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# AS AND A-LEVEL PSYCHOLOGY

AS (7181)  
A-level (7182)

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## Specifications

For teaching from September 2015 onwards  
For AS exams in May/June 2016 onwards  
For A-level exams in May/June 2017 onwards

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Version 1.0 13 October 2014



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## Are you using the latest version of these specifications?

- You will always find the most up-to-date version of these specifications on our website at [aqa.org.uk/7182](https://www.aqa.org.uk/7182)
- We will write to you if there are significant changes to these specifications.

# 1 Introduction

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## 1.1 Why choose AQA for AS and A-level Psychology

### Relevant content designed by experts

These qualifications offers an engaging and effective introduction to psychology. Students will learn the fundamentals of the subject and develop skills valued by Higher Education (HE) and employers, including critical analysis, independent thinking and research.

Retaining the most popular features of our previous, market-leading qualifications, we have worked with teachers, HE and the British Psychological Society to produce clear, up-to-date and stimulating specifications. We have built on the success of our previous specifications by introducing some minor amendments that reflect advances and changes in the subject and provide a coherent and holistic programme of study.

### The biggest teaching community

We are the most popular choice for AS and A-level Psychology and by choosing our specification you will be part of the country's largest community of psychology teachers and have access to the widest network of support to help your teaching.

### Content continuity

Our focus for these new qualifications has been on providing continuity for teachers. You will see many familiar and popular topics from our previous specifications which include:

- approaches and methods related to the core areas of psychology – cognitive, social, biological, developmental, individual differences and research methods are all retained and delivered through content similar to the previous specifications
- explanations from different approaches, along with psychological issues and debates, are retained
- A-level students can choose from a range of attractive topic options which have been arranged to help teachers to teach to their strengths and at the same time ensure that their students experience an interesting, diverse and coherent course of study, regardless of which topics they choose.

### Trusted assessment

Our assessments continue to employ a variety of familiar types of question such as multiple choice, short answer and extended writing/essays, which target the skills of knowledge and understanding, application and evaluation.

Students' understanding of research methods, gained through classroom experience of practical psychology, will be assessed using the familiar scenario-based question style and research methods questions embedded in topics.

### Co-teachability of AS and A-level

We have designed the AS and A-level specifications to cover the core areas of psychology and be fully co-teachable within the first year of study. We know this will help teachers with resourcing and timetabling and will also allow students to switch between AS and A-level during the first year if they wish.

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## Progression

Our specifications will appeal to a cross-section of students, regardless of whether they have studied the subject before. It builds on skills developed in the sciences and humanities, and enables progression into a wide range of other subjects.

You can find out about all our psychology qualifications at [aqa.org.uk/psychology](https://www.aqa.org.uk/psychology)

## 1.2 Support and resources to help you teach

We know that support and resources are vital for your teaching and that you have limited time to find or develop good quality materials. So we've worked with experienced teachers to provide you with a range of resources that will help you confidently plan, teach and prepare for exams.

### Teaching resources

We have too many psychology resources to list here so visit [aqa.org.uk/7182](https://www.aqa.org.uk/7182) to see them all.

They include:

- flexible sample schemes of work to help you plan for course delivery in your own way
- individual lesson plans on specific topic areas to assist you in providing continuity and progression in teaching
- specimen assessment materials that will give your students a clear idea as to what is expected in the examinations
- a range of student textbooks from AQA approved publishers
- example practical activities for research methods (teachers should ensure that the British Psychological Societies Code of Ethics and Conduct is followed in any practical research activity. This can be found on the British Psychological Societies website [www.bps.org.uk](https://www.bps.org.uk))
- training courses to help you deliver AQA psychology qualifications
- subject expertise courses for all teachers, from newly qualified teachers who are just getting started to experienced teachers looking for fresh inspiration.

### Preparing for exams

Visit [aqa.org.uk/7182](https://www.aqa.org.uk/7182) for everything you need to prepare for our exams, including:

- past papers, mark schemes and examiners' reports
- specimen papers and mark schemes for new courses
- Exampro: a searchable bank of past AQA exam questions
- exemplar student answers with examiner commentaries.

### Analyse your students' results with Enhanced Results Analysis (ERA)

Find out which questions were the most challenging, how the results compare to previous years and where your students need to improve. ERA, our free online results analysis tool, will help you see where to focus your teaching. Register at [aqa.org.uk/era](https://www.aqa.org.uk/era)

For information about results, including maintaining standards over time, grade boundaries and our post-results services, visit [aqa.org.uk/results](https://www.aqa.org.uk/results)

## Keep your skills up to date with professional development

Wherever you are in your career, there's always something new to learn. As well as subject-specific training, we offer a range of courses to help boost your skills.

- Improve your teaching skills in areas including differentiation, teaching literacy and meeting Ofsted requirements.
- Prepare for a new role with our leadership and management courses.

You can attend a course at venues around the country, in your school or online – whatever suits your needs and availability. Find out more at [coursesandevents.aqa.org.uk](https://coursesandevents.aqa.org.uk)

### Get help and support

Visit our website for information, guidance, support and resources at [aqa.org.uk/7182](https://aqa.org.uk/7182)

You can talk directly to the Psychology subject team

E: [psychology@aca.org.uk](mailto:psychology@aca.org.uk)

T: 01483 477 822

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# 2 Specification at a glance

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These qualifications are linear. Linear means that students will sit all the AS exams at the end of their AS course and all the A-level exams at the end of their A-level course.

## 2.1 AS

### Subject content

- 1 [Social influence](#) (page 12)
- 2 [Memory](#) (page 13)
- 3 [Attachment](#) (page 13)
- 4 [Approaches in psychology](#) (page 14)
- 5 [Psychopathology](#) (page 14)
- 6 [Research methods](#) (page 14)

## Assessments

Paper 1: Introductory topics in psychology	+	Paper 2: Psychology in context
<p><b>What's assessed</b></p> <p>Compulsory content 1–3 above</p>		<p><b>What's assessed</b></p> <p>Compulsory content 4–6 above</p>
<p><b>Assessed</b></p> <ul style="list-style-type: none"> <li>• written exam: 1 hour 30 minutes</li> <li>• 72 marks in total</li> <li>• 50% of AS</li> </ul>		<p><b>Assessed</b></p> <ul style="list-style-type: none"> <li>• written exam: 1 hour 30 minutes</li> <li>• 72 marks in total</li> <li>• 50% of AS</li> </ul>
<p><b>Questions</b></p> <ul style="list-style-type: none"> <li>• Section A: multiple choice, short answer and extended writing, 24 marks</li> <li>• Section B: multiple choice, short answer and extended writing, 24 marks</li> <li>• Section C: multiple choice, short answer and extended writing, 24 marks</li> </ul>		<p><b>Questions</b></p> <ul style="list-style-type: none"> <li>• Section A: multiple choice, short answer and extended writing, 24 marks</li> <li>• Section B: multiple choice, short answer and extended writing, 24 marks</li> <li>• Section C: multiple choice, short answer and extended writing, 24 marks</li> </ul>



