Mark schemes are prepared by the Lead Assessment Writer and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation events which all associates participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the students’ responses to questions and that every associate understands and applies it in the same correct way. As preparation for standardisation each associate analyses a number of students’ scripts: alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, associates encounter unusual answers which have not been raised they are required to refer these to the Lead Assessment Writer.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of students’ reactions to a particular paper. Assumptions about future mark schemes on the basis of one year’s document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

Further copies of this Mark Scheme are available from aqa.org.uk
Section A Key Approaches and Biopsychology

Question 1(a)

(AO1=1, AO2=1)

AO1 One mark for the idea of withholding of positive regard/love/affection/esteem
Plus
AO2 One mark for an appropriate example of how/when that might happen, either specific or general

Question 1(b)

(AO3=2)

Up to two marks for an appropriate explanation of how a PET scanner is used to identify areas of the brain that are active:
One mark for reference to the use of radioactive chemical
One mark for measurement/detection of blood flow/identification of blood flow changes/changes in activity level
The focus of the answer should be on how the scanner is used.

Question 1(c)

(AO2=2)

Up to two marks for an appropriate explanation that makes clear an advantage of the PET scan in relation to an EEG.

Likely advantage: more sensitive/precise/accurate/detailed

Likely contrast with EEGs: because it does not just measure generalised activity levels as an EEG does.

Possible answer: The PET scan is more useful because it identifies the specific area of the brain involved in the required task (1) whereas the EEG lacks this sensitivity/identifies the general presence or absence of activity so localised function is less clear.(1)
Accept other valid answers.

Question 1(d)

(AO1=2, AO2=2)

Up to two marks for a brief outline of each feature (AO1) with an explanation of how/why each feature might influence human behaviour (AO2).

Award only one mark per feature if the answer is relevant, but is brief/unclear.

1 mark for knowledge of the structure of personality: the outline should refer to id, ego and superego.
Plus 1 mark for valid application eg the Id might lead a person to be selfish, demanding, greedy etc.

1 mark for knowledge of the unconscious: the part of the personality that is not accessible/not part of conscious awareness/a place to store traumatic events/memories out of conscious awareness OR to store the biological instincts and drives.

Plus 1 mark for valid application eg unpleasant memories repressed in the unconscious may cause us to develop anxiety disorders eg phobias.

**Question 1(e)**

(AO1=5, AO2=3, AO3=2)

Examiners must read the whole response prior to marking in order to make a band judgement about whether the response is Very good (9-10 marks), Good (6-8 marks), Average to weak (3-5 marks) or Poor (1-2 marks). Examiners should be guided by the band judgement when annotating the script.

**AO1**

Up to 5 marks for a description of the features of the behaviourist approach in psychology eg the focus on observable behaviour; all behaviour is learned and can be best understood in terms of associations between stimulus and response; behaviour is determined by our interactions and experiences in the environment; psychology should be both scientific and objective; the nomothetic approach to psychology; apply the findings from animal research in order to explain human behaviour.

Credit knowledge of principles and procedures of both classical and operant conditioning:
- Classical conditioning – temporal associations between neutral stimulus and unconditioned stimulus (credit diagrammatic representation)
- Operant conditioning – the use of consequences/reinforcement to shape behaviour. The impact of reinforcement rather than punishment on learning.

**Up to 5 marks for evaluation in total**

**AO3**

Up to 2 marks are reserved for evaluation of the methods used by behaviourists. In terms of the strengths, the approach has been praised for its use of highly controlled and scientific methods of research – experiments – which have laid the foundation for other approaches to adopt scientific principles in research. These methods are sometimes artificial The approach has been viewed as crude in extrapolating the findings from animal research to explain human behaviour although animal research does provide benefits in terms of ethics and time saved due to short gestation periods. **Note:** Candidates may also receive AO3 credit by explicit comparison with the research methods used in other approaches in psychology.
AO2

Up to 3 marks for evaluation. This may include further evaluation of methodology or any of the following: In terms of the limitations, candidates may state how the behaviourist approach oversimplifies the stimulus-response links used to explain all forms of behaviour. The behaviourist approach suggests that all behaviour is determined by our environment thereby stating that there is no free-will or need to study internal mental events – a point criticised by humanistic and/or cognitive psychologists who have demonstrated the impact of these processes on behaviour in particular the demonstration that learning and performance are not equivalent (as in BoBo doll study). The behaviourist approach focuses on the importance of the environment/nurture in contrast to the nature aspect of the biological approach which has demonstrated the impact of biology on behaviour with evidence to support its assertions. In terms of application of the behaviourist approach to psychology, candidates may discuss the many practical applications of the behaviourist approach – phobia treatment, token economy programmes for criminals and people with schizophrenia; behaviour modification therapy for autism, etc. They may also point out the limitations of these programmes in some cases in terms of lack of generalisation outside the therapeutic situation.

