories of depression: the psychological explanation, including negative schemas and attributions.
- 3.8.4 Interventions/therapies for depression: the use of antidepressant medication (biological treatment).
- 3.8.4 Interventions/therapies for depression: cognitive behavioural therapy (CBT) as a psychological treatment.
- 3.8.4 Wiles' study of the effectiveness of CBT alongside medication in treating depression.
- 3.8.5 Characteristics of addiction and the symptoms of dependence on a substance.
- 3.8.5 Addiction to nicotine as an example, and the features that define an addiction.
- 3.8.6 Theories of addiction: the genetic explanation, including hereditary factors and vulnerability.
- 3.8.6 Theories of addiction: the learning (peer-related) explanation, including social learning and reinforcement.
- 3.8.6 Kaij's twin study of the genetic basis of alcohol abuse.
- 3.8.7 Interventions/therapies for addiction: aversion therapy as a behavioural treatment.
- 3.8.7 Interventions/therapies for addiction: self-management programmes as a way to overcome addiction.
- 3.8.8 Apply research methods to the study of psychological problems, including the ethics of researching mental health.