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## 2.2 A-level

### Subject content

#### Compulsory content

- 1 [Social influence](#) (page 16)
- 2 [Memory](#) (page 17)
- 3 [Attachment](#) (page 17)
- 4 [Psychopathology](#) (page 17)
- 5 [Approaches in psychology](#) (page 18)
- 6 [Biopsychology](#) (page 19)
- 7 [Research methods](#) (page 19)
- 8 [Issues and debates in psychology](#) (page 21)

#### Optional

##### Option 1

- 9 [Relationships](#) (page 22)
- 10 [Gender](#) (page 22)
- 11 [Cognition and development](#) (page 22)

##### Option 2

- 12 [Schizophrenia](#) (page 23)
- 13 [Eating behaviour](#) (page 23)
- 14 [Stress](#) (page 23)

##### Option 3

- 15 [Aggression](#) (page 24)
- 16 [Forensic psychology](#) (page 24)
- 17 [Addiction](#) (page 24)

## Assessments

Paper 1: Introductory topics in psychology	+	Paper 2: Psychology in context	+	Paper 3: Issues and options in psychology
<p><b>What's assessed</b></p> <p>Compulsory content 1–4 above</p>		<p><b>What's assessed</b></p> <p>Compulsory content 5–7 above</p>		<p><b>What's assessed</b></p> <p>Compulsory content 8 above</p> <p>Optional content, one from option 1, 9–11, one from option 2, 12–14, one from option 3, 15–17 above</p>
<p><b>Assessed</b></p> <ul style="list-style-type: none"> <li>written exam: 2 hours</li> <li>96 marks in total</li> <li>33.3% of A-level</li> </ul>		<p><b>Assessed</b></p> <ul style="list-style-type: none"> <li>written exam: 2 hours</li> <li>96 marks in total</li> <li>33.3% of A-level</li> </ul>		<p><b>Assessed</b></p> <ul style="list-style-type: none"> <li>written exam: 2 hours</li> <li>96 marks in total</li> <li>33.3% of A-level</li> </ul>
<p><b>Questions</b></p> <ul style="list-style-type: none"> <li>Section A: multiple choice, short answer and extended writing, 24 marks</li> <li>Section B: multiple choice, short answer and extended writing, 24 marks</li> <li>Section C: multiple choice, short answer and extended writing, 24 marks</li> <li>Section D: multiple choice, short answer and extended writing, 24 marks</li> </ul>		<p><b>Questions</b></p> <ul style="list-style-type: none"> <li>Section A: multiple choice, short answer and extended writing, 24 marks</li> <li>Section B: multiple choice, short answer and extended writing, 24 marks</li> <li>Section C: multiple choice, short answer and extended writing, 48 marks</li> </ul>		<p><b>Questions</b></p> <ul style="list-style-type: none"> <li>Section A: multiple choice, short answer and extended writing, 24 marks</li> <li>Section B: one topic from option 1, 9–11 above, multiple choice, short answer and extended writing, 24 marks</li> <li>Section C: one topic from option 2, 12–14 above, multiple choice, short answer and extended writing, 24 marks</li> <li>Section D: one topic from option 3, 15–17 above, multiple choice, short answer and extended writing, 24 marks</li> </ul>

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# 3 Subject content – AS

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## 3.1 Introductory topics in psychology

Students will be expected to:

- demonstrate knowledge and understanding of psychological concepts, theories, research studies, research methods and ethical issues in relation to the specified Paper 1 content
- apply psychological knowledge and understanding of the specified Paper 1 content in a range of contexts
- analyse, interpret and evaluate psychological concepts, theories, research studies and research methods in relation to the specified Paper 1 content
- evaluate therapies and treatments including in terms of their appropriateness and effectiveness.

Knowledge and understanding of research methods, practical research skills and mathematical skills (see Annex: [Mathematical requirements and exemplifications](#) (page 31)) will be assessed in Paper 1. These skills should be developed through study of the specification content and through ethical practical research activities, involving:

- designing research
- conducting research
- analysing and interpreting data.

In carrying out practical research activities, students will manage associated risks and use information and communication technology (ICT).

### 3.1.1 Social influence

- Types of conformity: internalisation, identification and compliance. Explanations for conformity: informational social influence and normative social influence, and variables affecting conformity including group size, unanimity and task difficulty as investigated by Asch.
- Conformity to social roles as investigated by Zimbardo.
- Explanations for obedience: agentic state and legitimacy of authority, and situational variables affecting obedience including proximity, location and uniform, as investigated by Milgram. Dispositional explanation for obedience: the Authoritarian Personality.
- Explanations of resistance to social influence, including social support and locus of control.
- Minority influence including reference to consistency, commitment and flexibility.
- The role of social influence processes in social change.

### 3.1.2 Memory

- The multi-store model of memory: sensory register, short-term memory and long-term memory. Features of each store: coding, capacity and duration.
- Types of long-term memory: episodic, semantic, procedural.
- The working memory model: central executive, phonological loop, visuo-spatial sketchpad and episodic buffer. Features of the model: coding and capacity.
- Explanations for forgetting: proactive and retroactive interference and retrieval failure due to absence of cues.
- Factors affecting the accuracy of eyewitness testimony: misleading information, including leading questions and post-event discussion; anxiety.
- Improving the accuracy of eyewitness testimony, including the use of the cognitive interview.

### 3.1.3 Attachment

- Caregiver-infant interactions in humans: reciprocity and interactional synchrony. Stages of attachment identified by Schaffer. Multiple attachments and the role of the father.
- Animal studies of attachment: Lorenz and Harlow.
- Explanations of attachment: learning theory and Bowlby's monotropic theory. The concepts of a critical period and an internal working model.
- Ainsworth's 'Strange Situation'. Types of attachment: secure, insecure-avoidant and insecure-resistant. Cultural variations in attachment, including van Ijzendoorn.
- Bowlby's theory of maternal deprivation. Romanian orphan studies: effects of institutionalisation.
- The influence of early attachment on childhood and adult relationships, including the role of an internal working model.