Credit use of relevant evidence.

Maximum 8 marks if no evaluation of methods used by behaviourists.

Mark bands

9 – 10 marks Very good answers
There is mostly accurate, well-organised and detailed description of the behaviourist approach in psychology.
The evaluation is mostly clear and coherent. The answer is well focused with little or no misunderstanding. Discursive points are elaborated rather than stated.
The answer is well structured with effective use of paragraphs, sentences and psychological terminology. There are few errors of spelling and punctuation.

6 – 8 marks Good answers
There is a reasonably accurate and organised description of the features of the behaviourist approach though some detail may be lacking. Evaluation is present but it may be limited in either depth or breadth. There may be some misunderstanding, irrelevance or limited focus. Some discursive points may be stated rather than discussed.
The answer has some structure with appropriate use of paragraphs, sentences and psychological terminology. There are some errors of spelling and punctuation.

3 – 5 marks Average to weak answers
There is some knowledge of the behaviourist approach and/or basic/limited evaluation. The answer may lack focus. There may be substantial inaccuracy and/or irrelevance. Some basic ideas are expressed adequately though the answer may lack structure. Psychological terminology may be missing or used inappropriately.
There may be some intrusive errors of grammar, spelling or punctuation.

1 – 2 marks Poor answer
There is extremely limited knowledge/evaluation of the behaviourist approach. There must be some relevant information.
Basic ideas are poorly expressed. There is little evidence of structure. There may be many errors in grammar, spelling and punctuation.

0 marks No relevant content
Section B Gender Development

Question 2(a)

(AO1=1, AO2=1)

AO1 One mark for a correct definition of the term. Possible answer: Androgyny refers to an individual who possesses a balance of both masculine and feminine traits (1).

AO2 One mark for an appropriate suggestion of how a single person might show androgynous behaviour. This must refer to balance eg a woman might be caring as a mother, yet assertive within her work role (1).

Question 2(b)

(i) (AO3=2)

One mark for an appropriate conclusion related to age differences in behaviour: the older children are less sex role stereotypical (in their responses) (than the younger children) OR the younger children are more sex role stereotypical……

One mark for an appropriate justification with reference to the data: because the response of ‘Both’ is much higher for the 10 year old children.

Accept references to gender schema but not Kohlberg’s stages.

(ii) (AO3=2)

One mark for identification of a methodological problem relevant to asking young children questions.

Likely answers: children may not understand the questions being asked; children may have limited communication/language skills; practical issue of gaining consent; likelihood of social desirability affecting results.

One mark for an explanation of why/how this is a problem. So the results of the study – the data obtained – may not reflect accurately the knowledge of the child – it is not measuring what it intends to measure so is not valid (1) The answer must go beyond a statement that the results may lack validity ie explain why this might be the case.

No marks for reference to ethical issues unless the explanation focuses on the practical problem(s). For consent: the explanation will relate to the practical difficulty of obtaining this from responsible adults and/or the children themselves – language difficulties.
Question 2(c)

(AO1=2, AO2=2)

AO1 One mark each for correct explanations of the terms in relation to gender.

Possible answer: Nature refers to the belief that gender differences in behaviour are determined by internal biological factors – chromosomal/hormonal and/or genetic factors (1). Nurture refers to the idea that gender differences are a result of external, social and cultural factors, the environment (1).

Award 1 mark for a clear distinction between nature and nurture that does not refer to gender.

AO2 Two marks for reference to the stimulus material that illustrates aspects of the term identified. The application to the stimulus material should be detailed to gain two marks. For example, David thinks Julie is very good at cooking as a result of nature because she is biologically a female (1). However, Mohammed thinks Julie is good at cooking as a result of nurture because of the opportunities she has had to acquire the skill due to environment (1).