## 3.2 Psychology in context

Students will be expected to:

- demonstrate knowledge and understanding of psychological concepts, theories, research studies, research methods and ethical issues in relation to the specified Paper 2 content
- apply psychological knowledge and understanding of the specified Paper 2 content in a range of contexts
- analyse, interpret and evaluate psychological concepts, theories, research studies and research methods in relation to the specified Paper 2 content
- evaluate therapies and treatments including in terms of their appropriateness and effectiveness.

Knowledge and understanding of research methods, practical research skills and mathematical skills (see Annex: [Mathematical requirements and exemplifications](#) (page 31)) will be assessed in Paper 2. These skills should be developed through study of the specification content and through ethical practical research activities, involving:

- designing research
- conducting research
- analysing and interpreting data.

In carrying out practical research activities, students will manage associated risks and use information and communication technology (ICT).

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## 3.2.1 Approaches in psychology

Origins of psychology: Wundt, introspection and the emergence of psychology as a science.

The basic assumptions of the following approaches:

- Learning approaches: the behaviourist approach, including classical conditioning and Pavlov's research, operant conditioning, types of reinforcement and Skinner's research; social learning theory including imitation, identification, modelling, vicarious reinforcement, the role of mediational processes and Bandura's research.
- The cognitive approach: the study of internal mental processes, the role of schema, the use of theoretical and computer models to explain and make inferences about mental processes. The emergence of cognitive neuroscience.
- The biological approach: the influence of genes, biological structures and neurochemistry on behaviour. Genotype and phenotype, genetic basis of behaviour, evolution and behaviour.

### 3.2.1.1 Biopsychology

- 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.

## 3.2.2 Psychopathology

- Definitions of abnormality, including deviation from social norms, failure to function adequately, statistical infrequency and deviation from ideal mental health.
- The behavioural, emotional and cognitive characteristics of phobias, depression and obsessive-compulsive disorder (OCD).
- The behavioural approach to explaining and treating phobias: the two-process model, including classical and operant conditioning; systematic desensitisation, including relaxation and use of hierarchy; flooding.
- The cognitive approach to explaining and treating depression: Beck's negative triad and Ellis's ABC model; cognitive behaviour therapy (CBT), including challenging irrational thoughts.
- The biological approach to explaining and treating OCD: genetic and neural explanations; drug therapy.

## 3.2.3 Research methods

Students should demonstrate knowledge and understanding of the following research methods, scientific processes and techniques of data handling and analysis, be familiar with their use and be aware of their strengths and limitations:

- Experimental method. Types of experiment, laboratory and field experiments; natural and quasi-experiments.
- Observational techniques. Types of observation: naturalistic and controlled observation; covert and overt observation; participant and non-participant observation.
- Self-report techniques. Questionnaires; interviews, structured and unstructured.
- Correlations. Analysis of the relationship between co-variables. The difference between correlations and experiments.

### 3.2.3.1 Scientific processes

- Aims: stating aims, the difference between aims and hypotheses.
- Hypotheses: directional and non-directional.
- Sampling: the difference between population and sample; sampling techniques including: random, systematic, stratified, opportunity and volunteer; implications of sampling techniques, including bias and generalisation.
- Pilot studies and the aims of piloting.
- Experimental designs: repeated measures, independent groups, matched pairs.
- Observational design: behavioural categories; event sampling; time sampling.
- Questionnaire construction, including use of open and closed questions; design of interviews.
- Variables: manipulation and control of variables, including independent, dependent, extraneous, confounding; operationalisation of variables.
- Control: random allocation and counterbalancing, randomisation and standardisation.
- Demand characteristics and investigator effects.
- Ethics, including the role of the British Psychological Society's code of ethics; ethical issues in the design and conduct of psychological studies; dealing with ethical issues in research.
- The role of peer review in the scientific process.
- The implications of psychological research for the economy.

### 3.2.3.2 Data handling and analysis

- Quantitative and qualitative data; the distinction between qualitative and quantitative data collection techniques.
- Primary and secondary data, including meta-analysis.
- Descriptive statistics: measures of central tendency – mean, median, mode; calculation of mean, median and mode; measures of dispersion; range and standard deviation; calculation of range; calculation of percentages; positive, negative and zero correlations.
- Presentation and display of quantitative data: graphs, tables, scattergrams, bar charts.
- Distributions: normal and skewed distributions; characteristics of normal and skewed distributions.
- Introduction to statistical testing; the sign test.

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# 4 Subject content – A-level

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## 4.1 Introductory topics in psychology

Students will be expected to:

- demonstrate knowledge and understanding of psychological concepts, theories, research studies, research methods and ethical issues in relation to the specified Paper 1 content
- apply psychological knowledge and understanding of the specified Paper 1 content in a range of contexts
- analyse, interpret and evaluate psychological concepts, theories, research studies and research methods in relation to the specified Paper 1 content
- evaluate therapies and treatments including in terms of their appropriateness and effectiveness.

Knowledge and understanding of research methods, practical research skills and mathematical skills (see Annex: [Mathematical requirements and exemplifications](#) (page 33)) will be assessed in Paper 1. These skills should be developed through study of the specification content and through ethical practical research activities, involving:

- designing research
- conducting research
- analysing and interpreting data.

In carrying out practical research activities, students will manage associated risks and use information and communication technology (ICT).

### 4.1.1 Social influence

- Types of conformity: internalisation, identification and compliance. Explanations for conformity: informational social influence and normative social influence, and variables affecting conformity including group size, unanimity and task difficulty as investigated by Asch.
- Conformity to social roles as investigated by Zimbardo.
- Explanations for obedience: agentic state and legitimacy of authority, and situational variables affecting obedience including proximity, location and uniform, as investigated by Milgram. Dispositional explanation for obedience: the Authoritarian Personality.
- Explanations of resistance to social influence, including social support and locus of control.
- Minority influence including reference to consistency, commitment and flexibility.
- The role of social influence processes in social change.

## 4.1.2 Memory

- The multi-store model of memory: sensory register, short-term memory and long-term memory. Features of each store: coding, capacity and duration.
- Types of long-term memory: episodic, semantic, procedural.
- The working memory model: central executive, phonological loop, visuo-spatial sketchpad and episodic buffer. Features of the model: coding and capacity.
- Explanations for forgetting: proactive and retroactive interference and retrieval failure due to absence of cues.
- Factors affecting the accuracy of eyewitness testimony: misleading information, including leading questions and post-event discussion; anxiety.
- Improving the accuracy of eyewitness testimony, including the use of the cognitive interview.

## 4.1.3 Attachment

- Caregiver-infant interactions in humans: reciprocity and interactional synchrony. Stages of attachment identified by Schaffer. Multiple attachments and the role of the father.
- Animal studies of attachment: Lorenz and Harlow.
- Explanations of attachment: learning theory and Bowlby's monotropic theory. The concepts of a critical period and an internal working model.
- Ainsworth's 'Strange Situation'. Types of attachment: secure, insecure-avoidant and insecure-resistant. Cultural variations in attachment, including van Ijzendoorn.
- Bowlby's theory of maternal deprivation. Romanian orphan studies: effects of institutionalisation.
- The influence of early attachment on childhood and adult relationships, including the role of an internal working model.

## 4.1.4 Psychopathology

- Definitions of abnormality, including deviation from social norms, failure to function adequately, statistical infrequency and deviation from ideal mental health.
- The behavioural, emotional and cognitive characteristics of phobias, depression and obsessive-compulsive disorder (OCD).
- The behavioural approach to explaining and treating phobias: the two-process model, including classical and operant conditioning; systematic desensitisation, including relaxation and use of hierarchy; flooding.
- The cognitive approach to explaining and treating depression: Beck's negative triad and Ellis's ABC model; cognitive behaviour therapy (CBT), including challenging irrational thoughts.
- The biological approach to explaining and treating OCD: genetic and neural explanations; drug therapy.



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## 4.2 Psychology in context

Students will be expected to:

- demonstrate knowledge and understanding of psychological concepts, theories, research studies, research methods and ethical issues in relation to the specified Paper 2 content
- apply psychological knowledge and understanding of the specified Paper 2 content in a range of contexts
- analyse, interpret and evaluate psychological concepts, theories, research studies and research methods in relation to the specified Paper 2 content
- evaluate therapies and treatments including in terms of their appropriateness and effectiveness.

Knowledge and understanding of research methods, practical research skills and mathematical skills (see Annex: [Mathematical requirements and exemplifications](#) (page 33)) will be assessed in Paper 2. These skills should be developed through study of the specification content and through ethical practical research activities, involving:

- designing research
- conducting research
- analysing and interpreting data.

In carrying out practical research activities, students will manage associated risks and use information and communication technology (ICT).

### 4.2.1 Approaches in psychology

Origins of psychology: Wundt, introspection and the emergence of psychology as a science.

The basic assumptions of the following approaches:

- Learning approaches: the behaviourist approach, including classical conditioning and Pavlov's research, operant conditioning, types of reinforcement and Skinner's research; social learning theory including imitation, identification, modelling, vicarious reinforcement, the role of mediational processes and Bandura's research.
- The cognitive approach: the study of internal mental processes, the role of schema, the use of theoretical and computer models to explain and make inferences about mental processes. The emergence of cognitive neuroscience.
- The biological approach: the influence of genes, biological structures and neurochemistry on behaviour. Genotype and phenotype, genetic basis of behaviour, evolution and behaviour.
- The psychodynamic approach: the role of the unconscious, the structure of personality, that is ID, ego and superego, defence mechanisms including repression, denial and displacement, psychosexual stages.
- Humanistic psychology: free will, self-actualisation and Maslow's hierarchy of needs, focus on the self, congruence, the role of conditions of worth. The influence on counselling psychology.
- Comparison of approaches.

## 4.2.2 Biopsychology

- 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.

## 4.2.3 Research methods

Students should demonstrate knowledge and understanding of the following research methods, scientific processes and techniques of data handling and analysis, be familiar with their use and be aware of their strengths and limitations.

- Experimental method. Types of experiment, laboratory and field experiments; natural and quasi-experiments.
- Observational techniques. Types of observation: naturalistic and controlled observation; covert and overt observation; participant and non-participant observation.
- Self-report techniques. Questionnaires; interviews, structured and unstructured.
- Correlations. Analysis of the relationship between co-variables. The difference between correlations and experiments.
- Content analysis.
- Case studies.

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### 4.2.3.1 Scientific processes

- Aims: stating aims, the difference between aims and hypotheses.
- Hypotheses: directional and non-directional.
- Sampling: the difference between population and sample; sampling techniques including: random, systematic, stratified, opportunity and volunteer; implications of sampling techniques, including bias and generalisation.
- Pilot studies and the aims of piloting.
- Experimental designs: repeated measures, independent groups, matched pairs.
- Observational design: behavioural categories; event sampling; time sampling.
- Questionnaire construction, including use of open and closed questions; design of interviews.
- Variables: manipulation and control of variables, including independent, dependent, extraneous, confounding; operationalisation of variables.
- Control: random allocation and counterbalancing, randomisation and standardisation.
- Demand characteristics and investigator effects.
- Ethics, including the role of the British Psychological Society's code of ethics; ethical issues in the design and conduct of psychological studies; dealing with ethical issues in research.
- The role of peer review in the scientific process.
- The implications of psychological research for the economy.
- Reliability across all methods of investigation. Ways of assessing reliability: test-retest and inter-observer; improving reliability.
- Types of validity across all methods of investigation: face validity, concurrent validity, ecological validity and temporal validity. Assessment of validity. Improving validity.
- Features of science: objectivity and the empirical method; replicability and falsifiability; theory construction and hypothesis testing; paradigms and paradigm shifts.
- Reporting psychological investigations. Sections of a scientific report: abstract, introduction, method, results, discussion and referencing.

### 4.2.3.2 Data handling and analysis

- Quantitative and qualitative data; the distinction between qualitative and quantitative data collection techniques.
- Primary and secondary data, including meta-analysis.
- Descriptive statistics: measures of central tendency – mean, median, mode; calculation of mean, median and mode; measures of dispersion; range and standard deviation; calculation of range; calculation of percentages; positive, negative and zero correlations.
- Presentation and display of quantitative data: graphs, tables, scattergrams, bar charts, histograms.
- Distributions: normal and skewed distributions; characteristics of normal and skewed distributions.
- Analysis and interpretation of correlation, including correlation coefficients.
- Levels of measurement: nominal, ordinal and interval.
- Content analysis and coding. Thematic analysis.

### 4.2.3.3 Inferential testing

Students should demonstrate knowledge and understanding of inferential testing and be familiar with the use of inferential tests.