Maximum of 1 AO2 mark if the answers merely pair up the boys’ comments to either nature or nurture correctly. For full credit there should be some elaboration as above.

Question 2(d)

(AO1=5, AO2=5)

Examiners must read the whole response prior to marking in order to make a band judgement about whether the response is Very good (9-10 marks), Good (6-8 marks), Average to weak (3-5 marks) or Poor (1-2 marks). Examiners should be guided by the band judgement when annotating the script.

AO1

Up to five marks for a description of one or more cognitive explanation(s) of gender development:

Kohlberg’s cognitive theory of gender development: stage theory proposes that understanding of gender changes as the child ages; changes are qualitative; Gender identity (2-3 years) – a child is able to label themselves as a boy or girl and label others as boys or girls; Gender stability (3-4 years) – a child understands that they will stay the same sex forever/fixed; Gender constancy (4½-7 years) - a child understands that gender is fixed for all people and they do not change sex by changing their outward appearance or being in different situations, tested by Slaby and Frey 1975/Marcus and Overton 1978/Damon 1977/McConaghy 1979/Monroe et al 1984.

Gender schema theory – knowledge held about appropriate behaviours, characteristics, hobbies, roles etc for boys and girls; this knowledge is actively acquired. Martin and Halverson (1981) state that around 2 years, when children can label their own sex, they actively seek their own environment for information to widen/reinforce their understanding of what it is to be male or female. Gender schemas are, according to Martin and Halverson (1981), built up in three stages: Stage 1 – child learns what things are associated with each sex eg boys play with toy trains. Stage 2 – child makes links between the different components of the schema for their own sex eg a boy who plays with toy trains must also wear trousers and have short hair. Stage 3 – child can use linked components of gender schema for both sexes, tested by Martin and Halverson 1983/Boston and Levy 1991.
Credit examples/questions that may be asked to measure a child’s understanding of their own gender development (max 1 mark), but only if this is not credited via description of a study.

Credit description of relevant evidence (up to two marks).

**AO2**
Up to five marks for an evaluation of the cognitive theory(ies) of gender development chosen. Criticisms of Kohlberg’s theory as being more descriptive than explanatory. Kohlberg underestimated the age at which children can identify their own sex – evidence to suggest that gender identity occurs earlier than he suggested. Alternatively, candidates may use other explanations of gender development as part of their evaluation. For example, the biological explanation states that gender is determined by genes, chromosomes, hormones – factors outside of the child’s control and evidence to support this. Gender schema theory and social learning theorists would criticise any assumptions of the passive nature of the acquisition of a child’s understanding of gender. Social learning theorists would argue that Kohlberg’s cognitive explanation does not pay much attention to the role of social interactions on the development of gender.

Credit use of relevant evidence to support/contradict theory.

**Maximum 6 marks if no evidence**

**Mark bands**

**9 - 10 marks Very good answers**
There is mostly accurate, well-organised and detailed description of (a) cognitive explanation(s) of gender development. The discussion is mostly clear and coherent. There is focus with little or no misunderstanding. Discursive points are elaborated rather than stated. There is appropriate reference to evidence.

The answer is well structured with effective use of paragraphs, sentences and psychological terminology. There are very few errors of spelling and punctuation.

**6 - 8 marks Good answers**
There is reasonably accurate and organised description of some features of (a) cognitive explanation(s) though it may lack detail. Discussion is present but it may be limited in either depth or breadth. There may be some misunderstanding, irrelevance or limited focus. At the top of the band there is reference to evidence.

There is some structure with appropriate use of paragraphs, sentences and psychological terminology. There are some errors of spelling and punctuation.

**3 – 5 marks Average to weak answers**
There is some knowledge of (a) cognitive explanation(s) of gender development and/or basic/limited discussion. There may be substantial inaccuracy and/or irrelevance. Some basic ideas are expressed adequately though the answer may lack structure.

Psychological terminology may be missing or used inappropriately. There may be intrusive errors of grammar, spelling or punctuation.

**1 - 2 marks Poor answers**
There is extremely limited knowledge/discussion of a cognitive explanation. There must be some relevant information.

Basic ideas are poorly expressed. There is little evidence of structure. There are many errors in grammar, spelling and punctuation.