- Introduction to statistical testing; the sign test.
- Probability and significance: use of statistical tables and critical values in interpretation of significance; Type I and Type II errors.
- Factors affecting the choice of statistical test, including level of measurement and experimental design. When to use the following tests: Spearman's rho, Pearson's r, Wilcoxon, Mann-Whitney, related t-test, unrelated t-test and Chi-Squared test.

## 4.3 Issues and options in psychology

Students will be expected to:

- demonstrate knowledge and understanding of psychological concepts, theories, research studies, research methods and ethical issues in relation to the specified Paper 3 content
- apply psychological knowledge and understanding of the specified Paper 3 content in a range of contexts
- analyse, interpret and evaluate psychological concepts, theories, research studies and research methods in relation to the specified Paper 3 content
- evaluate therapies and treatments including in terms of their appropriateness and effectiveness.

Knowledge and understanding of research methods, practical research skills and mathematical skills (see Annex: [Mathematical requirements and exemplifications](#) (page 33)) will be assessed in Paper 3. These skills should be developed through study of the specification content and through ethical practical research activities, involving:

- designing research
- conducting research
- analysing and interpreting data.

In answering questions on Issues and debates in psychology students will be expected to illustrate their answers with knowledge and understanding of topics studied elsewhere in the specification as appropriate.

In carrying out practical research activities, students will manage associated risks and use information and communication technology (ICT).

### 4.3.1 Issues and debates in psychology

- Gender and culture in psychology – universality and bias. Gender bias including androcentrism and alpha and beta bias; cultural bias, including ethnocentrism and cultural relativism.
- Free will and determinism: hard determinism and soft determinism; biological, environmental and psychic determinism. The scientific emphasis on causal explanations.
- The nature-nurture debate: the relative importance of heredity and environment in determining behaviour; the interactionist approach.
- Holism and reductionism: levels of explanation in psychology. Biological reductionism and environmental (stimulus-response) reductionism.
- Idiographic and nomothetic approaches to psychological investigation.
- Ethical implications of research studies and theory, including reference to social sensitivity.

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### 4.3.2 Relationships

- The evolutionary explanations for partner preferences, including the relationship between sexual selection and human reproductive behaviour.
- Factors affecting attraction in romantic relationships: self-disclosure; physical attractiveness, including the matching hypothesis; filter theory, including social demography, similarity in attitudes and complementarity.
- Theories of romantic relationships: social exchange theory, equity theory and Rusbult's investment model of commitment, satisfaction, comparison with alternatives and investment. Duck's phase model of relationship breakdown: intra-psychic, dyadic, social and grave dressing phases.
- Virtual relationships in social media: self-disclosure in virtual relationships; effects of absence of gating on the nature of virtual relationships.
- Parasocial relationships: levels of parasocial relationships, the absorption addiction model and the attachment theory explanation.

### 4.3.3 Gender

- Sex and gender. Sex-role stereotypes. Androgyny and measuring androgyny including the Bem Sex Role Inventory.
- The role of chromosomes and hormones (testosterone, oestrogen and oxytocin) in sex and gender. Atypical sex chromosome patterns: Klinefelter's syndrome and Turner's syndrome.
- Cognitive explanations of gender development, Kohlberg's theory, gender identity, gender stability and gender constancy; gender schema theory.
- Psychodynamic explanation of gender development, Freud's psychoanalytic theory, Oedipus complex; Electra complex; identification and internalisation.
- Social learning theory as applied to gender development. The influence of culture and media on gender roles.
- Atypical gender development: gender identity disorder; biological and social explanations for gender identity disorder.

### 4.3.4 Cognition and development

- Piaget's theory of cognitive development: schemas, assimilation, accommodation, equilibration, stages of intellectual development. Characteristics of these stages, including object permanence, conservation, egocentrism and class inclusion.
- Vygotsky's theory of cognitive development, including the zone of proximal development and scaffolding.
- Baillargeon's explanation of early infant abilities, including knowledge of the physical world; violation of expectation research.
- The development of social cognition: Selman's levels of perspective-taking; theory of mind, including theory of mind as an explanation for autism; the Sally-Anne study. The role of the mirror neuron system in social cognition.

### 4.3.5 Schizophrenia

- Classification of schizophrenia. Positive symptoms of schizophrenia, including hallucinations and delusions. Negative symptoms of schizophrenia, including speech poverty and avolition. Reliability and validity in diagnosis and classification of schizophrenia, including reference to co-morbidity, culture and gender bias and symptom overlap.
- Biological explanations for schizophrenia: genetics, the dopamine hypothesis and neural correlates.
- Psychological explanations for schizophrenia: family dysfunction and cognitive explanations, including dysfunctional thought processing.
- Drug therapy: typical and atypical antipsychotics.
- Cognitive behaviour therapy and family therapy as used in the treatment of schizophrenia. Token economies as used in the management of schizophrenia.
- The importance of an interactionist approach in explaining and treating schizophrenia; the diathesis-stress model.

### 4.3.6 Eating behaviour

- Explanations for food preferences: the evolutionary explanation, including reference to neophobia and taste aversion; the role of learning in food preference, including social and cultural influences.
- Neural and hormonal mechanisms involved in the control of eating behaviour, including the role of the hypothalamus, ghrelin and leptin.
- Biological explanations for anorexia nervosa, including genetic and neural explanations.
- Psychological explanations for anorexia nervosa: family systems theory, including enmeshment, autonomy and control; social learning theory, including modelling, reinforcement and media; cognitive theory, including distortions and irrational beliefs.
- Biological explanations for obesity, including genetic and neural explanations.
- Psychological explanations for obesity, including restraint theory, disinhibition and the boundary model. Explanations for the success and failure of dieting.

### 4.3.7 Stress

- The physiology of stress, including general adaptation syndrome, the hypothalamic pituitary-adrenal system, the sympathomedullary pathway and the role of cortisol.
- The role of stress in illness, including reference to immunosuppression and cardiovascular disorders.
- Sources of stress: life changes and daily hassles. Workplace stress, including the effects of workload and control.
- Measuring stress: self-report scales (Social Readjustment Ratings Scale and Hassles and Uplifts Scale) and physiological measures, including skin conductance response.
- Individual differences in stress: personality types A, B and C and associated behaviours; hardiness, including commitment, challenge and control.
- Managing and coping with stress: drug therapy (benzodiazepines, beta blockers), stress inoculation therapy and biofeedback. Gender differences in coping with stress. The role of social support in coping with stress; types of social support, including instrumental, emotional and esteem support.

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### 4.3.8 Aggression

- Neural and hormonal mechanisms in aggression, including the roles of the limbic system, serotonin and testosterone. Genetic factors in aggression, including the MAOA gene.
- The ethological explanation of aggression, including reference to innate releasing mechanisms and fixed action patterns. Evolutionary explanations of human aggression.
- Social psychological explanations of human aggression, including the frustration-aggression hypothesis, social learning theory as applied to human aggression, and de-individuation.
- Institutional aggression in the context of prisons: dispositional and situational explanations.
- Media influences on aggression, including the effects of computer games. The role of desensitisation, disinhibition and cognitive priming.

### 4.3.9 Forensic psychology

- Problems in defining crime. Ways of measuring crime, including official statistics, victim surveys and offender surveys.
- Offender profiling: the top-down approach, including organised and disorganised types of offender; the bottom-up approach, including investigative Psychology; geographical profiling.
- Biological explanations of offending behaviour: an historical approach (atavistic form); genetics and neural explanations.
- Psychological explanations of offending behaviour: Eysenck's theory of the criminal personality; cognitive explanations; level of moral reasoning and cognitive distortions, including hostile attribution bias and minimalisation; differential association theory; psychodynamic explanations.
- Dealing with offending behaviour: the aims of custodial sentencing and the psychological effects of custodial sentencing. Recidivism. Behaviour modification in custody. Anger management and restorative justice programmes.

### 4.3.10 Addiction

- Describing addiction: physical and psychological dependence, tolerance and withdrawal syndrome.
- Risk factors in the development of addiction, including genetic vulnerability, stress, personality, family influences and peers.
- Explanations for nicotine addiction: brain neurochemistry, including the role of dopamine, and learning theory as applied to smoking behaviour, including reference to cue reactivity.
- Explanations for gambling addiction: learning theory as applied to gambling, including reference to partial and variable reinforcement; cognitive theory as applied to gambling, including reference to cognitive bias.
- Reducing addiction: drug therapy; behavioural interventions, including aversion therapy and covert sensitisation; cognitive behaviour therapy.
- The application of the following theories of behaviour change to addictive behaviour; the theory of planned behaviour and Prochaska's six-stage model of behaviour change.

# 5 Scheme of assessment

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Find past papers and mark schemes, and specimen papers for new courses, on our website at [aqa.org.uk/pastpapers](http://aqa.org.uk/pastpapers)

The AS specification is designed to be taken over one or two years with all assessments taken at the end of the course. The A-level specification is designed to be taken over two years with all assessments taken at the end of the course.

Assessments and certification for the AS specification are available for the first time in May/June 2016 and then every May/June for the life of the specification.

Assessments and certification for the A-level specification are available for the first time in May/June 2017 and then every May/June for the life of the specification.

These are linear qualifications. In order to achieve the award, students must complete all exams in May/June in a single year. All assessments must be taken in the same series.

All materials are available in English only.

## AS

Our assessment in AS Psychology includes questions that allow students to demonstrate their ability to:

- draw together their skills, knowledge and understanding from across the full course of study
- provide extended responses.

For example, section A of Paper 1 contains an extended response question. An 'extended response' is evidence of sufficient length generated to allow students to demonstrate their ability to construct and develop a sustained line of reasoning which is coherent, relevant, substantiated and logically structured.

## A-level

Our assessment in A-level Psychology includes questions that allow students to demonstrate their ability to:

- draw together their skills, knowledge and understanding from across the full course of study
- provide extended responses.

For example, sections B, C and D of Paper 3 contain extended response questions. An 'extended response' is evidence of sufficient length generated to allow students to demonstrate their ability to construct and develop a sustained line of reasoning which is coherent, relevant, substantiated and logically structured.



## 5.1 Aims

Courses based on these specifications must encourage students to:

- develop essential knowledge and understanding of different areas of the subject and how they relate to each other
- develop and demonstrate a deep appreciation of the skills, knowledge and understanding of scientific methods
- develop competence and confidence in a variety of practical, mathematical and problem-solving skills
- develop their interest in and enthusiasm for the subject, including developing an interest in further study and careers associated with the subject
- understand how society makes decisions about scientific issues and how the sciences contribute to the success of the economy and society.

## 5.2 Assessment objectives

Assessment objectives (AOs) are set by Ofqual and are the same across all AS and A-level Psychology specifications and all exam boards.

The exams will measure how students have achieved the following assessment objectives.

- AO1: Demonstrate knowledge and understanding of scientific ideas, processes, techniques and procedures.
- AO2: Apply knowledge and understanding of scientific ideas, processes, techniques and procedures:
  - in a theoretical context
  - in a practical context
  - when handling qualitative data
  - when handling quantitative data.
- AO3: Analyse, interpret and evaluate scientific information, ideas and evidence, including in relation to issues, to:
  - make judgements and reach conclusions
  - develop and refine practical design and procedures.

### Weighting of assessment objectives for AS Psychology

Assessment objectives (AOs)	Component weightings (approx %)		Overall weighting (approx %)
	Paper 1	Paper 2	
AO1	19–22	14–17	35–37
AO2	12–15	18–21	32–34
AO3	15–18	13–16	30–32
Overall weighting of components	50	50	100

At least 10% of the overall assessment of psychology will contain mathematical skills equivalent to Level 2 or above.

At least 25–30% of the overall assessment will assess skills, knowledge and understanding in relation to research methods.

## Weighting of assessment objectives for A-level Psychology

Assessment objectives (AOs)	Component weightings (approx %)			Overall weighting (approx %)
	Paper 1	Paper 2	Paper 3	
AO1	11–14	7–10	9–12	30–33
AO2	6–9	16–19	5–8	30–33
AO3	12–14	7–9	15–17	36–38
Overall weighting of components	33.3	33.3	33.3	100

At least 10% of the overall assessment of psychology will contain mathematical skills equivalent to Level 2 or above.

At least 25–30% of the overall assessment will assess skills, knowledge and understanding in relation to research methods.

## 5.3 Assessment weightings

The marks awarded on the papers will be scaled to meet the weighting of the components. Students' final marks will be calculated by adding together the scaled marks for each component. Grade boundaries will be set using this total scaled mark. The scaling and total scaled marks are shown in the table below.