**0 marks No relevant content**
Section C Research Methods

3(a)

(1 mark: AO3=1)

One mark for an appropriate description of the dependent variable which must refer to both options:

- Type of food chosen – healthy or not
- Whether the food choice was healthy or not
- The number of healthy and non-healthy food choices

3(b)

(2 marks: AO3=2)

Up to 2 marks for an appropriate hypothesis.

For 2 marks the hypothesis must be a testable, coherent statement and contain both the IV and DV.

For 1 mark the hypothesis is muddled/not fully testable but should still refer to IV and DV.

Accept hypotheses based on association/relationship between the two variables (do not accept correlation).

Accept null version of the hypothesis.

The IV can be represented by reference to either the presenters being famous or not, Film A and Film B or School A and School B (or type of presenter, type of film, which school).

Possible answers:

Non-directional: There is a difference in the number of healthy food choices of children who saw Film A (famous presenters) and of children who saw Film B (presenters who were not famous).

Directional: There are more healthy food choices for (children who saw) Film A/famous presenters than for (children who saw) Film B.

(Accept ‘Fewer’ for Film B/presenters who were not famous)

3(c)

(2 marks: AO3=2)

Up to two marks for an explanation:

To ensure that differences in the data are due to whether the presenters in the films were famous or not rather than due to the effects of an extraneous variable(s), ie reference to establishing cause and effect.

One mark only for generic references eg: avoiding/controlling for extraneous variables; avoiding confounding results; variables affecting behaviour.
3(d)

(3 marks: AO3=3)

One mark for identification: independent groups design/unrelated design
Plus
2 marks for clear explanation of why this is a suitable design for this study
1 mark for a generic explanation eg to avoid order effects

Likely points: the participants can only be exposed to the content of the film once (1) as they will then have some understanding of what the study is trying to find out and their behaviour will be affected by this knowledge (lack of naiveté, which could be expressed as the practice effect). (1)

If the design is not identified appropriately should still credit appropriate justification of an independent design (or matched design).

3(e)

(3 marks: AO3=3)

Up to 3 marks for ‘a drawing’ of a record sheet that would allow the researcher to record the observations appropriately. Must include:
- spaces for the observations/tallies to be recorded (1)
- labels for specific food choices or labels for healthy or not healthy (1)
- third mark for additional relevant information eg title/heading, reference to school A, film A, famous presenter, tallies, frequencies (1)

Note: For full marks the record sheet must be practical and refer only to School A.

Record sheet for School A (1)

<table>
<thead>
<tr>
<th>Healthy food choice</th>
<th>Non-healthy food choice</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>(1) (for space to record)</td>
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</table>

or

<table>
<thead>
<tr>
<th>Healthy food choice</th>
<th>School A OR Film A/famous presenters</th>
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<tbody>
<tr>
<td>(1)</td>
<td>(1)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Healthy food choice</th>
<th>Non-healthy food choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>(1) (for space to record)</td>
</tr>
</tbody>
</table>
3(f)

(1 mark: AO3=1)
One mark for an appropriate suggestion – results were affected by type of film, type of presenter.

3(g)

(3 marks: AO3=3)

1 mark for an appropriate conclusion: the use of famous presenters had a long-term effect on the food choices of the children at School A.

1 mark for: The number of healthy food choices at School A/with famous presenter/with film A remains the same (high).

1 mark for: The number of healthy food choices at School B/with unknown presenter/with film B goes down over time.

3(h)

(3 marks: AO3=3)

One mark for identification of an appropriate ethical issue which may be named or described. Likely issues: consent, deception, right to withdraw, respect and so on.
Up to two marks for explanation of how the issue could have been addressed.

Note: For full credit the explanation must relate directly to the investigation.

Consent: answers should refer to permission from parents and/or those in loco parentis.

3(i)

(2 marks: AO3=2)

Up to two marks for full explanation of why the study could be said to have ecological validity.

For full credit there must be explicit reference to this study.

Likely points: the children were not aware of the study taking place (1) or the context in which the study took place was their normal canteen (1) so their behaviour would be natural and reflect their real life eating choices. (1)
## ASSESSMENT OBJECTIVES GRID

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<thead>
<tr>
<th>Question</th>
<th>AO1</th>
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