### AS

Component	Maximum raw mark	Scaling factor	Maximum scaled mark
Paper 1: Introductory topics in psychology	72	x1	72
Paper 2: Psychology in context	72	x1	72
Total scaled mark:			144

### A-level

Component	Maximum raw mark	Scaling factor	Maximum scaled mark
Paper 1: Introductory topics in psychology	96	x1	96
Paper 2: Psychology in context	96	x1	96
Paper 3: Issues and options in psychology	96	x1	96
Total scaled mark:			288

# 6 General administration

You can find information about all aspects of administration, as well as all the forms you need, at [aqa.org.uk/examsadmin](http://aqa.org.uk/examsadmin)

## 6.1 Entries and codes

You only need to make one entry for each qualification – this will cover all the question papers and certification.

Every specification is given a national discount (classification) code by the Department for Education (DfE), which indicates its subject area.

If a student takes two specifications with the same discount code, Further and Higher Education providers are likely to take the view that they have only achieved one of the two qualifications. Please check this before your students start their course.

Qualification title	AQA entry code	DfE discount code
AQA Advanced Subsidiary GCE in Psychology	7181	4850 (post-16), PK1 (KS4)
AQA Advanced Level GCE in Psychology	7182	4850

These specifications comply with Ofqual's:

- *General conditions of recognition* that apply to all regulated qualifications
- GCE qualification level conditions that apply to all GCEs
- GCE subject level conditions that apply to all GCEs in this subject
- all relevant regulatory documents.

Ofqual has accredited these specifications. The qualification accreditation number (QAN) for the AS is 601/4837/8. The QAN for the A-level is 601/4838/X.

## 6.2 Overlaps with other qualifications

There is overlapping content in the AS and A-level Psychology specifications. This helps you teach the AS and A-level together.

## 6.3 Awarding grades and reporting results

The AS qualification will be graded on a five-point scale: A, B, C, D and E.

The A-level qualification will be graded on a six-point scale: A\*, A, B, C, D and E.

Students who fail to reach the minimum standard for grade E will be recorded as U (unclassified) and will not receive a qualification certificate.

## 6.4 Re-sits and shelf life

Students can re-sit these qualifications as many times as they wish, within the shelf life of the qualifications.

## 6.5 Previous learning and prerequisites

There are no previous learning requirements. Any requirements for entry to a course based on these specifications are at the discretion of schools and colleges.

However, we recommend that students should have the skills associated with a GCSE course or equivalent.

## 6.6 Access to assessment: diversity and inclusion

General qualifications are designed to prepare students for a wide range of occupations and further study. Therefore our qualifications must assess a wide range of competences.

The subject criteria have been assessed to see if any of the skills or knowledge required present any possible difficulty to any students, whatever their ethnic background, religion, sex, age, disability or sexuality. If any difficulties were encountered, the criteria were reviewed again to make sure that tests of specific competences were only included if they were important to the subject.

As members of the Joint Council for Qualifications (JCQ) we participate in the production of the JCQ document *Access Arrangements and Reasonable Adjustments: General and Vocational qualifications*. We follow these guidelines when assessing the needs of individual students who may require an access arrangement or reasonable adjustment. This document is published on the JCQ website at [jqc.org.uk](http://jqc.org.uk)

### Students with disabilities and special needs

We can make arrangements for disabled students and students with special needs to help them access the assessments, as long as the competences being tested are not changed. Access arrangements must be agreed **before** the assessment. For example, a Braille paper would be a reasonable adjustment for a Braille reader but not for a student who does not read Braille.

We are required by the Equality Act 2010 to make reasonable adjustments to remove or lessen any disadvantage that affects a disabled student.

If you have students who need access arrangements or reasonable adjustments, you can apply using the Access arrangements online service at [aqa.org.uk/eaqa](http://aqa.org.uk/eaqa)

### Special consideration

We can give special consideration to students who have been disadvantaged at the time of the assessment through no fault of their own – for example a temporary illness, injury or serious problem such as the death of a relative. We can only do this **after** the assessment.

Your exams officer should apply online for special consideration at [aqa.org.uk/eaqa](http://aqa.org.uk/eaqa)

For more information and advice about access arrangements, reasonable adjustments and special consideration please see [aqa.org.uk/access](http://aqa.org.uk/access) or email [accessarrangementsqueries@aqa.org.uk](mailto:accessarrangementsqueries@aqa.org.uk)

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## 6.7 Working with AQA for the first time

If your school or college has not previously offered any AQA specification, you need to register as an AQA centre to offer our specifications to your students. Find out how at [aqa.org.uk/becomeacentre](https://www.aqa.org.uk/becomeacentre)

If your school or college is new to these specifications, please let us know by completing an Intention to enter form. The easiest way to do this is via e-AQA at [aqa.org.uk/eaqa](https://www.aqa.org.uk/eaqa)

## 6.8 Private candidates

A private candidate is someone who enters for exams through an AQA-approved school or college but is not enrolled as a student there.

If you are a private candidate you may be self-taught, home-schooled or have private tuition, either with a tutor or through a distance learning organisation. You must be based in the UK.

If you have any queries as a private candidate, you can:

- speak to the exams officer at the school or college where you intend to take your exams
- visit our website at [aqa.org.uk/examsadmin](https://www.aqa.org.uk/examsadmin)
- email: [privatecandidates@aqa.org.uk](mailto:privatecandidates@aqa.org.uk)

# 7 Mathematical requirements and exemplifications

## 7.1 AS

In order to be able to develop their skills, knowledge and understanding in psychology, students need to have been taught, and to have acquired competence in, the appropriate areas of mathematics as indicated in the table of coverage below.

Overall, at least 10% of the marks in assessments for psychology will require the use of mathematical skills. These skills will be applied in the context of AS Psychology and will be at least the standard of higher tier GCSE mathematics.

The following tables illustrate where these mathematical skills may be developed during teaching or could be assessed.

This list of examples is not exhaustive. These skills could be developed in other areas of specification content. Other areas where these skills could be developed have been exemplified throughout the specification.

Mathematical skills	Exemplification of mathematical skill in the context of AS Psychology
<b>Arithmetic and numerical computation</b>	
Recognise and use expressions in decimal and standard form.	For example, converting data in standard form from a results table into decimal form in order to construct a pie chart.
Use ratios, fractions and percentages.	For example, calculating the percentages of cases that fall into different categories in an observation study.
Estimate results.	For example, commenting on the spread of scores for a set of data, which would require estimating the range.
<b>Handling data</b>	
Use an appropriate number of significant figures.	For example, expressing a correlation coefficient to two or three significant figures.
Find arithmetic means.	For example, calculating the means for two conditions using raw data from a class experiment.
Construct and interpret frequency tables and diagrams, bar charts and histograms.	For example, selecting and sketching an appropriate form of data display for a given set of data.
Understand simple probability.	For example, explaining the difference between the 0.05 and 0.01 levels of significance.
Understand the principles of sampling as applied to scientific data.	For example, explaining how a random or stratified sample could be obtained from a target population.

Mathematical skills	Exemplification of mathematical skill in the context of AS Psychology
Understand the terms mean, median and mode.	For example, explaining the differences between the mean, median and mode and selecting which measure of central tendency is most appropriate for a given set of data. Calculate standard deviation.
Use a scatter diagram to identify a correlation between two variables.	For example, plotting two variables from an investigation on a scatter diagram and identifying the pattern as a positive correlation, a negative correlation or no correlation.
Use a statistical test.	For example, calculating a non-parametric test of differences using the data from a given experiment.
Make order of magnitude calculations.	For example, estimating the mean test score for a large number of participants on the basis of the total overall score.
Know the characteristics of normal and skewed distributions.	For example, being presented with a set of scores from an experiment and being asked to indicate the position of the mean (or median, or mode).
Understand measures of dispersion, including standard deviation and range.	For example, explaining why the standard deviation might be a more useful measure of dispersion for a given set of scores, eg where there is an outlying score.
Understand the differences between qualitative and quantitative data.	For example, explaining how a given qualitative measure (for example, an interview transcript) might be converted into quantitative data.
Understand the difference between primary and secondary data.	For example, stating whether data collected by a researcher dealing directly with participants is primary or secondary data.
<b>Algebra</b>	
Understand and use the symbols: =, <, <<, >>, >, $\alpha$ , ~.	For example, expressing the outcome of an inferential test in the conventional form by stating the level of significance at the 0.05 level or 0.01 level by using symbols appropriately.
<b>Graphs</b>	
Translate information between graphical, numerical and algebraic forms.	For example, using a set of numerical data (a set of scores) from a record sheet to construct a bar graph.
Plot two variables from experimental or other data.	For example, sketching a scatter diagram using two sets of data from a correlational investigation.

## 7.2 A-level

In order to be able to develop their skills, knowledge and understanding in psychology, students need to have been taught, and to have acquired competence in, the appropriate areas of mathematics as indicated in the table of coverage below.

Overall, at least 10% of the marks in assessments for psychology will require the use of mathematical skills. These skills will be applied in the context of A-level Psychology and will be at least the standard of higher tier GCSE mathematics.

The following tables illustrate where these mathematical skills may be developed during teaching or could be assessed.

This list of examples is not exhaustive. These skills could be developed in other areas of specification content. Other areas where these skills could be developed have been exemplified throughout the specification.

Mathematical skills	Exemplification of mathematical skill in the context of A-level Psychology
<b>Arithmetic and numerical computation</b>	
Recognise and use expressions in decimal and standard form.	For example, converting data in standard form from a results table into decimal form in order to construct a pie chart.
Use ratios, fractions and percentages.	For example, calculating the percentages of cases that fall into different categories in an observation study.
Estimate results.	For example, commenting on the spread of scores for a set of data, which would require estimating the range.
<b>Handling data</b>	
Use an appropriate number of significant figures.	For example, expressing a correlation coefficient to two or three significant figures.
Find arithmetic means.	For example, calculating the means for two conditions using raw data from a class experiment.
Construct and interpret frequency tables and diagrams, bar charts and histograms.	For example, selecting and sketching an appropriate form of data display for a given set of data.
Understand simple probability.	For example, explaining the difference between the 0.05 and 0.01 levels of significance.
Understand the principles of sampling as applied to scientific data.	For example, explaining how a random or stratified sample could be obtained from a target population.
Understand the terms mean, median and mode.	For example, explaining the differences between the mean, median and mode and selecting which measure of central tendency is most appropriate for a given set of data. Calculate standard deviation.



Mathematical skills	Exemplification of mathematical skill in the context of A-level Psychology
Use a scatter diagram to identify a correlation between two variables.	For example, plotting two variables from an investigation on a scatter diagram and identifying the pattern as a positive correlation, a negative correlation or no correlation.
Use a statistical test.	For example, calculating a non-parametric test of differences using data from a given experiment.
Make order of magnitude calculations.	For example, estimating the mean test score for a large number of participants on the basis of the total overall score.
Distinguish between levels of measurement.	For example, stating the level of measurement (nominal, ordinal or interval) that has been used in a study.
Know the characteristics of normal and skewed distributions.	For example, being presented with a set of scores from an experiment and being asked to indicate the position of the mean (or median, or mode).
Select an appropriate statistical test.	For example, selecting a suitable inferential test for a given practical investigation and explaining why the chosen test is appropriate.
Use statistical tables to determine significance.	For example, using an extract from statistical tables to say whether or not a given observed value is significant at the 0.05 level of significance for a one-tailed test.
Understand measures of dispersion, including standard deviation and range.	For example, explaining why the standard deviation might be a more useful measure of dispersion for a given set of scores, eg where there is an outlying score.
Understand the differences between qualitative and quantitative data.	For example, explaining how a given qualitative measure (for example, an interview transcript) might be converted into quantitative data.
Understand the difference between primary and secondary data.	For example, stating whether data collected by a researcher dealing directly with participants is primary or secondary data.
<b>Algebra</b>	
Understand and use the symbols: =, <, <<, >>, >, $\alpha$ , ~.	For example, expressing the outcome of an inferential test in the conventional form by stating the level of significance at the 0.05 level or 0.01 level by using symbols appropriately.
Substitute numerical values into algebraic equations using appropriate units for physical quantities.	For example, inserting the appropriate values from a given set of data into the formula for a statistical test, eg inserting the N value (for the number of scores) into the Chi Square formula.
Solve simple algebraic equations.	For example, calculating the degrees of freedom for a Chi Square test.

Mathematical skills	Exemplification of mathematical skill in the context of A-level Psychology
<b>Graphs</b>	
Translate information between graphical, numerical and algebraic forms.	For example, using a set of numerical data (a set of scores) from a record sheet to construct a bar graph.
Plot two variables from experimental or other data.	For example, sketching a scatter diagram using two sets of data from a correlational investigation.

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## Get help and support

Visit our website for information, guidance, support and resources at [aqa.org.uk/7182](http://aqa.org.uk/7182)

You can talk directly to the Psychology subject team

E: [psychology@aqa.org.uk](mailto:psychology@aqa.org.uk)

T: 01483 477 822